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Improving Submissions to Scholarly Journals via Peer Review

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Due to their commitment to better publishing standards and desire to improve their journals' academic reputation, editorial boards, editors, and editorial teams seek to refine submissions they receive. Though, the peer review process serves as a filtering and assessment system, it is believed to greatly contribute to better quality of scholarly journals. Based on the analysis of the peer review internationally, the JLE editors focus on the peer review in the *Journal of Language and Education*, sharing their experience with the JLE potential authors. The editorial contains some reflections on the efficacy of peer review in the JLE. Potential authors may find some tips as to how to interact with recommendations and criticism on part of their peer reviewers and to make their voices heard.

Keywords: peer review, peer reviewer, scholarly communication, scholarly journal, submission, original article, editor

Peer Review as a Communication Platform and a Filtering System

The present-time role of peer review process in scholarly journals is undoubtedly great, though it is changing to address the new challenges of the rapidly evolving scholarly communication. Peer review has been in existence for over three hundred years. Lately it has become a social institution to safeguard new contributions to science against fraudulent or fake research and lack of integrity at large.

Academic quality control is installed to filter all research publications. The traditional screening system embraces peer review and editing of all submissions without which scholarly journals cannot be considered a fully-fledged communication platform. Though "the editorial management is a crucial part of the publishing process" (Zheng, 2005), the peer review process is believed to be aimed at improving the accepted manuscripts. It might "contribute to the citedness of papers" (Rigby, 2018). Peer review is central to "the production of academic knowledge" (Rigby, 2018).

As the academia is a rather specific and narrow profession, peers act as the sole experts barring other social, but non-academic actors' interaction and interference. But academic peers are expected not only to assess manuscripts submitted to scholarly journals and publishers, but also to prove their verdict, pointing out mistakes and outlining omissions as well as suggesting some ways of correcting the drawbacks to improve the manuscripts at large.

Journal peer review seeks to decide whether to accept or reject a submission. Peer review is viewed as a decision-making process (Rigby, 2018). Validity of judgments in peer review is proved by the academic experience of reviewers, their publications, their influence in the field determined by the reputation of the journals they publish with and citedness of their research.

The efficacy of peer review is desirable, but it is still a disputed issue. The approaches are numerous, and sometimes they contradict each other. Every journal records cases when a peer reviewer's criticism may degrade

some well-done research if blindly accepted by the author(s). Poor quality of peer review is often quoted as a major problem faced by journal editors (Jawaida, 2004).

In some settings, peer review can have little or no impact on the quality of journal papers. When the ratio of accepted manuscripts to incoming submissions is very low, i.e. few papers are accepted whereas a lot of submissions are made; the quality of a paper in such a journal remains nearly unchanged via the peer review process (Somerville, 2016). Most highly ranking journals fit this pattern, as they regularly receive many submissions, with their desk rejection and overall rejection levels being close to 80-90% of all the submitted papers. Such journals are in a lucky position as the best authors with high-quality research papers target this category of journals.

Peer Review Stakeholders

Stakeholders in the peer review process embrace authors, editors, and reviewers. Editorial boards are also widely involved in the process in most journals. The role and functions as well as goals of the stakeholders may sometimes be at variance. Editorial teams and boards are to guide the process in order to facilitate the review process communication. The more submissions a journal gets, the easier it selects relevant and solid papers for publication. But when a journal is relatively new, or is not indexed with the leading international databases, peer review helps a great deal to fine-tune the papers to be published.

Peer reviewers set the scene for authors of submissions. The verdict they pass is often determinant in accepting or rejecting a manuscript. To be more or less impartial, editors often seek to base their final decision on their reviewers' recommendations. Though, the final say is always with the editorial board. Authors at large appear to have not much impact on the manuscript acceptance. But if a journal editor, reviewers, and authors actively communicate regarding the submission, the authors' voice may matter a lot. Editors, boards, and reviewers are peers of authors. They are not controllers or otherwise superior to authors. The understanding of their functional positions as well as aspiration to publish a high-profile journal are prone to success. For a journal, to be successful implies being influential, open-minded, and unbiased.

Unfortunately, stakeholders are often inclined to "cut their way short":authors do their best to get their papers published without any amendments and revisions; reviewers insist on the revisions the way they see them, occasionally turning a deaf ear to authors; editors endeavor to get the incoming papers improved if these submissions are positively assessed. Editors are eager to publish high-profile papers without going beyond time schedules. Thus, personal motives often collide and bring the peer review process to a halt or to worse than expected results.

Traditional double blind peer review is a "time-tested method" (Das, 2016). It is being widely critiqued for great delays in completion, occasional prejudice, "inconsistencies amongst reviewers, … lack of motivation of reviewers" (Das, 2016). It may also lead to failures to detect fraud.

In response, many new forms of peer review have emerged. Open peer review is making some headway in scholarly publishing. Some time ago this form came into existence when a few journals started experimenting with open peer review for articles. It has brought two meanings: transparency and participation (Peters, Brighouse, Tesar, Sturm, & Jackson, 2020). Though some critics believe it also may result in inability to validate quality control (Das, 2016); open review is regularly compared with traditional double blind review. The efficacy of the new forms seems to be not much higher than that of double blind review (Shoham, & Pitman, 2020). But open peer review "increases accountability of reviewers". In its turn, "accountability fosters greater cooperation" (Zhang, Smith, & Lobo, 2020). But the most important feature of the emerging forms of peer review is brand-new ways of scholarly communication.

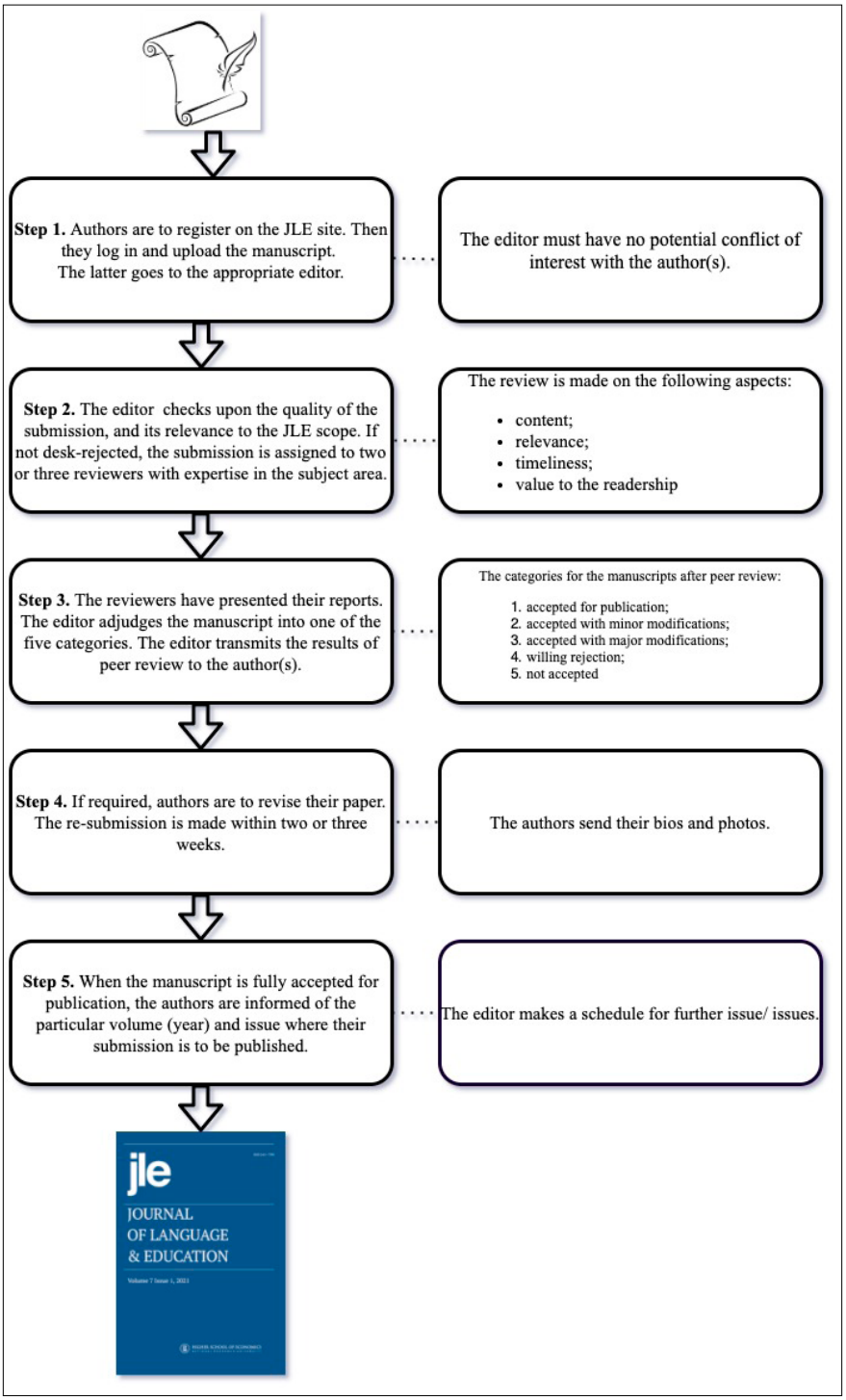
Peer Review in the JLE

The JLE sticks to double peer review (where both authors and reviewers are unaware of identities of each other) and open peer review (where identities of reviewers and authors are not concealed). Any author is entitled to opt for either of them. But the key stages are common for both forms. As for the JLE reviewers, only twenty percent of them opt for open review. But none has given their consent to publish their reports on the JLE site.

When a manuscript enters its submission system via the JLE site, and unless it is desk rejected, it is assigned to two or three reviewers (See Exhibit 1). Prior to peer review, the JLE editorial board and team scrutinize the manuscript to save the reviewers' time. They seek to prove the identity of the relevant reviewers, check the information on their expertise. In most cases, JLE editors select experts in the field, having publications on the related themes. The JLE reviewers represent various nations and affiliations, preferably different from those of the submission authors.

Exhibit 1

The peer review process at the JLE



The problem typical of double-blind review is delays in submitting review reports. Sometimes our reviewers fail to reply within a few weeks. It is rather upsetting as it may disrupt the whole editorial cycle. As reviewers throughout the world are active researchers, sometimes they are short of time to response within the stated periods to enquiries. Luckily, most reviewers send their acceptance or rejection without delays. It is essential. All editors and reviewers realize that any new research is to come out as fast as possible, not to make the new knowledge obsolete. For medical sciences, it is also a matter of saving lives by introducing new methods of treatment (Andersen, Fonnes, & Rosenberg, 2021).

Then the enquiries are sent to other reviewers. Occasionally, the initially assigned reviewers send their reports on a submission in several months. Such a submission may attract up to 4-5 review reports or more, collecting review reports at three or more rounds of the editorial cycle. In the JLE practice, there was a manuscript that got as many as nine review reports within several months. The authors should not be terrified of receiving many recommendations, even criticism from numerous reviewers. In general, the authors tend to revise their papers two or more times; they do it "in the light of feedback received on each occasion" (Price, 2014).

Submissions tend to have common mistakes or faults, mainly typical of each of the paper sections, including "title, abstract, key words, introduction, methods, results, discussion, conclusion, acknowledgments, references, tables, figures, cover letter, format and writing, submission processes, communication with the editor, revision processes, proof processes" (Johnson & Green, 2009); and data presentation (Schriger, Sinha, Schroter, Liu, & Altman, 2006). All authors should be concerned with details, including the scope of the journal, directions in the Author's Guide, structural patterns for the type of publication they are going to get published. Errors, misprints, inaccuracies may add to negative peer reviewers' reports (Schoenwolf, 2013). Occasionally, sections in the submissions contain inappropriate content. Their function will not realize.

There is one more disappointing practice when authors fail to upload some of the necessary files. Unfortunately, authors at large sometimes read the instructions for authors not very attentively. Some authors fail to comply with the JLE requirements (especially, requirements to enclose a cover letter and title page with the uploading manuscript).

The JLE reviewers contribute a lot to improve the manuscripts. Their recommendations are of great help and importance for the authors. The JLE editors are glad to realise that most of the suggested amendments are worth following. Critical thinking on part of all the concerned is essential in outlining the key points that can considerably improve the quality of the manuscript. The concepts and ideas of every author are self-important. Very rarely improvements may worsen a paper, as some reviewers suggest them solely based on their own views and expertise, failing to see the gist and rationale of the author(s).

As for double blind review, the JLE's experience is within the standard stereotyped view with all advantages (though sometimes subtle) and disadvantages (shared by most academics). With open review, fewer JLE authors opt for this form. In contacting some of those, we asked the question: "Why do you think that double blind review is more promising for your submission?" Some of the respondents think that their identity, including their affiliation, might distort their reviewers' attitude to their submission. Others note that they are not ready for this form of communication. At present, about 80 percent of all the JLE authors tend to choose double blind review. We guess that open review is still new to most researchers. It will take some time to adapt and realise the assets of open peer review. With open science being high on the global agenda, open review is certain to attract more supporters in the near future.

Conclusion

The JLE sees further studies of interrelation among peer review, its forms and the quality improvement of submissions as vital. JLE board members and editors strive to promote more efficient communication modes to attract active and promising researchers to communicate their cutting-edge ideas to the JLE readers.

We trust that our potential authors are willing to share our commitment to more open, transparent, and unbiased scientific communication. Our editors do their best to rein in all inefficacies in the peer review process. But communication succeeds only when all participants are equally involved and contribute much.

Finally, we would like to express our gratitude to our reviewers for their dedication to science, their competence and invaluable contribution to the JLE development.

Conflicts of interest

The authors declare that they have no conflicts of interest.

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Aleksius, M. (2021). Repair Practice in the Classroom Conversations of Indonesian EFL Students. *Journal of Language and Education, 7*(2), 10-24. https://doi.org/10.17323/jle.2021.11486

Repair Practice in the Classroom Conversations of Indonesian EFL Students

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This study examines repair practice by English as a Foreign Language (EFL) college students to address the understanding problems that may cause communication breakdowns in classroom conversations. Conversational data were elicited from 40 second-semester students performing jigsaw and information gap communicative tasks. Using the conversation analysis theory and methodological approach, the recorded and transcribed conversations were analyzed to scrutinize the frequency and types of repair strategies, trouble sources, and repair outcomes. The findings show that to address the understanding problem, the EFL college students employed 11 other-initiated repair strategies: Open-class or unspecified strategies; WH-interrogatives; Partial repeat plus WH- interrogatives; Repetition or partial repetition; Candidate understanding; Correction; Request for repetition; Non-verbal; Asking for definition, explanation, translation, example, or spelling; Explicit display of non-understanding; and Request to speak up. These other-initiated repair strategies were triggered by the presence of lexical, semantic content-related, and sequential/speech delivery trouble sources.Attempts to resolve the understanding problem were conducted by a set of repair outcomes, including Repetition, Acknowledgment, Repetition or acknowledgment plus expansion, explanation, and/or translation, and Repetition or acknowledgment plus translation.The study provides language educators with new insights on how EFL learners deal with understanding problems in communication so that they could respond appropriately to the repair practice initiated by the students.

***Keywords*:** conversation analysis, repair practice, other-initiated repair, trouble source, repair outcome, EFL student, classroom conversations

Introduction

Repair practice as a joint interactional accomplishment between conversational interlocutors (Barraja-Rohan, 2011) used to avoid communication problems is one of the important components of communicative competence (Canale & Swain, 1980; Celce-Murcia, 2007).In conversation analysis (henceforth CA), repair means "addressing trouble appearing in interactive language use" (Seedhouse, 2005, p.168) such as "in speaking, hearing, or understanding of talk"(Wong & Waring, 2010, p.212).Furthermore, Schegloff (2000, p.207) asserted that not all forms of understanding problems are addressed by repair practice, but are limited only to the understanding of an utterance that has been just said by the previous speaker.

According to Gardner (2013), studying repair in classroom interactions from a CA perspective is only about a decade in age, and that what people have done so far is only "scratching the surface" (p.610).While some studies (Bae & Oh, 2013; Bolden, 2012) on classroom repair have shown the similarities and differences with ordinary interactions, there is still a need to find out different types of repair in classroom conversations and how the learners change from a lower level to a higher level through the repair process (Gardner, 2013).The current study, then, attempted to scrutinize other-initiated repair (henceforth OIR) as one of the strategies that EFL students use to address the understanding problem in their classroom conversations using the CA angle.This is a common phenomenon that many EFL learners still face when encountering problems in their interactions with their peers or with native speakers of English due to their lack of ability to deploy necessary repair strategies to address such understanding problems. Studying this phenomenon would add to our understanding of how learning a foreign language occurs as learners' endeavor to achieve shared understanding during their interactions.

The application of CA in applied linguistics and language learning has been flourishing, especially after the publication of Seedhouse's, (2005) state-of-the-art article on the connection of CA with the learning of a language and Kasper & Wagner's (2014) publication about the application of CA in applied linguistics. Various studies have been conducted to examine language learning and classroom interactions by employing the CA approach (Azkarai & Agirre, 2016; Bae & Oh, 2013; Cancino, 2015; Cancino, 2020; Hellermann & Lee, 2014; O'Neal, 2015; Radford, 2010; Ryan, 2015) These studies used naturally occurring conversational data between English non-native speakers and English native speakers. The studies by Bae and Oh (2013) andHellermann and Lee (2014)reconceptualizedthe concepts of native and non-native speakers and language ability as language learners' identities . Both studies see language learners' as non-native speakers or deficient language users as something that sequentially evolves through the interaction process.Through their practice of using OIR, language learners are enacting their identities as non-native speakers.

Other researchers, such as Cancino's (2015) study with young language learners and Azkarai and Agirre's (2016) study with upper-intermediate proficiency learners, investigated whether age, proficiency level, and setting influenced the practice of addressing understanding problems in the interactions of EFL learners. Similar to ESL learners, EFL learners negotiate for meaning during L2 task-based interactions and employ a variety of strategies that help them in the task completion process and when attempting to solve understanding problems during their interactions with peers and teachers.Learning opportunities through classroom interactions are heightened or hindered depending upon the teacher's proper understanding and utilization of how the interaction unfolds moment-by-moment in regard tolearners' turns and utterances based on a particular context of their occurrence (Cancino, 2015)

OIR practice is operated through the use of different types of strategies, such as an Open-class (Drew, 1997) OIR, a strategy used with no specification of trouble source in the turn prior to the OIR strategy, when the problem is related to hearing, misunderstanding of talk, or both (Wong & Waring, 2010).Studies on this strategy include Dehé (2015) in Icelandic,Enfield et al., (2013) in mundane conversations across several languages,Fotovatnia and Dorri (2013) in Iranian EFL learners conversations, Golato and Golato (2015) in German and French, and Hayashi and Kim (2015) in Japanese and Korean. These studies found that the Open-class OIR strategy is represented by the interrogative pronoun 'what' or an interjection 'huh' or "yeah", which are used either in isolation or in combination with other OIR types, such as repetition, to address different kinds of trouble sources.

Another strategy, Repetition, is used by repeating some parts of the trouble source turn for repair initiation, usually delivered with a rising intonation to convey uncertainty and to "invite the speaker of the trouble-source to complete the repair" (Wong & Waring, 2010, p. 232).Kaur (2012) found that repetition is used to exhibit an expression of astonishment, disbelief, or nonalignment, and to heighten the recipient's understanding by making the expression clearer.Other studies (Lilja, 2014; Osvaldsson, Persson-Thunqvist & Cromdal, 2013; Persson, 2015; Rabab'ah, 2013; Wang & Wu, 2015) found that in addressing the understanding problems, repetition functions to treat the recognized problems of comprehension, to treat a specific language-related understanding problem, to request to repeat and to ask for confirmation, and to facilitate the learners in identifying the trouble source in their utterances.

The next common type of OIR strategy is a Correction, either an exposed or embedded correction (Wong & Waring, 2010).Correction strategy has been reported to be have been performed by teachers and the students to address language-related trouble sources, such as with adjectives, vocabulary, and grammar (Åhlund & Aronsson, 2015; Lee, 2013; Osvaldsson, Persson-Thunqvist, & Cromdal, 2013).In a study with high-level graduate students in an EFL setting, Lee (2013) revealed that exposed correction is a corrective feedback strategy that the students most prefer to use in both their teacher-student and peer interaction.These studies drew important conclusions about the learning initiative taken by the learners in addressing communication problems due to the existence of non-target constructions in peer interaction, and not merely the responsibility of the teacher.

Code-switching, "an alternating use between two languages" (Tavakoli, 2012, p. 61), is also commonly used as a repair strategy, especially in an EFL setting.In their investigations of Japanese/English bilingual interaction practice, Greer (2013) and Sasuga and Greer (2014) found that code-switching is employed to indicate that an interlocutor is having a problem searching for a word(s) to continue his/her utterance.By switching codes, the

speaker signals a problem of how to continue the utterance, thus, seeking assistance from the other speaker in the interaction.Repair and code-switching are also used by learners as crucial interactional resources to cooperate in language learning and to build a rapport (Lehti-Eklund, 2013; Tudini, 2016).

The next type of OIR strategy is Candidate understanding, i.e. an interactional strategy used when someone repeats an utterance from the previous turn with different words to show his/her understanding of the utterance. Candidate understanding is used not only to disclose one's understanding of the previous speaker's turn but also functions as an offer of help in formulating utterances in a more understandable way (Kushida, 2011).Benjamin (2012) suggested that this strategy is commonly used as an OIR in various conversational settings to repair understanding problems occurring in the turn that adjoins the turn where it appears in the conversation.

One way to signal an understanding problem in face-to-face interactions is by using Non-verbal signs, such as gestures or other visual practices(Gardner, 2013).Investigations on this practice have been done by several researchers such as Seo and Koshik (2010), Sert and Jacknick (2015), Floyd, Manrique, Rossi, and Torreira (2016), Mortensen (2016),Hömke, Holler, and Levinson (2017), and Walker (2017). It was found that certain types of gestures such as head turns are understood to be a way of initiating a repair and function in the same way as an Open-class OIR such as "huh?".Furthermore, eye blinking as a kind of non-verbal behavior was found to be limited to a certain context, and that it is used to signal understanding or non-understanding of the current speaker's utterance (Hömke, Holler, & Levinson, 2017).

The use of different types of OIRs is mainly triggered by the existence of trouble sources in the turns before the OIR turn. Such trouble sources cause an understanding problem for the OIR speaker that encourages the interlocutors to take steps to solve it.Trouble sources can take different forms, for example due to unclear lexical meaning (Saldert, Ferm, & Bloch,2014), pronunciation problems (O'Neal, 2015; Plug, 2015), or pragmatic, lexical, morphological, phonological elements (Morgenstern, Leroy-Collombel, & Caët, 2013).In addition to the problems related to language use, OIRs may also be employed due to a speech delivery problem in the previous speaker's turn.A study by Hoey (2015) specifically investigated the occurrence of lapses that may become a source of the interactional problem because, during this silent period, it is not known who is going to speak next or what to do next.

Based on the above review of the studies, it can be ascertained that the employment of other-initiated repair is basically to address an understanding problem that occurs ubiquitously in different communication settings, such as in mundane/ordinary interactions as well as institutional settings.Those studies inform us that it is ordinary that communication breakdowns take place because of misunderstandings on either side of the conversation.Since CA is "a systematic study of talk produced in everyday situations of human interactions" (Hutchby & Wooffitt, 2002, p.13), most of the conversational data presented in the studies are taken from ordinary or mundane interaction involving native speakers of a particular language.However, although still limited in number, there have been some attempts to implement CA methodology for analyzing interactions between the non-native speaker (NNS) and native speaker (NS), either in a classroom setting or in an ordinary setting (for example Khodadady & Alifathabadi, 2012;Lázaro-Ibarrola & Azpilicueta-Martínez, 2015). Therefore, more studies need to be conducted on the enactment of different types of OIR strategies in conversations involving NNSs, such as EFL learners. The current study is an attempt to fill this gap and proposes the following research question to be investigated in this study: How do EFL college students enact OIR practice in classroom conversations? Specifically, what are the types of OIR strategies, trouble sources, and repair outcomes that occur in their conversations?

Materials and Methods

Participants and Data Collection

The participants of the current study consisted of a group of EFL students who enrolled in an English Education Study Program at Widya Mandira Catholic University, a small private university located in Timor, an island in the eastern part of Indonesia.The total number was forty students (m = 17;f= 23), ranging in age between 18-20 years.As a part of their undergraduate teacher training, the students have to program some speaking subjects

that aim at developing their speaking ability as candidate English teachers.During the data collection of the current study, the students were enrolled in the Speaking for Everyday Conversation subject, the first of a series of speaking subjects they need to take during their four-year teacher training program. Thus, the data were elicited from the intact class of Speaking for Everyday Conversation. It was purposively chosen by the lecturer who taught the subject because the students were in their initial stage of learning English and their level of proficiency was rated low-intermediate, so that the chance for them to negotiate meaning and perform repair initiation was high.

The conversational data were obtained when the students worked in pairs on jigsaw and information gap communicative language tasks.In the Jigsaw task, each member of a pair had to find and understand the information from another member ofanother pair so that it could be described to the homegroup clearly.In the Information Gap task, the students engaged in a so-called split information activity (Nation & Newton, 2009) where they worked in pairs to complete the task by sharing information needed by their interlocutors.The main characteristic of the split information task was that the learners could only find the required answers by working together and exchanging information verbally. Therefore, they were expected to engage in an active conversational exchange without looking at the picture of their interlocutor.

The students' conversations were audio- and video-recorded to obtain both the verbal features and the non-verbal behaviors of the conversations.The recording started when the students opened the conversations and ended when they were closed. Overall, there were 52 sets of conversations produced by the students, 34 from the jigsaw task and 18 from the information gap task.The students' conversations were then transcribed in detail using the transcription model proposed by ten Have (2007) which is simplified from that of Atkinson and Heritage (1999), a general transcription convention commonly employed in conversation analytic studies.The transcription model was chosen because it provides a accurate representation not only of the vocal representation of talks but also the non-vocal symbols, such as gaze, gestures, and laughter/smile.

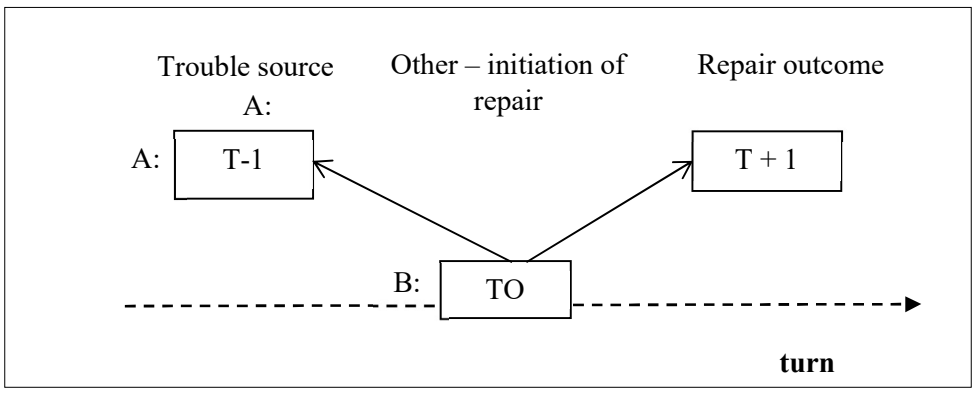
The transcription represented four main features of conversational data.First, sequencing represents the way that conversational turns are ordered in relation to other speaker's previous or next turn.Second, time intervals represent the occurrence of silences between turns or within a turn. Third, the characteristics of speech production represent the way a speaker utters the words or sentences in his/her turns.Fourth, transcriber's doubts or comments represent comments given for unclear speech by the speakers.

Data Analysis

The unit of analysis focused on conversational instances where the OIR trajectories appeared by examining the sequences of conversational turns.As the guideline for determining the OIR trajectory, the anatomy of OIR by Enfield et al. (2013) was followed, as shown in the following diagram.

Figure 1

Trajectory of Other-Initiated Repair



TO means the turn where the OIR strategy occurs that points back to a problem source in Turn -1 and points forward to a next turn, Turn +1, where the problem is repaired as the result of the OIR strategy use.The basis for the determination of types of OIR strategies came from the works ofSchegloff, Jefferson, and Sacks (1977) and Wong and Waring (2010), which were employed as guidelines while the actual occurrence depended on whether or not the participants employed them in their conversations.

- Open-class or unspecified OIR. It is used without specifying a trouble source in the turn before the OIR strategy, whether is related to hearing, misunderstanding of talk, or both.It is indicated by the use of *Huh?, What? Pardon? I'm sorry? Excuse me?*
- *WH*-Interrogative OIR. Using a question like "who", "where", or "when" as repair initiation that specifies the trouble source of the prior turn.
- Repeating part of the trouble source plus a WH-interrogative OIR. A question word is used together with the repetition of the trouble source turn.
- Repetition or partially repeating of the trouble-source OIR. Some parts of the trouble source are repeated in repair initiation, usually delivered in a rising intonation, to convey uncertainty so the producer of the trouble source enacts a repair.
- Candidate understanding OIR. It involves an understanding check often preceded by *You mean*. It is done by targeting more specifically the trouble in the previous speaker's turn.
- Correction repair strategy OIR. It refers to stopping the trajectory of talks to overtly address a trouble source.
- Request for repetition OIR.The repair initiator explicitly asks the previous speaker to repeat the utterance that might have caused the understanding problem.
- Non-verbal repair strategy. Use of body language and silence to indicate that one is having a problem understanding the utterance of the previous speaker.

The categories of trouble source types in this research were based on the findings of previous studies by Morgenstern, Leroy-Collombel, and Caët (2013), Saldert, Ferm, and Bloch (2014), O'Neal (2015), Plug (2015), and Hoey (2015 and 2017).The studies indicated that the trouble sources can take different types, including lexical meaning trouble sources, pronunciation trouble sources, grammar trouble sources, semantic content in the utterances, and speech delivery, such as lapses, overlapping, and cut-off speech.When examining the data, however, the types of trouble sources were not limited to the ones mentioned above but opened to any new types that appeared in the data.The repair outcome comes after a T-O turn and is produced by the speaker of the trouble source in T-1. Depending on their occurrence in conversational data, repair outcome categories can take different forms, such as repetition,explanation,corrections,and acknowledgment.

Results

Based on the results of data elicitation, recordings, and transcription, the analysis found that the students managed to produce 52 sets of conversations, from which 370 sets of OIR trajectories were excerpted.The OIR trajectories were examined by using the guidelines proposed by Enfield, et al. (2013, p.346) above.Then, the types of OIR strategies, trouble sources, and repair outcomes in every trajectory were identified.

Types and Frequency of OIR Strategies in the EFL Students' Conversations

Table 1 presents the frequency distribution of each OIR type.

Table 1

Types and frequencies of OIR strategies

No	Type	f	%
1	Open-class or unspecified strategy	72	19.45
2	WH-interrogatives OIR	34	9.20
3	Partial repeat plus WH-interrogatives	15	4.05

No	Type	f	%
4	Repetition or partial repetition	91	24.60
5	Candidate understanding	22	5.94
6	Correction	19	5.14
7	Request for repetition	64	17.30
8	Non-verbal	13	3.52
9	Asking for definition/ explanation/ translation/ example/ or spelling	28	7.56
10	Explicit displayof non-understanding	6	1.62
11	Request to speak up	6	1.62
		370	**100**

All the categories of OIR types proposed by Schegloff, Jefferson, and Sacks (1977) and Wong andWaring (2010) occurred in the students' conversations.However, after analyzing the data, new categories were found, namely (1) asking for a definition/ explanation/ example/ translation/ or spelling; (2) explicit display of non-understanding; and (3) request to speak up.Although these three OIR types occupied the lowest three positions in frequency of occurrence, their presence indicated that the EFL students in the current study had particular strategies to deal with the understanding problems in their conversations. Repetition or partial repetition that occurred seemed to be the most favorable strategy followed by an Open-class or unspecified strategy.

To understand better how these OIR strategies are enacted in the students' conversations,examples taken from the conversation excerpts are provided below.All names that appeared in the conversation excerpts are pseudonames.

Excerpt 1. Conversation 1/Hadi and Elen/Jigsaw_Home: Repetition/partial repetition OIR strategy

9.	Hadi		:	I want to tell you about uh:: traditional ceremony from Pakalia's uh:: hometown in Soe (1.0)
10.	Elen	→	:	the traditional name is uh:: Baukneno
11.	Hadi		:	Baukneno?
12.	Elen		:	yes=
13.				=I think the same with me (hhhh)

Excerpt 1 exemplifies the Repetition OIR strategy where Elen initiated repair in line 11 by repeating the word "Baukneno" from her interlocutor's turn in line 10.It seems that Elen had to make sure that she heard the word correctly because it was a new word for her. Hadi's response in line 12 indicates that the problem was resolved.

Excerpt 2. Conversation 32/Beth and Ando/Jigsaw_Home: Open-class or unspecified OIR strategy

17.	Beth		:	uh:: I like- I don't like the Justin Bieber an::d
18.	Ando	→	:	and what the::: favorite music about Justin Bieber do you hear
19.	Beth		:	yes?
20.	Ando		:	what the:: TITLE I mean the title of the song

In Excerpt 2, an Open-class/unspecified OIR strategy was employed by Beth in line 19. Beth seemed not to understand Ando's utterance in line 18 "and what the::: favorite music about Justin Bieber do you hear", so she initiated a repair by saying "yes?"There was no specific part(s) of Ando's utterance that caused her understanding problem.Ando response in line 20 resolved her problem that what he meant was the title of a Justin Bieber song.

Excerpt 3. Conversation 52/Ferdi and Lara/Information Gap: Candidate understanding OIR strategy

60.	Ferdi		:	sorry sorry I am not- okay if you feel saying this thing okay (4.0) yes it's the same as mine
61.	Lara	→	:	picture number eight is yours number eight this thing is different part of the leg for to the toes
62.	Ferdi		:	that pants that body
63.	Lara		:	you mean it to make pants narrow or wide?
64.	Ferdi		:	uh::
65.				you mean it to make pants narrow or wide?
66.				uh::

The Candidate understanding OIR strategy is exemplified in Excerpt 3.In line 63, Lara seemed to have a problem understanding Ferdi's utterance in line 62, so she tried to offer her understanding by saying "you mean it to make pants narrow or wide?" However, Ferdi could not explain the utterance, so Lara repeated her question in line 65.It showed that the sequence did not result in resolving the understanding problem as Ferdi did not give any clarification to Lara's offer of understanding in her next turn. Such an unsuccessful resolution of the understanding problem was quite common in these EFL students' conversations.

Excerpt 4. Conversation 26/Pask and Niki/Jigsaw_Home: Correction OIR strategy

120.	Pask		:	district in my district there are many:: (1.0) tourism place
121.	Niki	→	:	tourism places?
122.	Pask		:	tourism places (2.0) and uh:: every (2.0) every people (2.0) came (1.0) around the world come-
123.				came around the world to visit our my my district uh:: there are uh:: (2.0)
124.				

Excerpt 4 is an example of a grammatical correction OIR strategy. Line 120 of Pask's turn contained a grammatical mistake "……many tourism place", so Niki took an initiative to repair it in line 121 by providing a correct form "many places".The correction was accepted by Pask in line 122 by repeating the correct form, then continuing with his utterance.

Excerpt 5. Conversation 23/Beth and Paul/Jigsaw_Home: Non-verbal OIR strategy

13.	Beth		:	yes he's bring a camera when he was doing photoshop
14.	Paul	→	:	oh good all right uh:: (3.0) uh:: (2.0) did he (2.0) get something for take a picture ***(frowning)***
15.	Beth		:	*maksudnya dia dapat uang dari ambil foto* "I mean whether he gets any money from taking a
16.	Paul		:	picture" did he get something for take a picture
17.	Beth		:	yes he getsand now can you tell me about Marsi
18.				

Excerpt 5 exemplifies the employment of facial expressions as a Non-verbal OIR strategy.In line 15, Beth frowned to indicate that she did not understand Paul's utterance in line 14. It was then repaired by Paul in line 16 by using translation and repetition strategies on the trouble sources that appeared in line 13.Beth's understanding problem was resolved as seen by her positive response in line18.

Excerpt 6. Conversation 51/Ferdi and Lara/Information Gap: Explicit display of non-understanding OIR strategy

50.	Lara		:	uh:: mouth bird mouth bird uh:: (2.0) it is (function) to the store food and the (lock) usually is
51.	Ferdi	→	:	it in the dark and the picture
52.	Lara		:	sorry I don't catch what you mean
53.	Ferdi		:	it is (function) to the story storm
54.				storm?

Excerpt 6 shows the employment of the Explicit display of non-understanding strategy.Ferdi (line 52) seemed not to have any idea about Lara's utterance in line 50-51 because it contained some ill-formed construction such as "bird mouth", "is it in the dark and the picture", unclear speech delivery like "(function)","(lock)", and an intra-turn pause of 2.0 seconds.Ferdi expressed his understanding problem by saying "sorry I don't catch what you mean", hoping that Lara would explain herself better or more clearly, which was to no avail.She even produced another trouble source "storm" which triggered Ferdi to initiate the Repetition OIR strategy. Thus, the repair initiation sequence was not successful in overcoming the understanding problem.

Types and Frequency of Trouble Sourcesin the Students' Conversations

Table 2 presents the trouble sources that occurred in the students' conversations.

Table 2

Types and frequencies of trouble sources

No	Type	f	%
	Lexical trouble sources	205	55.40
	Semantic content-related trouble sources	102	27.57
	Sequential/Speech delivery	63	17.03
	Total	***370***	***100***

As shown in Table 3, there were three types of trouble sources identified in the students' conversations. They were lexical, semantic content-related, and sequential/speech delivery trouble sources.Lexical trouble sources covered lexical meaning, pronunciation, and grammar.Semantic content trouble sources meant the overall unclear message in the T-1 utterance.Sequential trouble sources are related to the smoothness of speech production due to the presence of lapses, pauses, cut-off speech, or loudness of speech.

Most of the lexical trouble sources were related to proper nouns such as names of places or objects and common nouns that were either unfamiliar to the students or considered as a new word.Others were associated with pronunciation or grammatical problems.Excerpt 7 below demonstrates an example of a proper name as a trouble source. It showed that the name "Atambuku" in Elen's turn in line 42 was unfamiliar for Rina, so she initiated a repair in line 43 by repeating the trouble source "Atambuku".Then in line 44, Elen ascertained that the name she meant was really "Atambuku" as a lake.

Excerpt 7. Conversation 9/Elen and Rina /Jigsaw_Home:Proper name as Lexical Trouble Source

40.	Elen		:	and the- uh:: Kofainufamuri lake is the same color with Atapolo lake the same colour (2.0) yes
41.	Rina	→	:	the same color they are so red colour yes (4.0) and the last one is Atambuku lake
42.	Elen		:	Atambuku?
43.				yes Atambuku lake. an::d Atambuku lake is:: (2.0) I think there so:::: like chokol- chocolate
44.				(hhh)
45.				

The following excerpt exemplifies mispronunciation as a trouble source.In line 52, Tini mispronounced the word "chain" as [kain] and it triggered Beth to employ the OIR strategy in line 53 by saying "huh?". Tini continued to mispronounce the word in line 54 but, then, it was repaired by Beth in line 55 with the correct pronunciation.

Excerpt 8. Conversation 46/Beth and Tini /Information Gap: Mispronunciation as Lexical Trouble Source

50.	Beth		:	uh:: uh seventh picture (1.0) uh:: every man- every woman always wear it it have a link and::
51.	Tini	→	:	do you know that
52.	Beth		:	uh:: like chain([kein])
53.	Tini		:	huh?
54.	Beth		:	chain([kein])
55.				chain

The next excerpt is an example of a semantic content-related trouble source which contained an utterance with unclear meaning or message that prompted the employment of OIR strategy.It can be seen in Excerpt 9 that Gabi seemed to have a problem understanding Kari's utterance in lines 19 and 20 so he initiated a repair strategy in line 21. To deal with this problem, Kari offered a translation in line 22 and it helped Gabi continue his speaking turn in line 23.

Excerpt 9. Conversation 31/Gabi and Kari /Jigsaw_Home: Semantic content-related trouble source

19.	Kari		:	I like type musical is uh:: (2.0) keyboard and guitar (2.0) and what do you kind to::: football
20.	Gabi	→	:	huh?
21.	Kari		:	*apa yang kamu suka dari* "what do you like from" football
22.	Gabi		:	because (2.0) because football is sport
23.				

The following excerpt displays an example of a sequential/speech delivery trouble source that caused misunderstanding in the students' conversations.

Excerpt 10. Conversation 43/Nela and Yuli/Information Gap: Sequential/Speech Delivery rouble source

103.	Nela		:	a run and:::: *apa* "what" (7.0) the foot (5.0) the foot (4.0) the foot in::: if if we we go to::: (*keatas*
104.	Yuli	→	:	"upstairs") *tangga* "ladder"
105.	Nela		:	(14.0)
106,	Yuli		:	uh:: I don't understand you explain (2.0) can you repeat again
107.	Nela		:	the object (1.0) usually we::: climb use climb use climb *untuk pakai naik* "used to climb" for
108.				climb in::: the:: $^{0}()^{0}$ uh::::
109.				a ladder
110.				oh yeah right

As displayed, Nela's turn in lines 103 and 104 contained several long pauses, sound prolongation (indicated by the semicolons), and even unclear speech production that triggered the employment of an OIR strategy by Yuli in line 106.Nela attempted to refine her turn in lines 107 and 108 and that seemed to help Yuli guess the item she was explaining before.

Types and Frequency of Repair Outcomes in the Students' Conversations

From the analysis of the students' conversations, it was found that there are seven categories of repair outcomes that were distinctive to these particular EFL students. Table 3 below presents the repair outcomes.

Table 3

Types and frequencies of repair outcomes

No	Type	f	%
	Repetition	184	49.73
	Acknowledgment	38	10.27
	Repetition or acknowledgment plus expansion	51	13.78
	Explanation	23	6.22
	Translation	18	4.86
	Repetition or acknowledgement plus translation	20	5.41
	Not successful	36	9.73
	Total	***370***	***100***

As shown in Table 3, Repetition seemed to be the most dominant repair outcome employed by the students.In this case, the interlocutor just repeated the lexical items that might have triggered the understanding problem in the conversation.In some other cases, the students did not only repeat the problematic item but also expanded it with additional information such as an acknowledgement or explanation.Translation, either appearing by itself or in combination with other strategies such as Repetition or Acknowledgement, inescapably occurred in these EFL students' conversations given the fact that they came from the same L1 background.

Excerpt 11 exemplified the employment of Repetition combined with an expansion as a repair outcome strategy in the students' conversation.

Excerpt 11. Conversation 2/Rina and Alia/Jigsaw_Home: Repetition plus expansion repair outcome

63.	Rina		:	Kelimutu lake (1.0) is very very beautiful place and I think you know you know the place
64.	Alia	→	:	I know
65.	Rina		:	Kelimutu have (1.0) three color
66.	Alia		:	three colors?
67.	Rina		:	three colors yes and the first uh:: the first the first the first name the first name (2.0) is one
68.				lake the meaning of the :: (1.0) the lake is one one lake is Atapolo lake and (1.0) and Atapolo
69.				lake have blue color. you know?
70				

In line 68, Rina repeated the trouble source that appeared in her utterance in line 66 after Alia offered a correction OIR in line 67.Furthermore, she supplied more information about "three colors" (the number of colors of Kelimutu lake) to help Alia understand better what she meant by "three colors".

In some cases, the OIR initiation did not yield a successful completion in solving the understanding problem because the speaker of the trouble source did not provide the required response to the repair initiation offered by the initiator of the OIR.In Excerpt 12 below, Pask offered a correction OIR "you didn't go" in line 102 to repair Niki's incorrect grammar in line 101.However, in line 103, Niki did not show whether she accepted the offer because she just continued her turn to talk about something new.

Excerpt 12. Conversation 26/Niki and Pask/Jigsaw_Home: Not-successful repair outcome

100.	Niki		:	yes they are uh:: (1.0) especially my:: uh:: sister and my brother (2.0) they very happy because
101.	Pask	→	:	uh:: (2.0) a long time I don't go back//in village//
102.	Niki		:	//you didn't go // you didn't go
103.				my village and she::: they are very happy because I have uh:: chance to=

One of the distinct characteristics of the repair outcome strategy in the students' conversations was the employment of Translation strategy whereby they simply translated the trouble source item into Indonesian to overcome the understanding problem.In Excerpt 13 below, Maia seemed to have a problem with the word "regency" so she initiated a repetition OIR in line 16.To overcome Maia's problem, Arno simply translated the word "regency" into Indonesian in line 17 by saying "kabupaten". The translation was accepted by Maia in line 18, thus resolving her understanding problem.

Excerpt 13. Conversation 3/Maia and Arno /Jigsaw_Home: Translationrepair outcome

14.	Maia		:	I only know Manggarai I don't know(2.0) East Manggarai West Manggarai
15.	Arno	→	:	it is like (2.0) the regency
16.	Maia		:	regency?
17.	Arno		:	*Kabupaten* "regency"
18.	Maia		:	oh

Discussion

The study shows that EFL students in Indonesia managed to employ eleven OIR strategies to deal with understanding problems during classroom conversations.The OIR strategies in the current study are different from the ones in Schegloff, Jefferson, and Sacks (1977) and Wong and Waring (2010) who proposed eight OIR types: Open-class or unspecified, WH-interrogative, Partly repeating the trouble source plus WH-interrogative, (Partial) repetition of the problem, Candidate understanding, Correction repair strategy,Request for repetition, and Non-verbal repair strategy. While all those categories appeared in the EFL learners' conversations in the current study, new categories of OIR types also emerged.The new categories were Asking for definition/ explanation/ translation/ example/ or spelling; Explicit display of non-understanding; and Request to speak up.The higher frequency of OIR strategies in these EFL students' conversations indicated that they may have more problems understanding during the course of a conversation due to their limited proficiency in English as language learners.However, it should be acknowledged that although the students were at the beginning level, they managed to employ the OIR strategies to deal with such understanding problems in classroom conversations.

The employment of Repetition or partial repetition strategies to understand new lexical items or grammatical items in the current study is aligned with Kaur's (2014) and Lilja's (2014) studies, which reported that by employing repetition strategies the students are seeking more explanation from the speaker on the trouble sources to clarify the problematic item.Regardless of the students' language proficiency, the language learners' repetition OIRs to overcome the understanding problem of vocabulary item could be due to their lack of linguistic knowledge.The finding of the employment of request of repetition in the learner-learner conversations bears some similarities to other previous studies such as Persson (2015) and Wang and Wu (2015) who noted the employment of repetition functions to treat specific language-related problems such us lexical grammatical problems.

The Open-class or unspecified strategy was employed when the students had a problem understanding the message in the previous speaker's utterance, although it was not clear which part of the utterance became the source of non-understanding.This finding mirrors the results of various studies on the employment Open-class OIR in ordinary conversations (Dehé, 2015; Drew, 1997;Enfield et al., 2013; Hayashi & Kim, 2015; Golato & Golato, 2015)Similar to the current study, these studies found that the uses of the interjection "huh" or question word "what" as Open-class OIRs in different languages are ways to address misunderstandings due to problems in hearing the talk.The use of the interrogative pronoun "what" also appeared as a WH-interrogative OIR strategy that the students employed to target specific trouble sources related to the unfamiliar proper names of places, mispronounced words, unclear speech delivery, or L1 words.The employment of WH-interrogatives as an OIR strategy in the current study showed a similar result in other EFL contexts, such as in Iran (Emrani & Hooshmand, 2019; Fotovatnia & Dorri, 2013) where it is employed to indicate a hearing problem or general understanding of specific trouble sources, such as lexical items, appearing in the prior speaker's utterance.The question words "what", "who", and "when" were used, and the students also used the Partial repeat plus WH-interrogatives OIR strategy to repair trouble sources related to lexical items, such as the unfamiliar proper names of places or mispronunciation of words.By employing these strategies, the students managed to avoid possible breakdowns in the production and understandability of their conversations (Schegloff, 2007).

Another OIR type found was Asking for a definition, explanation, translation, example, or spelling to address a problem of understanding lexical items produced by the interlocutors.Comparably, this finding is incongruent with Liebscher and Dailey-O'Cain's(2003) study on the classroom interactions between a teachers and their students.It was found that both the teacher and the students used requests for definition, translation, or explanation, in an identical way but for different functions.The students used this strategy as a true request for a particular or specific kind of information, such as a problematic lexical item, similar to the practice of the participants of the current study. The recent study by Aleksius et al., (2021) found that this type of OIR strategy was also employed by learners when they engaged in a task-based activity as a technique to assess their speaking ability.

Candidate understanding was one of the OIR strategies performed by the students, usually by using phrases like "you mean …", "do you mean…" followed by an utterance representing their understanding of the previous speakers' intended meaning.The use of this strategy helped the previous speakers find a way to simplify or clarify what he or she meant so that misunderstanding could be avoided. This finding supports the previous study by Kushida (2011) on the employment of candidate understanding in mundane conversations, which suggested that candidate understanding is a common strategy in various conversational settings to repair understanding problems occurring in the turn that adjoins the turn where it appears in the conversation.EFL learners also need to learn this strategy because, by restating the ideas of the previous speaker, they can avoid misunderstandings and it also enables them to ask for clarification without displaying their non-understanding directly.

The students' conversations also featured the presence of the Correction OIR strategy to repair an incorrect construction in the previous speaker's utterances.The incorrect construction included linguistic errors, such as pronunciation, grammar, morphology, or unclear meaning of words.The presence of such errors is inevitable because the students were in the process of learning the language.Besides, during the data collection, there was no intervention at all regarding the grammaticality or correctness of language use in their speaking.The students were given a free opportunity to talk based on their current language level.This finding is in line with the study of Khodaday and Alifathabadi (2014) with EFL intermediate learners in Iran.The Correction OIR took place in three or more turns and this reveals that the learning initiative could be taken by the learners when addressing communication problems due to the existence of non-target constructions, and it is not merely the responsibility of the teacher.

Another result in the current study was the employment of laughter/smile as a Non-verbal OIR strategy. Laughing was treated as a non-verbal repair initiation because it was employed as an interactional resource, and not just as a response to something humorous.It is an indication that a speaker was having an understanding problem with the previous speaker's utterance.In line with Walker's (2017) study on the usage of laughter by young children in ordinary conversations, the participants of the current study used laughter because they were not able to provide a full verbal answer due to their limited proficiency in English or they might not be willing to do so.The finding also supports Sert and Jacknick (2015) regarding ESL classroom interactions between the teacher and the students.They discovered that smile (as a form of laughter) played a key role in

resolving interactional troubles due to the students' status as the unknowing participants in the process of knowledge negotiation with their teacher.

In terms of the trouble sources occurring in the students' conversations, it was found that there were three types of trouble sources, namely lexical trouble sources, semantic content trouble sources, and sequential/ speech delivery trouble sources.Lexical trouble sources cover lexical meaning, pronunciation, and grammar. Semantic content trouble sources mean the overall unclear message in the T-1 utterance that was not understandable for the interlocutors.Sequential trouble sources are related to the smoothness of speech production due to the presence of lapses, pauses, cut-off speech, or loudness of speech.Since the participants had a low level of English proficiency, it might be quite normal when their utterances were characterized by the occurrence of such deficient language construction and influent speech delivery, which in this study are treated as interactional resources to build up a turn sequence in the language learning process.This finding supports previous studies (Morgenstern, Leroy-Collombel, & Caët, 2013; O'Neal, 2015; Plug, 2015) on the different types of linguistic-related trouble sources occurring in mundane conversations.Regarding the sequential/speech delivery trouble sources, the current study is incongruent with Hoey's (2015, 2017) studies on British and American English conversations in various conversation settings.The studies found that the trouble sources were treated by the participants by completing the interactional sequence using various OIR strategies such as repetition, candidate understanding, and correction.

Regarding the repair outcomes, it was found that the students in this study managed to employ seven types of repair outcome strategies, namely Repetition; Acknowledgment; Repetition or acknowledgment plus expansion, explanation, and/or translation; Repetition or acknowledgment plus translation; and Not-successful repair outcome.Repetition, Acknowledgment, and Translation (either in isolation or in combination with other repair outcome strategies) were considered linguistically simple and less demanding repair outcome types because most of the time these were expressed as a single-word item or the response token of "yeah" or "yes".The choice of these simple repair outcome strategies might be affected by the students' low-level language proficiency. It also resonates with Schegloff's (1992) claim that the choice of different repair outcome strategies is a typical mechanism in an OIR sequence in all conversation settings regardless of the speakers' language proficiency. The occurrence of Not-successfulrepair outcomes happened because the speaker of the trouble source did not provide the necessary or required response to the speaker of the repair initiation turn, resulting in an incomplete sequence of OIR trajectories.Most of the Not-successful repair outcome cases occurred in the form of silence, i.e. the speaker of the trouble source did not say anything to respond to the repair initiation and it prompted the speaker of the repair initiation to reiterate the repair initiation or to just continue to talk about something new.Kitzinger (2013) confirmed that the failure to respond to the repair initiation is a dispreferred environment in an OIR trajectory because the speaker of the trouble source turn does not use the opportunity to examine his/her turn to find out the cause of misunderstanding problem for the speaker of the repair initiation turn.In the current study, such inability may be explained by the students' lack of ability to develop a connected conversation due to their limited proficiency in English or due to the lack of practice conversing in English.

Conclusion

The current study shows that in addressing understanding problems in classroom conversations, EFL college students in Indonesia managed to employ a set of OIR strategies and these OIR strategies were triggered by the occurrence of a number of trouble sources.For solving the understanding problems in their conversations, the students employed various types of repair outcomes, some of which were successful, others not. This finding provides language educators with a better understanding of the process of how EFL learners deal with understanding problems during classroom interactions.Therefore, teachers should raise their awareness about different types of conversational problems that occur in the classroom and how their students use repair strategies to overcome such problems. Also, by knowing students' methods for addressing understanding problems in classroom conversations, teachers could systematically prepare their teaching materials and design the speaking classes to incorporate these strategies so that the students' interactional ability to avoid communication problems could develop gradually.

This study, however, has some limitations in terms of the small number of subjects and the specificity of the context from which the data were gathered.The data were taken from freshmen in an undergraduate English

Study Program at a small private university in Timor, Indonesia.The small number of participants and the specific context make the generalization of the study limited.Therefore future studies with more participants in other settings such as high schools or other university students in Indonesia need to be undertaken to expand the horizon of students' repair practices in the EFL context.Furthermore, since the current study focuses only on the employment of OIR practice between EFL students in classroom conversations, future studies need to be conducted on the conversations between the teacher and students or the students' conversations outside the classroom in order to encompass a better picture of OIR practice in EFL settings.

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Arianto, M. A., Saukah, A., Basthomi, Y., & Wulyani, A. N. (2021). Previous studies have several limitations ...: Indonesian Doctoral Students', Indonesian Academics', and International Authors' Research Gap Strategies in ELT Research Article Abstracts and Introductions. *Journal of Language and Education, 7*(2), 25-44. https://doi.org/10.17323/jle.2021.11735

Previous studies have several limitations ...: Indonesian Doctoral Students', Indonesian Academics', and International Authors' Research Gap Strategies in ELT Research Article Abstracts and Introductions

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Presenting research gap(s) in a research article (RA), particularly in the abstract and introduction, should be considered by authors, since it functions to show the novelty of the research. As there have been limited studies on the possible variations in authors' research gap strategies and the problems in identifying research gaps, this mixed-method study aimed to fill the gaps. Using genre analysis, this study compared the use of research gap strategies in English Language Teaching (ELT) RA abstracts and introductions by three groups of authors, namely, Indonesian doctoral students, Indonesian academics, and international authors. The results of the quantitative analysis in this study indicated that the three groups share similarities and differences in using the types of research gap strategy in their ELT RA abstracts and introductions. Then, the qualitative analysis using semi-structured interviews with ten doctoral students revealed some problems encountered by them in identifying research gaps during research activities. Finally, this study demonstrates the extent to which our findings have theoretical and practical implications concerning the use of strategies in presenting research gaps in RAs.

***Keywords*:** abstract, introduction, research article, research gap strategy

Introduction

Publishing English RAs in international journals has been a requisite for doctoral students to achieve the doctoral degree, and this rule has become widespread in many countries in America, Europe, and Asia over the last few years (Cuthbert & Spark, 2008; Li, 2015). We do agree that sharing knowledge through the medium of publications is important, especially to navigate students' expertise, foster interaction in discourse community memberships, train students to search for innovations, and increase scientific autonomy and credibility as future researchers (Behnam & Zamanian, 2013; Hyland, 2011; Horta & Santos, 2016; Kwan et al., 2012; Tanko, 2017; Yasmin and Mahmood, 2017). Considering the importance of RA publications, universities in Indonesia have provided several programs, such as workshops and short courses about writing RAs for publications, to assist students in writing RAs for publication in international journals (Arono & Arsyad, 2019). The curriculum developers have also provided several courses in which the objectives demand the students to produce RAs.

Moreover, researchers, who focus on genre analysis of RAs, have also been in the limelight because their reports contribute to the advancement of knowledge, particularly in writing RAs (Ankomah & Afful, 2019; Hu & Liu, 2018; Irawati, Saukah, & Suharmanto, 2018; Kawase, 2018; Keshavarz, Atai, & Barzgar, 2007; Parnawati, Basthomi, & Ruslan, 2017; Rahman, Darus, & Amir, 2017; Rochma, Triastuti, & Ashadi, 2020; Samraj, 2005; Swales, 1990; Swales, 2004; Tanko, 2017). However, in the context of non-native English countries, such as Indonesia, understanding the rhetorical style of English RA is still lacking (Arono & Arsyad, 2019; Arsyad, Purwo, Sukamto, & Adnan, 2019, Khany, Aliakbari, & Mohammadi, 2019; Su & Wood, 2012; Yonezawa, 2015). Moreover, acquiring acceptance for publication in international journals is not as easy as falling off a log. The

editorial teams only consider RAs that make novel contributions. Therefore, authors need to have knowledge of how to propose novelty in their studies to convince their audience (e.g., editors, reviewers, peer researchers, etc.) about the validity of the research being conducted (Lim, 2012).

The novelty of research can be identified in the RA abstracts and introduction sections (Hyland, 2000; Shehzad, 2008), and it appears when authors present their research gaps. The research gaps in the abstract can capture the interest of the audience and impress them enough to continuing reading or ignoring the remaining sections (Amnuai, 2019). In the introduction section, the research gaps appeared in the move of establishing a niche (Swales, 1990, 2004). It functions to show the difference between what has been studied and what can be potentially conducted as further studies (Chen & Li, 2019; Lim, 2012). Thus, doctoral students need to learn the ways to present research gaps in both sections.

Under the previous studies, the investigation of authors' research gap strategies so far has received little attention since only limited studies has been conducted (Chen & Li, 2019; Lim, 2012; Suryani, Yacob, & Aziz, 2015). In response to a call for studies focusing on authors' research gap strategies in other disciplines (Lim, 2012) and considering what has been barely explored in the current body of knowledge, this study investigated Indonesian doctoral students' strategies for presenting research gaps in their ELT RA abstracts and introductions. Although they have mastered English both in oral and written communication, the majority of non-native English authors still have problems in writing English RAs, particularly in proposing novelty in their research (Adnan, 2009; Arono & Arsyad, 2019; Arsyad, Purwo, Sukamto, & Adnan, 2019; Basthomi, 2007; Flowerdew, 2001).

Furthermore, since English RAs published in international journals can be used as guidelines for students in writing RAs (Alamri, 2020; Futasz, 2006; Khany & Tazik, 2010), in this study, the Indonesian doctoral students' research gap strategies were also compared to the strategies used by Indonesian academics and international authors whose ELT RAs had been published in high-quality, peer-reviewed international journals. A comparative analysis enabled us to see the differences and similarities, particularly involving the realization of research gap strategies. To provide more useful pedagogical implications, we also conducted a qualitative study to explore the students' problems identifying research gaps in both sections. This study sought to provide the answers to the following research questions:

1. How do Indonesian doctoral students, Indonesian academics, and international authors use their research gap strategies differently in their ELT RA abstracts and introductions?
2. Are there any problems faced by Indonesian doctoral students in identifying research gaps?

The first question required quantitative data related to the frequency of occurrences of the authors' research gap strategies, while the second one required qualitative data related to the doctoral students' problems in identifying research gaps. This study may enlighten instructors who are developing academic writing instructions and materials, and provide implications for non-native and novice authors, including doctoral students, in regard to writing English RAs abstracts and introductions, particularly when presenting research gaps.

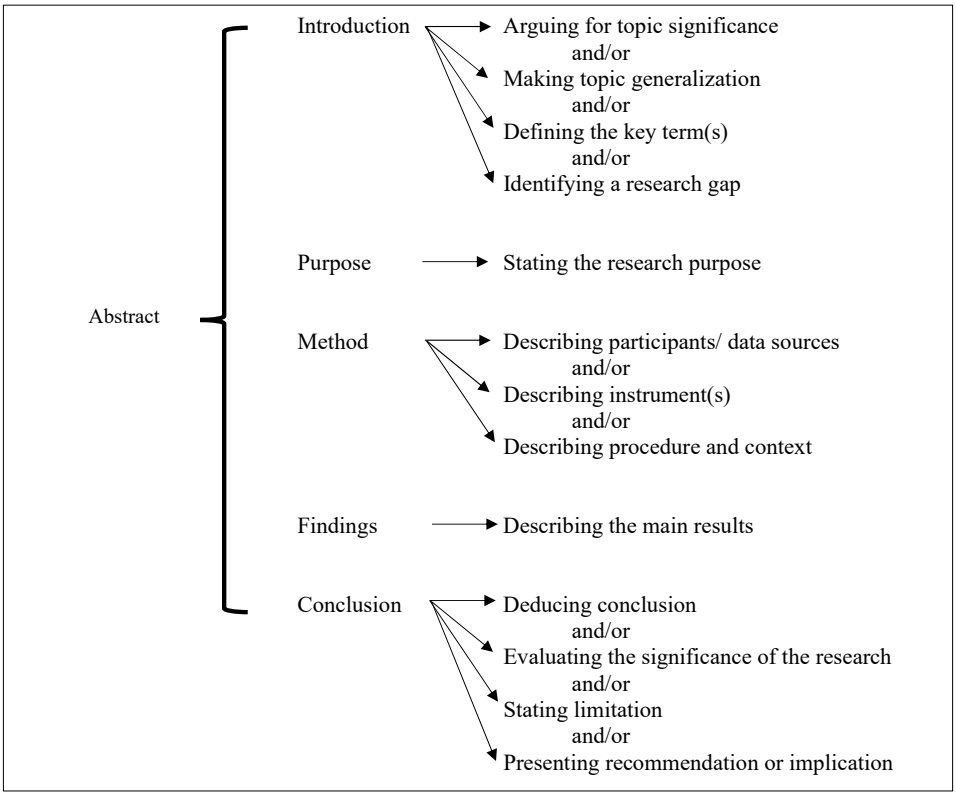
Materials and Methods

Research Gaps in Research Articles

In writing RAs, authors should propose novel contributions of their research to the advancement of knowledge. Novelty in research functions to help avoid the repetition of already existing knowledge (Ankomah & Afful, 2019). One solution for showing the novelty of research is by presenting research gap(s). The RA abstract and introduction sections are the parts of the paper in which the authors present their research gaps. The abstract functions to place the authors' aims, description of methodology, results, and conclusion (Bathia, 1993; Swales, 1990, 2004). Moreover, if we look deeper, the introduction element of the abstract section not only contains the background, purpose, or objective of the research, but it can also benefit from statements indicating research gap(s) (Hatzitheodorou, 2014). This is in line with Hyland's (2000) idea that one of the ways to present the introduction element in the abstract section is by stating the research gaps (Figure 1).

Figure 1

Hyland's framework (2000) of RA abstracts



The RA introduction also plays an important role in allowing the author to establish a territory, establish a niche, and occupy the niche (Swales, 1990, 2004). This section demands that authors explicitly justify areas that are worthy of study and show their position in the study being conducted (Ankomah & Afful, 2019). In this regard, Swales' (1990, 2004) Creating a Research Space (CARS) models have been regarded as breakthroughs in guiding non-native and novice authors in writing their introduction sections. The three moves followed by their respective steps can be seen in Figure 2 below.

Figure 2

Swales' (1990, 2004) CARS models of RA introductions

Move 1 Establishing a territory
Step 1 Claiming centrality (and/or)
Step 2 Making topic generalization(s) (and/or)
Step 3 Reviewing items of previous research
Move 2 Establishing a niche
Step 1A Counter-claiming (or)
Step 1B Indicating a gap (or)
Step 1C Question-raising (or)
Step 1D Continuing a tradition
Move 3 Occupying the niche
Step 1A Outlining purposes (or)
Step AB Announcing present research
Step 2 Announcing principal findings
Step 3 Indicating RA structure

A 1990 Swales' CARS Model

Move 1 Establishing a territory
Topic generalization of increasing specifity
Move 2 Establishing a niche
Step 1A Indicating a gap (or)
Step 1B Adding to what is known
Step 2 Presenting positive justification (optional)
Move 3 Occupying the niche
Step 1 Outlining purposes or stating the nature of the present research (Obligatory)
Step 2 Listing research questions or hypothesis
Step 3 Definitional clarifications (optional)
Step 4 Summarizing methods (optional)
Step 5 Announcing principal findings
Step 6 Stating the value of the present research
Step 7 Indicating structure of the research paper

A 2004 Swales' CARS Model

As seen in Figure 2, the second model (Swales, 2004) is the revised version of the first one (Swales, 1990), and it was developed considering critiques from previous studies (Anthony, 1999; Samraj, 2002). However, it does not mean that the first model cannot still be used. Recently, some previous studies (e.g., Abdolmalaki et al., 2019;

Afshar et al., 2018; Farnia & Barati, 2017) have considered the 1990 version to be the model used to identify the moves and steps in RA introductions. Meanwhile, some others have considered both models when investigating authors' rhetorical elements in RA introductions (Abdi & Sadeghi, 2018; Lim, 2012; Loi, 2010; Moghaddasi & Graves, 2017; Rahman, Darus, & Amir, 2017; Rubio, 2011; Wang & Yang, 2015). However, although many studies have investigated authors' RAs, particularly the abstract and introduction sections, and their reports have been used as guidelines for non-native and novice authors, there is still a need for deeper analysis on how authors present their research gaps in both sections.

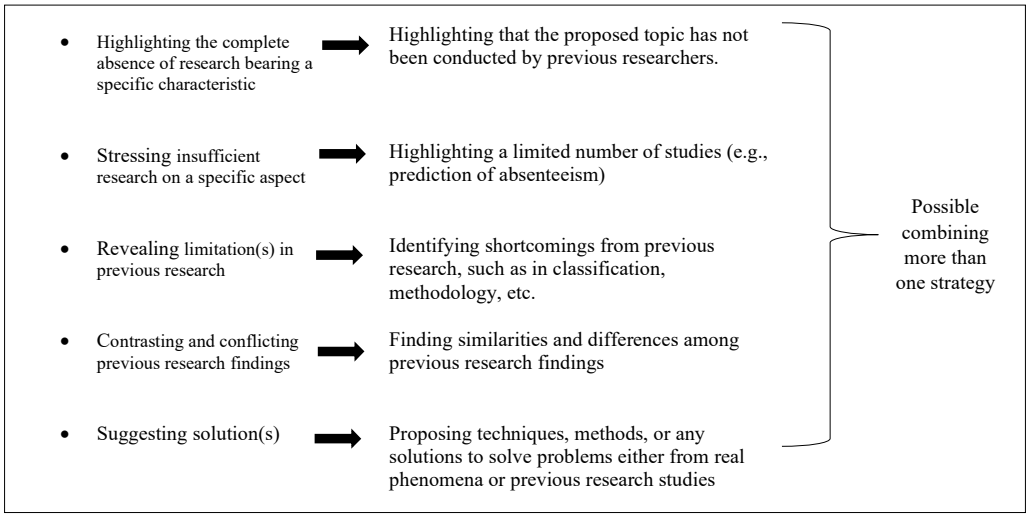
Zainuddin and Shaari (2017) claimed that a research gap is quite important to consider when writing RAs. Research gaps function to justify the authors' position in their studies (Hyland, 2000; Lim, 2012; Swales, 1990, 2004). Presenting research gaps can guarantee strong impressions from audiences, such as reviewers, editorial teams, readers, and discourse communities because they can establish the positionality of authors in the research being conducted. To ensure that their topics are feasible for the current contribution (Samraj, 2002; Swales, 1990, 2004), authors needs to understand how to present research gaps in theirRA abstracts and introductions.

Lim (2012), who investigated the management of RA introductions, found that authors used several strategies when presenting research gaps, namely, highlighting the complete absence of research bearing a specific characteristic, stressing insufficient research in a specific aspect, revealing a limitation in previous research, and contrasting conflicting previous research findings. This insight is also supported by Chen and Li (2019) who investigated Chinese authors' research gap strategies and found that pointing out insufficient research could be considered a way to present a research gap in applied linguistics RAs. However, a missing strategy called suggesting solution(s), which was not found in either study (i.e., Chen & Li, 2019; Lim, 2012), should be considered as a potential strategy in presenting a research gap. This strategy starts with identifying some problems then proposing solution(s) to solve the problems (Kwan et al., 2012). Authors in the education field tend to reveal problems experienced in the real-world context. For instance, teachers as authors may present their real problems in classroom settings and try to solve the problems using some proposed techniques (Rochma et al., 2020). Besides the absence of the strategy of suggesting solution(s) in previous studies, the authors limited their studies to only RA introductions. They missed the opportunity to analyze other authors' research gap strategies in the RA abstracts, which are also something necessary to investigate.

Considering the limitations of previous studies (e.g., Chen & Li, 2019; Lim, 2012), this study was deemed necessary to conduct. Additionally, as further development of Hylands' (2000) and Swales' (1990, 2004) frameworks on research gaps, Figure 3 shows an updated framework that can be used to identify authors' strategies for presenting research gaps in RA abstracts and introductions. Although it may not be a perfect framework, it can be reliably used to investigate authors' research gap strategies in RAs in the education field, especially in ELT.

Figure 3

Strategies for presenting research gaps



Research Design

Since this study focused on comparing the research gap strategies used by Indonesian doctoral students, Indonesian academics, and international authors in their ELT RA abstracts and introductions, as well as exploring the doctoral students' problems in identifying research gaps, a mixed-method design was employed and a quantitative analysis involving simple descriptive statistics was conducted. The analysis focused on the frequency of occurrences of the research gap strategies used by the three groups of authors in their RA abstracts and introductions with a total of ninety RAs. Meanwhile, for the qualitative analysis, the doctoral students' problems identifying research gaps were obtained through semi-structured interviews. Out of thirty doctoral students who were undertaking the ELT doctoral program in a public university in Malang, West Java, Indonesia, ten of them participated in the interviews.

Data Collection and Analysis

Comparing the RAs of the three groups of authors in the same field enabled us to identify the authors' similarities and differences when using strategies to present research gaps. The quantitative data were derived from analyzing the occurrences of Indonesian doctoral students', Indonesian academics', and international authors' research gap strategies in their ELT RA abstracts and introductions. For the first group, thirty RAs written by Indonesian doctoral students were selected. Since the participants had not had articles published in international journals, we considered compiling their RAs which had been published in local Indonesian peer-reviewed journals[1]. Conversely, the data for the second and third groups were obtained from thirty RAs written by Indonesian academics and thirty RAs written by international authors (non-Indonesian) whose RAs had been published in international journals[2].

For selecting the international journals, a certain set of criteria was applied. First, the journals were open access and peer-reviewed journals. Second, since Scopus has the best reputation among all indexing databases, the selected journals were Scopus-indexed journals, and the Scopus and Scimago websites (www.scopus.com & www.scimagojr.com) were visited to see the journals' information details. Third, the impact factor according to Journal Citation Reports (JCR) was also considered to determine whether or not the selected journals represent the world's leading journals.

Then, in regard to the selection of the RAs, the selected RAs had to follow the conventional structure of RAs, i.e., abstract (A), introduction (I), method (M), results (R), and discussion (D) sections (Hyland, 2000; Swales, 1990). Regarding the introduction section, which became one of the concerned sections in this study, we only selected RAs with introduction sections that covered all of the moves (i.e., establishing a territory, establishing a niche, and occupying a niche) without any subheadings such as literature review, aims/ purposes of the study, rationales of the study, etc. Additionally, to control the potentially rapid changes within the discipline, the years of publication were restricted to a period of five years (2016-2020).

[1] The Indonesian doctoral students' RAs that were analyzed in this study are those which had been published in local journals in the period 2016-2020, namely *Pedagogy Journal of English Language Teaching, Jurnal Edukasi, The Journal of English Language Studies, MADRASAH, Jurnal Bahasa Lingua Scientia, Lingua Scientia, BRIGHT, UNILA Journal of English Teaching, Journal of ELT Research, Journal Pendidikan Humaniora, Language and Language Teaching Journal, Teflin, Lingua Didaktika, LET Journal, JEELS, Premise Journal, Bahasa dan Seni, Journal of English Educators Society, ELTICS Journal, Vidyottama Sanatama, Indonesian Journal of English Teaching, LEEA, IJSELL, Tell Journal, NOBEL, Academic Journal Perspective, and RETORIKA.*

[2] The Indonesian academics' and international authors' RAs that were analyzed in this study are those which had been published in international ELT journals, namely *Applied Linguitsics, The Modern Language Journal, System, ELT Journal, Journal of Second Language Writing, Language Teaching Research, TESOL Quarterly, Language Learning and Technology, Indonesian Journal of Applied Linguistics, The Qualitative Report, Cakrawala Pendidikan, XLinguae, The Asian ESP Journal, The Asian EFL Journal, The Asian Journal of Applied Linguistics, Journal of Language and Education, TESOL International Journal, International Journal of Language Studies,e-FLT, The Journal of Asia TEFL, Korea TESOL Journal, and SAGE Open.*

Table 1

The Indonesian doctoral students', Indonesian academics', and international authors' ELT RAs

Corpus	Number of RAs	Publication Years
Indonesian doctoral students' RAs	30	2016-2020
Indonesian academics' RAs	30	2016-2020
International authors' RAs	30	2016-2020
Total	***90***	***2016-2020***

For the data analysis, a modified framework (Figure 3) was prepared. The framework was discussed and validated by two experts in the field of genre analysis. It was also tested on other RAs out of the selected sample, and it was found that the framework was reliable to be used to investigate the authors' strategies for presenting research gaps. The process of data analysis was done in several steps. First, the abstract and introduction sections of each RA were extracted and documented in a different file. Second, the statements indicating research gaps were highlighted and coded. When analyzing the abstract of the RAs, Hyland's framework (2000) was used to identify the statements indicating research gaps. Meanwhile, in the introduction section of the RAs, the analysis focused on the authors' niche establishment in which their research gap strategies were found (Swales, 1990). Third, the research gap strategies found in the corpora were grouped according to the modified framework. We also invited a co-rater to assess the reliability of our analysis results. She was firstly briefed to familiarize herself with the classification of strategies to indicate research gaps. The discrepancies in the analysis results were found, but we negotiated and discussed them until we got the final decisions. The reliability value was found to be .948, and it was claimed as the excellent agreement between the raters (the co-rater and us) (Orwin, 1994).

To obtain the qualitative data, ten potential participants (i.e., three males and seven females out of the Indonesian doctoral students) were chosen randomly, and they were asked whether or not they would be willing to be interviewed. Considering their anonymity, they were informed that their names would be pseudonyms. Their affiliations and other personal information would alsobe completely anonymized. The interview guidelines were piloted to two students not among the participants to check the interview questions before conducting the interview to the participants of the study. The list of questions was revised based on the feedback and suggestions from the two students from a pilot study and two experts (Appendix 2). Given the semi-structured interview format, elaborating on some of the questions might occur during the interview sections. The interviewers and interviewees were free to develop the ongoing conversations in order to obtain additional data. The interviews were audio-recorded, transcribed, and analyzed. The data obtained were then interpreted and described under the heading of problems when identifying research gaps. To ensure the credibility (Creswell, 2007), two expert were invited to examine the data and verify that they were interpreted in an appropriate manner.

Results

Indonesian Doctoral Students', Indonesian Academics', and International Authors' Research Gap Strategies in ELT RA Abstracts and Introductions

This subheading presents the results on the frequency of occurrences of the strategies for presenting research gaps used by the three groups of authors: Indonesian doctoral students, Indonesian academics, and international authors. Table 2 and Table 3 display the types of research gap strategies used by the authors in their ELT RA abstracts and introductions.

Table 2

Frequency of occurrences of strategies for presenting research gaps in the authors' abstracts

No.	Research Gap Strategies	Indonesian Doctoral Students (N= 30)		Indonesian Academics (N= 30)		International Authors (N=30)	
		f	%	f	%	f	%
1	Highlighting the complete absence of research bearing a specific characteristic	-	-	1	14.3	1	8.3
2	Stressing insufficient research on a specific aspect	1	33.3	4	57.1	5	41.7
3	Revealing limitation(s) in previous research	-	-	-	-	1	8.3
4	Contrasting conflicting previous research findings	-	-	1	14.3	2	16.7
5	Suggesting solution(s)	2	66.7	1	14.3	3	25
	Total	***3***	***100***	***7***	***100***	***12***	***100***

Table 3

Frequency of occurrences of strategies for presenting research gaps in the authors' introductions

No.	Research Gap Strategies	Indonesian Doctoral Students (N= 30)		Indonesian Academics (N= 30)		International Authors (N=30)	
		f	%	f	%	f	%
1	Highlighting the complete absence of research bearing a specific characteristic	-	-	7	20	15	21.7
2	Stressing insufficient research on a specific aspect	6	31.6	10	28.6	21	30.4
3	Revealing limitation(s) in previous research	1	5.3	4	11.4	16	23.2
4	Contrasting conflicting previous research findings	1	5.3	2	5.7	6	8.7
5	Suggesting solution(s)	11	57.8	12	34.3	11	15.9
	Total	***19***	***100***	***35***	***100***	***69***	***100***

The two tables above present some variations in the research gap strategies used by the three groups, and most of the strategies appeared in all RAs. We can see that the international authors, in general, applied the five types of research gap strategy in their RA abstracts and introductions. Overall, the group with the fewest occurrences of the strategies was the group of Indonesian doctoral students (3 occurrences in the RA abstracts and 19 occurrences in the RA introductions). Moreover, as seen in Table 3, the five types of research gap strategies occurred in the Indonesian academics' and international authors' introductions. Meanwhile, the Indonesian doctoral students used four strategies; they did not use the strategy of highlighting the complete absence of research bearing a specific characteristic.

Figure 4

Overall occurrences of research gap strategies in the RA abstracts and introductions across the three groups of authors

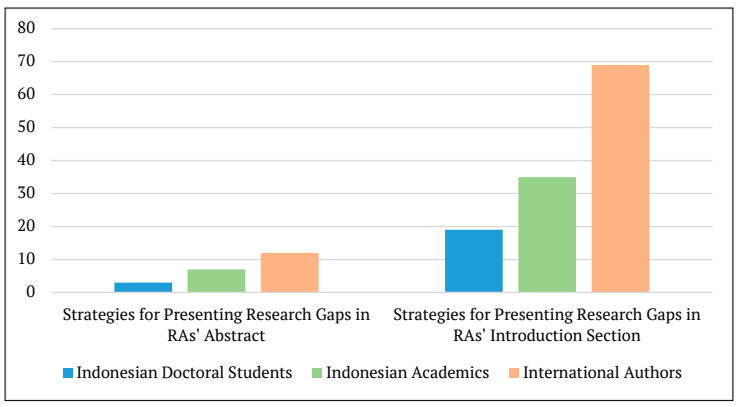


Figure 4 illustrates that the strategies for presenting research gaps in the RA abstracts and introductions were most frequently used by the international authors, followed by the Indonesian academics. We argue that the international authors believed in the importance of research gaps. They tried to convince readers about the novelties of their studies by presenting research gaps in their RA abstracts and introductions via the five types of research gap strategy. Moreover, it is important to note that some of the Indonesian doctoral students and Indonesian academics used positive justification as the only way to justify their research instead of applying research gap strategies like the international authors did. Based on the data analysis, a positive justification in the RA introductions was used more by the Indonesian doctoral students (11 RAs) than the Indonesian academics (4 RAs). A detailed explanation of the research gap strategies used by the three groups of authors, along with examples from the corpora, will be provided below.

Highlighting the Complete Absence of Research Bearing a Specific Characteristic

Authors can produce research gaps by claiming that no research has been done related to a specific area. Lim (2012) stated that this strategy can be used in RAs by using negative quantitative noun phrases (e.g., none of the studies, no research, etc.) or negative investigative verb phrases (e.g., have not been investigated, has yet to be examined, etc.). Based on the data analysis, except for the Indonesian doctoral students, the Indonesian academics and international authors used the strategy of highlighting the complete absence of research bearing a specific characteristic in their RA abstracts and introductions.

Excerpt 1

*They ***have not*,** however, explicitly addressed how wiki-mediated collective production helps individual L2 writing performance. The present study aims to fill this gap. (IA-RAI14)*

Looking at the excerpt above, the authors used a negative verb phrase (i.e., have not) to indicate their research gap. It indicated that the authors believed that the research on how wiki-mediated collective production helps individual L2 writing performance had not been conducted to date.

Stressing Insufficient Research in a Specific Aspect

Certain topics that have still received little attention need to be studied. The lack or dearth of literature can result in unstable reports or findings. Authors may indicate the limited number of studies on certain topics as their research gaps (Lim, 2012).

Excerpt 2

Although there have been some studies done on the <u>impact of glossing</u>, most of them ***only*** focus on paper-based glossary and online glossary on improving L2 reading comprehension and vocabulary mastery. ***However**, **little attention has been paid*** to connect glossary and personality learning style. (DS-RA101)

Excerpt 3

Although ***students*** are the key players in pair or group work, **little is known** about their perceptions of or attitudes towards collaborative writing and how these factors influence patterns of interaction and language learning opportunities during such activities. (IA-RAI13)

Excerpt 2 shows that the author proposed a new inclusion of connecting glossaries and personality learning styles. She first reported what had been done by previous studies. Then, she put the word *'however'* as a concessive conjunction to highlight the research gap. After putting in the conjunction, she used an adjective phrase denoting the dearth of literature focusing on examining a specific area (i.e., little attention has been paid). However, she only focused on adding a new issue, and she left off what had been found in previous research studies.

In addition, Excerpt 3 shows another function of the strategy of stressing insufficient research. The authors used an adjective signaling insufficiency (i.e., little is known) as a linguistic feature indicating a research gap. Thus, the statement indicating the research gap as seen in Excerpt 3 functions to give a signal regarding the authors' aims of the study. This strategy can be embedded in the move of occupying a niche, specifically in announcing present research.

Revealing Limitation(s) in Previous Research

When authors are going to implement certain methods or techniques, or they are going to conduct certain designs of study, they can consider what previous researchers have done. Some authors may identify the shortcomings of previous related studies (Suryani et.al, 2015). They can specifically focus on and point out the methodological shortcomings and weaknesses (Lim, 2012). Based on the data analysis, the strategy of revealing limitation(s) in previous research was found in the corpus of this study.

Excerpt 4

> The previous studies give insight that in translating cultural humor in the graphic novel…the translator ***should*** consider the paralinguistic elements…***However*, *different from the previous studies*,** this present study recognized the challenge in translating cultural humor by applying Vandaele (2002) humor translation theory and classifying the data findings using Newmark (1988, p. 95) proposes five cultural categories of the translation of 'foreign' cultural words. (DS-RAI08)

Excerpt 5

> ***However***, as implied in Storch (2013), this model ***fails*** to factor in the fluctuating nature of learners' dyadic interaction. That is, this model does not capture the situation in which learners demonstrate various collaboration patterns when discussing different aspects of a CW task. (IA-RAI11)

Excerpt 4 shows that the authors' use of medium modality (i.e., should) indicated that they suggested considering paralinguistic elements, meaning that the previous researchers had not considered those important elements in their studies. Then, the authors indicated their research gap by stating that their method was different from the previous ones. It implied that the authors criticized the methods that had been used by the previous researchers and, with the use of the medium modality, they informed the readers that the proposed method (applying Vandaele's (2002) theory and using Newmark's (1988) classification) was more appropriate than what had been used in the previous studies. Next, Excerpt 5 illustrates that the authors used a verb denoting failure (i.e., fails) to indicate that the model proposed by Storch (2013) could not be used in different situations. It indicated that the authors needed to develop a new model to capture the situation mentioned in the next sentence.

Contrasting Conflicting Previous Research Findings

In this strategy, authors persuade the readers by stating the unfixed findings of past studies. This strategy is used after they have done a meta-analysis to compare several findings related to certain topics to see if there are inconclusive or unclear findings. In this study, the authors in the corpus of this study used this strategy in their RAs.

Excerpt 6

> The findings of the studies as reviewed above indicate that the effect of gender on the choice of speaking strategies ***is not yet conclusive*** and that the correlation between speaking strategies and speaking proficiency ***is not yet clear***. (DS-RAI03)

Excerpt 7

> …the **few studies** conducted in L2 writing contexts have produced ***contradictory results*. *For instance*,** Meraji (2011) observed a positive effect of pre-task planning on all aspects of L2 writing. Yet, Ojima (2006) and Ellis and Yuan (2004) found that pre-task planning led to increased fluency and syntactic complexity ***but little change*** in L2 written accuracy. Johnson, Mercado, and Acevedo (2012) found ***little effect*** of pre-task planning on the overall L2 writing performance, except ***a small significant effect on fluency***. (IA-RAI01)

Excerpt 6 illustrates that the authors indicated the inconclusiveness among previous research findings. The statements *"…is not yet conclusive"* and *"…is not yet clear"* indicated that the authors detected the unclear findings regarding the correlation between the two variables. Excerpt 7 shows that the authors had done a meta-analysis related to the topic that was going to be researched. They had compared several previous related research findings, and they found the contradiction then put a phrase indicating uncertainty (i.e., contradictory

results). They also showed the results of reviewing the previous research findings in the next sentences preceded by the use of an example conjunction (i.e., for instance).

Suggesting Solution(s)

According to Kwan et al., (2012), this strategy is used when authors show problems that need to be solved or things that need to be improved. This strategy can be considered a useful strategy to indicate a research gap because it functions to present unresolved problems and suggest solution(s) for the problems (Lindeberg, 2004). In this study, most of the Indonesian doctoral students, Indonesian academics, and international authors used this strategy in their RAs.

Excerpt 8

Pathan says that using ***podcast*** with ***internet*,** also has plenty of benefits for developing listening…it can be said that when teacher is in the process of teaching listening, he or she ***should consider those tools*** and know which tools that can be used to help and applied in the laboratory in the listening class. (DS-RAI04)

Excerpt 9

Despite this gap in the research literature, many textbooks ***suggest*** the use of collaborative writing tasks to pre-and in-service teachers (Ferris and Hedgcock, 2013: Peregoy and Boyle, 2012). (IA-RAI15)

In Excerpt 8, the author tried to persuade the readers that the tools (i.e. podcast and internet) were good choices for listening classes. She stated '*…should consider those tools'* to indicate a solution. The use of the medium modality (i.e., should) was considered a signal to indicate a gap that she needed to examine the effectiveness of those tools in listening classes. Excerpt 9 illustrates another way of suggesting a solution. They brought in the previous researchers' suggestion that pre-service and in-service teachers focus on collaborative writing tasks. Excerpt 8 and Excerpt 9 show the differences in how the authors conveyed the solutions; the author in Excerpt 8 suggested a solution using her own opinion, while the authors in Excerpt 9 presented a suggestion using their research orientation.

Based on the results of this study, we can conclude that four out of the five strategies to present research gaps were used by the Indonesian ELT doctoral students in their RA introductions section. Meanwhile, the Indonesian academics and international authors in this study used all five strategies in their introductions. In the RA abstracts, only the international authors used the five types of research gap strategies, while the other two groups used four types of research gap strategies (Indonesian academics) and two types of research gap strategies (Indonesian doctoral students). Moreover, the authors, seen from the three corpora, mostly used contrastive discourse markers, i.e., the concessive conjunction *'however'*, to start their statements indicating their research gaps. This conjunction was used more frequently than the other concessive conjunctions found in Lim's (2012) study, such as *'in fact', 'though', 'although', 'even though', 'even if', 'unless', 'yet', 'but', 'despite', 'in spite of', 'whereas', 'nevertheless', and 'notwithstanding'*.

The Indonesian Doctoral Students' Problems Identifying Research Gaps

Based on the interviews, the results indicated that the ten participants understood what a research gap is. They agreed that presenting research gaps in RAs can give contributions to the body of knowledge, as some participants noted.

Excerpt 10

What I know about a research gap is that it can differ our research to what previous scholars had done. (Jean)

Excerpt 11

A research gap is about extending the works of others…my research is collorative writing, some of them examine the effect of the technique in writing a parapgraph and I extend the effect of the technique in writing another text, essay writing maybe. (Rose)

Excerpt 12

> In my opinion, if my research had been possessed by no one before, I can claim that my study has a novelty. (Dani)

The excerpts above highlight how the participants defined a research gap. Jean defined a research gap as a difference between what previous researchers have done and what will be potentially researched in the future. Rose defined a research gap as the extension of other researchers' studies by adding some variables or changing the focus of the particular study so that it differs from the others. Then, Dani claimed that a research gap is something that has not been done by previous studies so that the particular study can present novelty.

Although the participants knew what a research gap is, they still had problems identifying research gaps during their research activities. We argue that most of the participants only knew the definition of a research gap, but they did not know how to identify the gaps for their proposed studies. Based on the interviews with the participants, some of difficulties they encountered were found.

Excerpt 13

> I have read many articles…, but I got confused because too many articles that I read. My lecturers always ask to us, read, read, and read…but I did not find the gaps. (Ryan)

We can see that Ryan faced difficulties identifying research gaps after reading RAs. He said that reading many articles could make him confused about what he needed to research. He evaluated the activity and claimed that reading many articles could not help him to get inspiration for conducting research. We argue that he only read the RAs without criticizing what had been studied so that he could not find the research gaps. Moreover, it also happened to some of the participants who had difficulty criticizing previous research studies. Sinta was one of them.

Excerpt 14

> When I got articles from my lecturers, I just agreed about what the authors did in their research. I do not know why…some are new for me. (Sinta)

The excerpt above illustrates that Sinta encountered problems criticizing previous studies because the topics were quite new for her. As we know, critical reading skills may be used if someone has background knowledge about a certain topic so that he/she can criticize and question what has been studied. Moreover, an author may agree with what previous scholars have done, while others may find limitations in their work. Based on the interview with Lin, she had difficulty identifying the shortcomings of previous research studies.

Excerpt 15

> Honestly, I got difficulties in finding the shortcomings of previous studies…When I read the article, I felt amazed and I didn't find the weaknessess. (Lin)

Lin was one of the doctoral students who had to read local journals since she was a lecturer in a university. However, when she entered the doctoral program, her supervisors asked her to read international journals. In the process of reading, she thought that all of the authors from international journals had done their research perfectly, and she could not find any weaknesses.

Research gaps can be revealed if authors read and criticize previous studies. However, the difficulties identifying research gaps, in this study, were not simply because of the participants' weaknesses in critical reading skills; two participants had problem with the confidence to criticize other researchers' studies. Thus, feeling small in a discourse community can be a problem when authors try to identify research gaps.

Excerpt 16

> Sometimes I feel that I have no credibility to judge previous works…especially in criticizing articles published in international journals. I have no experience in publishing articles in international journals. (Rose)

In addition, the lack of guidelines on identifying research gaps can result in confusion when attempting to identify research gaps, as illustrated by the participant below.

Excerpt 17

> Until now, I cannot find my research gaps especially for my research article. I always ask to my friends where I can find the gap, how I can find it. Since I was in undergraduate program, I did get the ways how to identify the research gaps in research articles…even from the seminars, short trainings…I didn't find concreate explanations how to reveal research gaps. (Tina)

Research gaps may be difficult for authors to identify. Some of them read whole articles and they may still fail to identify the gaps. What happened to Tina indicated that she needed some clear instructions, guidelines, or explanations about strategies for identifying research gaps in RAs.

Discussion

This study has accomplished its objectives: 1) to investigate Indonesian doctoral students', Indonesian academics', and international authors' strategies for presenting research gaps in their ELT RA abstracts and introductions, and 2) to explore Indonesian doctoral students' problems identifying research gaps during research activities. Based on the comparative analysis carried out in this study, the highest occurrence of the strategies appeared in the international authors' RAs with 12 occurrences in the RA abstracts and 69 occurrences in the RA introductions.

Additionally, all the international authors and some of the Indonesian academics, as seen in the corpora, applied more than one strategy to indicate research gaps in their RAs introductions, and they performed the cyclical pattern of reviewing previous studies and indicating research gaps. This result conforms what was claimed by Swales (1990, 2004), that authors can review previous research studies to identify a research gap, and when they need to identify other gaps, they can continue the same steps cyclically. On the other hand, the Indonesian doctoral students in this study only used one strategy in their RA introductions. This may be due to their lack of understanding of how to criticize previous studies in order to reveal the research gaps. The lack of reading good international journals may also impact the knowledge of writer-responsible rhetoric (Hinds in Fakhri, 2004).

On top of that, the step of presenting positive justification occurred in the introduction section of eleven Indonesian doctoral students' RAs. Of course, every author may use positive justification when they think there is a need for their topics to be researched (Chen & Li, 2019; Samraj, 2002). However, considering that the international authors and some of the Indonesian academics in this study used a variety of strategies to indicate research gaps, it is suggested that ELT authors not only justify their studies by stressing the importance, but they also need to review previous studies to strengthen their arguments that the proposed topics are valuable and meaningful to be researched.

In fact, a lesser application of strategies to present research gaps was found not only in Indonesian doctoral students' RA abstracts and introductions, but also in Iranian authors' RAs. Farnia and Barati (2017), who conducted a comparative analysis, found that Iranian authors whose RAs were published in local journals used fewer strategies for presenting research gaps than native authors whose RAs were published in leading English journals. Additionally, Briones (2012) found that Philippine authors merely showed the purposes of their studies without highlighting previous studies' limitations. The study conducted by Jogthong (2001) also indicated that Thai authors did not provide many critiques to what have been done by previous researchers. These mean that Indonesian, Iranian, Philippine, and Thai authors would prefer to focus on the necessity of their studies and avoid giving critiques to previous studies in their field of study. This may be due to the culture of the authors' countries of origin. For instance, Indonesian culture puts a priority on respecting others, and this may impact activities in which they tend to avoid giving negative evaluation to others, including giving critiques to previous research studies (Adnan, 2014).

Concerning research gap strategies, this study found that the Indonesian doctoral students did not use the strategy of highlighting the complete absence of research bearing a specific characteristic in their RA abstracts

and introductions. Meanwhile, this strategy was the third highest strategy used by the Indonesian academics and international authors in their RA introductions and was used in the same number of occurrences in their RA abstracts. If we refer to previous studies investigating this strategy, some studies found that this strategy was used by their research participants. The study conducted by Lim (2012) indicated that the strategy of highlighting the complete absence of research bearing a specific characteristic was used by experienced management authors. Chen and Li (2019) found that Chinese master's students used this strategy in their literature review sections. Abdolmalaki et al., (2019), who investigated Malaysian students' introduction chapters of their article-based theses, found that they used the phrase '*for the first time*' to claim their studies' novelty. This strategy, unfortunately, was not found in the Indonesian doctoral students' RAs, possibly because they had lack of arguments or strong claims indicating that their topics had not yet been proposed by previous researchers. A lack of confidence might also be the causative factor of why they doubted promoting their studies' novel contributions.

This study also found that the Indonesian doctoral students and Indonesian academics shared a similarity in using the strategy of suggesting solution(s); they used this strategy most frequently in their RA introductions. This strategy functions to solve problems found in previous studies (Lindeberg, 2004). Similar to the field of law in which authors tended to be problem-focused in their RA introductions (Feak & Swales, 2011), authors from the education field, especially in ELT, also identified problems and suggested solutions to solve the problems. This is in line with Rochma et al. (2020), who found that undergraduate students in ELT also conveyed suggestions to indicate their research gaps. However, in this study, this strategy was the second lowest strategy used by the international authors. This difference between the Indonesian authors and international authors might be influenced by the authors' orientation. Having a real-world orientation, Indonesian ELT authors tend to convey suggestions to solve problems found in the process of teaching English. Meanwhile, having a research orientation, international ELT authors tend to identify problems or criticize limitations of previous research studies and propose suggestions to improve the quality of studies in the future. Above all, authors can present problems based on real-world phenomena and suggest solutions (Wang & Yang, 2015), but it would be better if they also develop a stronger research orientation in order to strengthen their arguments that the suggestions are derived not only from what has been experienced but also from previous research evidence.

Then, based on the data analysis, the popular strategy that was used most frequently by the international authors in their RA abstracts and introductions was stressing insufficient research in a specific area. This strategy functions to continue and extend the previous studies about a certain topic. Shehzad (2008) claimed that extending previous studies can be a way to fill a research gap. More clearly, Robinson et al. (2011), indicated that insufficient research can happen because of the limited number of research studies related to a certain area, and the findings are too small to contribute to the body of knowledge. This finding of our study is similar to the finding of a study conducted by Chen and Li (2019) that the strategy of stressing insufficient research in a specific aspect was used the most by Chinese applied linguistics authors in the literature review section. We argue that the strategy can also be used in the introductions, in which the process of reviewing the literature review is integrated within the section.

Although extending the studies of other researchers can create a space for further research (Robinson et al., 2011; Shehzad, 2008; Suryani et al., 2015), it can be better if authors have arguments or give some rationale before stating the need to extend the studies. They may identify the limitations of past studies, for instance in the methodology (i.e., choosing more appropriate tools to collect and analyze the data). Then, they can claim *"few studies …" or "little research has been done related to …"* with strong arguments derived from criticizing previous studies' methodologies.

Contrasting and conflicting previous research findings and revealing limitation(s) in previous research were the least observed strategies in the Indonesian doctoral students' and Indonesian academics' introductions. The study conducted by Chen and Li (2019) also found that Chinese master's students of applied linguistics seldom used these strategies. The rare use of the strategies of contrasting and conflicting previous research findings and revealing limitation(s) in previous research may be due to the psychological aspect of authors who still do not have the feeling of readiness to expose the problems found in previous studies (Taylor & Tingguang, 1991). Highlighting contradictions among previous research studies may also occur when authors find 'provocative' results based on analyzing each research stream, synthesizing, and revealing contradictory evidence (Muller-Bloch & Kranz, 2014). These two strategies may be optimally used if authors collect many

relevant references and conduct a meta-analysis so that they can clearly identify the contradictions among previous research findings. Much differently, the strategy of revealing limitation(s) in previous research was the second highest strategy used by the international authors in this study. This strategy can be used if authors have wide knowledge in a certain area so that they can criticize and identify limitations or shortcomings of previous studies.

Concerning Indonesian doctoral students' understanding of the concept of a research gap, the present study has shown that the Indonesian doctoral students understood what a research gap is, and they also agreed that research gaps in RAs can propose novel contributions to the advancement of knowledge. The students' understanding of a research gap might be due to their background knowledge and experience. The introduction of a research gap had been taught by their lecturers in the course of academic writing (Suryani et al., 2015), and they presented research gap(s) in their respective RAs as a compulsory step in establishing a niche (Swales, 1990, 2004).

However, the Indonesian doctoral students still encountered problems identifying research gaps during their research activities. Based on the interviews carried out, the students had a lack of critical reading skills so that they found it difficult to reveal the limitations of previous studies. Meanwhile, critical reading skills are pivotal for students in higher education who are conducting studies because they can identify issues with reasoning, evaluating, and analyzing arguments (Ruggiero, 2012). Based on the interviews with the participants, they also had doubts about criticizing previous studies. They were not ready to criticize previous studies (Farnia & Barati, 2017; Taylor & Chen, 1991) due to several reasons: feeling small in a discourse community and feeling afraid of revealing the weaknesses of what previous scholars had done in their studies.

Indonesian authors come from culture that prioritizes respecting other researchers' studies so that they tend to avoid giving negative evaluations of those studies (Adnan, 2014). Meanwhile, according to Sheldon (2011, p.244), every author needs to give evaluations by "detailing perceived limitations" of what had been done by previous scholars in their studies. Therefore, Indonesian authors should criticize and propose improvements based on the shortcomings identified in the previous studies. One way to increase their critical reading skills is through collaborative research activities. Collaborative activities have benefits such as increasing students' understanding of identifying research gaps and getting inspirations from the members to conduct studies. We would prefer Loes and Pascarella's (2017) suggestion that both female and male students need to create small groups and the members of the groups engage in discussions to increase their critical thinking skills. By doing this, it can be possible for them to find research gaps based on the results of the discussion in their collaborative activities.

Conclusion and Implications

TThis study aimed to investigate Indonesian doctoral students', Indonesian academics', and international authors' use of strategies to indicate research gaps in their ELT RA abstracts and introductions. The strategies investigated were: highlighting the complete absence of research bearing a specific characteristic, stressing insufficient research in a specific aspect, revealing limitation(s) in previous research, contrasting conflicting previous research findings, and suggesting solution(s). The results of this study demonstrated some important points. First, all five strategies to indicate research gaps were used by the international authors in their RA abstracts and introductions. Second, the Indonesian academics also used all five strategies in their RA introductions, but they did not use the strategy of revealing limitation(s) in previous research in their RA abstracts. Third, the Indonesian doctoral students did not use the strategy of highlighting the complete absence of research bearing a specific characteristic in their RA introductions, and they only used the strategies of stressing insufficient research in a specific aspect and suggesting solution(s) in their RA abstracts. The similarities and differences in using the strategies among the three groups of authors can be used to demonstrate how different groups of authors used the types of research gap strategy in their ELT RAs.

Furthermore, this study also aimed to explore the problems faced by Indonesian doctoral students in identifying research gaps during research activities. The results of this study indicated that the Indonesian doctoral students encountered problem criticizing previous research studies reported in the articles that they had read. Some of them also had difficulty identifying the limitations of previous research studies. Some of them were

not confident giving critiques to what had been done by previous scholars. Thus, Indonesian doctoral students need guidance, especially on identifying research gaps and indicating the research gaps in their RA abstracts and introductions.

Although this study provides insightful and meaningful information on the use of strategies to indicate research gaps, it has some limitations that should be considered for future studies. This exclusive study's findings, which focused only on ELT RA abstracts and introductions, may not be generalizable across wider contexts and other disciplines. Thus, a larger corpus of RAs in different disciplines may provide a wider description of the application of strategies to indicate research gaps. Also, more research participants may result in more accurate insights for genre analysts and instructors to solve students' problems in identifying research gaps.

Importantly, this study provides pedagogical implications that can help students and other non-native and novice authors indicate research gaps. First, authors need to focus more on using the strategy of revealing shortcomings or limitations of previous studies. Journal reviewers can be impressed if authors review previous related studies, criticize them, and highlight some shortcomings or limitations of the studies. We recommend that authors criticize the sections of methodology and results sections in RAs since the weaknesses of the studies can be potentially revealed in these sections. The conclusions and suggestions for further research sections are also areas where limitations can be found. Some researchers may state their studies' weaknesses in these sections, hoping that future researchers will improve on their studies. Second, in terms of reading RAs, the RAs with relevant topics published within the last five years can be helpful to maintain the existence of the topics that are being studied. In the process of reading RAs, critical reading strategies should be considered in order to help readers, as future authors, evaluate what have been done in previous research studies. Third, small group discussions can also be important activities for students to share or discuss ideas while writing RAs. Authors should try to discuss their respective studies and share ideas related to what can be investigated for further studies. In these discussions, they can share the possible research gaps, too. Furthermore, we suggest that curriculum developers and lecturers provide a mentoring course that aims to engage the students in higher education in writing RAs for publication.

Conflicts of interest

The authors declare that they have no conflicts of interest.

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Appendix 1

Strategies to indicate research gaps

No.	Strategies (key words)	Linguistic features	Examples
1	Absence	Concessive conjuncts (adverbs)	Nevertheless,…
			Yet,…
			However,…
		Concessive conjuncts (prepositional phrases)	Despite this research…,…
			…remains largely a mystery.
			Notwithstanding these views,…
2	Insufficient	Adjectives modifying nouns	Relatively unexplored
			Understudied phenomenon
		Adjectival premodifiers of nouns	Limited information
			Sporadic evidence
3	Limitation(s)	Negative verb phrases	Do not sufficiently explain…
			Do not explicitly consider…
			Has not addressed…
4	Contrasting evidence	Phrases denoting uncertainty	Ambiguity…
			Mixed evidence…
			Lack of consensus…
		Adjective phrases denoting uncertainty	Conflict with…
			Inconsistent with…
5	Suggesting solution(s)	Phrases denoting suggestion	..previous studies suggest that
			It is suggested…

Appendix 2

Interview Guidelines

1. Please introduce yourself, and tell me where you live and work.
2. Have you had publications since you first became a lecturer in that university? If no, why not?
3. How many publications do you have?
4. What are the kinds of articles of yours that have been published?
5. Research articles should have novel contributions to the advancement of knowledge. Do you agree with that?
6. Have you ever heard about a research gap? What do you know about research gaps?
7. In which parts of a research article do we present research gap(s)?
8. Have you ever had any problem in identifying research gaps so far?

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Role of Task Repetition and Content Familiarity in EFL Students' Fluency and Accuracy in Narrative Tasks: A Case Study

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Developing writing skills has become a priority for many students in English as a foreign language (EFL) contexts. To this end, classroom practices should be facilitative of opportunities to communicate accurately and fluently in written and oral forms. Drawing on evidence which suggests that task repetition allows students to perform subsequent tasks more efficiently and accurately, the study examines the likely effect of procedural repetition with four narrative tasks (i.e. narrating stories in written form after watching short animated videos) on five EFL students' fluency and accuracy (AF). To do this, the levels of the students' AF were measured during the performance of each task. Moreover, qualitative data from questionnaires administered to the students after each task were also included to better understand the behavior of the AF levels in relation to their perceptions of the task performance and the familiarity with the content of the tasks. The evidence shows that the students' AF tended to progressively increase as weeks went by. The highest AF levels were found in the tasks where the content was familiar to the students. The opposite was observed when the students claimed not to be familiar with the content. The argument that we put forward in this article is that task (procedural) repetition may be beneficial for enhancing students' AF in writing task performance; however, if this practice combines with the students' lack of content familiarity, AF may engage in a dynamic interaction in which trade-off effects can be observed.

Keywords: accuracy, fluency, content familiarity, narrative task, student perception, task repetition

Introduction

Because of globalization, the need to develop writing skills to ensure academic achievement and professional success has become apparent. However, "competent writing is frequently accepted as being the last language skill to be acquired for native speakers of the language as well as for foreign/second language students" (Hamp-Lyons & Heasly, 2006, p. 2). This could be explained by the fact that writing is a highly demanding activity which comprises complex cognitive processes (i.e. planning, decision making regarding discourse and pragmatics, making meaning to the reader, and proofreading) (Kellogg et al., 2013). Writing also demands much attention and thinking from the writer and, in contrast to spoken language, there is no opportunity for the negotiation of meaning (Kellogg et al., 2013). Despite the challenges of learning how to write in English, English as a foreign language (EFL) students are encouraged to develop writing proficiency for their professional careers and the highly competitive labor market.

To better understand the complexity of developing students' writing skills, researchers have investigated the link between writing tasks and students' complexity, accuracy, and fluency (CAF). The evidence has suggested that during writing, as well as in oral production, students tend to direct their cognitive resources to some CAF dimensions, but not all three simultaneously because of their limited attentional capacities (Robinson & Gilabert, 2007). For example, Tavakoli and Foster (2008) conducted a study that explored the effects of narrative structure and complexity on the performance of second language students. Their results showed that the tight structure of narrative tasks is connected to increased accuracy, but narrative tasks involving background information (two storylines) increased more complex syntax. Tavakoli and Foster (2008) concluded that "L2 performance is affected in predictable ways by design features of narrative tasks" (p. 459). According to Skehan (2003), the CAF dimensions can significantly be improved when students are provided with opportunities to

manipulate the structure and information of tasks. An implication of this is the possibility that the procedural repetition of tasks would allow students to manipulate and become familiar with the structure of tasks which are thought to be complex in nature, such as narrative tasks.

Drawing on the findings of Tavakoli and Foster (2008), we hypothesized that procedural task repetition would assist students in promoting not only accurate but also fluent written constructions in narrative tasks with a tight structure, because task repetition allows students to "access and (re)formulate words and grammatical structures more efficiently, effectively, and accurately" (Ahmadian, 2012, p. 380). Thus, the present study examines the behavior of five students' accuracy and fluency (AF) in the performance of four narrative tasks. The procedural implementation of the narrative tasks was repeated at weekly intervals using short animated videos and without controlling any classroom or student variables. Through the administration of brief questionnaires, the students' perceptions were also explored to understand their perceptions of the task performance and the familiarity with the content of the tasks. The importance of this study is that it provides an examination of the extent to which the procedural repetition of narrative tasks shapes AF levels in the students' classrooms. Moreover, this study contributes to existing knowledge on the interaction of AF in tasks whose design is complex, in other words, "the result of the attentional, memory, reasoning, and other information processing demands imposed by the structure of the task on the language learner" (Robinson, 2001, p.29). Therefore, the insights gained from this study, and particularly from the implementation of procedural task repetition, may be of assistance to EFL teachers who design writing tasks to promote their students' writing skills.

Writing, Memory, and Cognitive Load

Producing a written text is largely shaped by individual characteristics and strategies. According to Kellogg et al. (2013), writing is much more than just producing language. They believe that writing is a complex process that involves planning, making decisions, making meaning for the reader, and proofreading to make changes if needed. Some researchers in the field concerned with cognitive functions have developed models that try to unravel the processes involved in writing a text (see Flower & Hayes, 1980; Kellogg, 1996). For example, Kellogg (1996) proposed a theory that attempted to describe the cognitive processes involved in writing, i.e. the planning of ideas, translating the ideas into written sentences, and reviewing the ideas and text already produced. In this theory, the last operation (reviewing ideas and text produced) is sub-divided into reading and editing, specifying that these required different cognitive exigencies. It is, in fact, this last operation in the process of writing that differs from oral production.

In the process of writing, it has been suggested that memory plays a key role because of its functions and capacities to perform composition activities. This assumption is supported by the stage theory model of information processing based on the work of Atkinson and Shriffin (1968). The aim of this model was to describe how memory stores and retrieves information for effective use. For Lutz and Huitt (2003), memory is a multi-staged system of representations that encompass a lifetime's accumulation of perceptions. Even though the notion of memory, its functions, and descriptions have been subject to disagreement, there is general agreement among scholars on the fact that individuals' perceptual processing is limited, and thus "to attend to a stimulus is to focus on it while consciously attempting to ignore other stimuli" (Lutz & Huitt, 2003, p.3). Lutz and Huitt (2003) suggested that:

> Attention does facilitate the integration and transfer of the information being attended, but it is impacted by many factors including the meaningfulness of the new stimulus to the student, the similarity between competing ideas or stimuli, the complexity of the new information, and the physical ability of the person to attend. (p.3)

It is implied in this assertion that memory and its attentional capacities can be influenced by other cognitive factors. This is supported by the Cognitive Load Theory, which was put forward by John Sweller in the 1980s following some principles of the information processing model. This theory suggests that there are distinct types of demands imposed on the (working) memory. These demands can be initiated by the difficulty associated with a task (intrinsic), the design or characteristics of a task (extraneous), and the presence or construction of schemas (organization of information) (germane). These demands during the performance of tasks are additive in the sense that they can individually increase the amount of processing required in the memory (Lutz & Huitt, 2003). While intrinsic cognitive load cannot be changed, it is possible that researchers

and language teachers can manipulate extraneous and germane cognitive loads. The implication of this for English teaching is that performing complex writing tasks and repeating their implementation design (i.e. procedural task repetition) in the language classroom will enable them to free up their extraneous and germane cognitive loads, allowing them to focus their attention on the difficulty associated with the new task (intrinsic cognitive load).

In the area of CAF, the suggestions of limited capacity of (working) memory and the nature of the cognitive load are consistent with Skehan's (2009) Trade-off Hypothesis, which argues that there is a tension between form (complexity and accuracy) and meaning (fluency) when students produce written or oral constructions. Students' inability to promote meaning and form simultaneously is believed to be a consequence of limitations in their attentional capacities, which compel them to make choices on being complex, being accurate, and/or being fluent (Skehan, 2009), and thus "committing attention to one area, other thing being equal, might cause lower performance in others" (Skehan, 2009, p. 511). These claims suggest that writing, as an activity that requires mental processing, can be highly influenced by the limited capacity of individuals' mental systems (Huitt, 2003). That is, the processes involved in writing (i.e. planning, translating, programming, executing, reading, and editing information) can use up all of the attentional capacities and thus influence their writing production in important ways. This could mean that students face the need to decide whether to allocate their attentional resources for producing either complex, accurate, or fluent compositions.

However, Skehan (2003) maintained that written and oral production can be improved if students are provided with opportunities to manipulate and become familiar with the structure and information of tasks. This suggestion becomes relevant for the purpose of the present study because it implies that repeating the design of tasks would enable students to become familiar with their structure and thus see gains in terms of the AF of their written production during tasks. To this end, we will discuss in the next section the concept of task repetition, how it has been operationalized, and its benefits for language learning.

Task Repetition and L2 Performance

At this stage, it is important to define what a writing task is. In this study, a writing task is defined as an activity that encourages students to use their language resources (e.g. meaning and form) to achieve an authentic writing objective. For more than 20 years, a practice that has gained popularity in both second language L2 pedagogy and research is the performance of writing tasks in the EFL classroom (Tavakoli & Foster, 2008). This popularity has been motivated by the fact that through a focus on meaning, writing tasks efficiently promote the development of writing skills (Samuda & Bygate, 2005). This learning benefit has rendered tasks as practical activities for teaching, assessing, and researching language performance and learning. In fact, research in the field of Second Language Acquisition (SLA) has corroborated the benefits of using writing tasks for language learning by examining how their design and implementation procedures (e.g. planning time, task repetition, and task familiarity) influence students' performance and learning (for a full discussion, see Manchón, 2014; Manchón & Roca de Larios, 2011; Manchón & Vasylets, 2019). For example, in Ellis and Yuan (2004), the effects of pre-task planning, unpressured on-line planning, and no planning were examined on the written performance of Chinese students. The results show that pre-task planning resulted in greater fluency and syntactic variety, but unpressured on-line planning led to greater accuracy. In their study, it was proposed that the two types of planning impact different aspects of L2 writing processes. Moreover, Kuhi et al. (2014) conducted a study on the effect of manipulating the type of tasks (narrative and cause-effect) on written production in English. Their findings showed that the genre of writing has an impact on the students' writing fluency and complexity, which was associated with learning styles. Together, these studies provide evidence that the planning, designing, and conditioning of tasks considerably influence students' L2 writing performance.

Because of the learning benefits of using tasks in the classroom, researchers and practitioners in the field of SLA have directed their attention towards understanding how task design and implementation procedures (of pre- and post-task activities) can maximize language performance and learning (Ahmadian, 2012). Among these variables, task repetition is a procedure that has attracted researchers' interest for more than two decades because it has been found to promote the link between language performance and development (Bygate & Samuda, 2005). Task repetition involves asking language students to repeat the same or slightly modified tasks (the whole task or parts of a task) at intervals of one or two weeks (Ahmadian, 2012). Task repetition can also be described as repeating the same tasks with the same content or repeating tasks with the same procedure

(procedural repetition) but with different content (Ellis, 2009). According to Ahmadian (2013) and Ellis (2005), the first performance of a task is the preparation for further performances or tasks. To handle the task at hand, this preparation allows students to simultaneously focus their attention on the message content, scan their memory, and seek appropriate language resources for use. This first encounter enables them to establish familiarity with the task and/or content. Moreover, the familiarity provides them with the basis to handle subsequent tasks more efficiently and accurately (Bygate, 1999). In Ahmadian's (2012) words, "by repeating the same or similar tasks, therefore, students might be able to build upon what they have already done in order to 'buy time' not only to do mental work on what they are about to communicate but also to access and (re) formulate words and grammatical structures more efficiently, effectively, and accurately" (p. 380). The benefits of repeating a task is that the first performance of the task will result in an activation boost and an exogenous automatic control that make the repeated task performance more efficient (Sohn & Anderson, 2001).

Based upon the above, we can claim that task repetition is a kind of planning because performing a task one time involves implicit planning that will increase the degree of familiarity concerning the content or procedure of future tasks (Bui, 2014; Bygate & Samuda, 2005). According to Ahmadian and Tavakoli (2010), planning opportunities—as those provided in task repetition — significantly impact the students' CAF areas. However, increasing the levels of CAF is believed to be desirable but difficult. From an information processing perspective and consistent with Skehan's (2009) Trade-off Hypothesis, Ahmadian and Tavakoli (2010) explain that this difficulty results from the fact that our attentional capacity and processing systems are both limited and selective; for example, students cannot focus on both meaning (fluency) and form (accuracy and complexity) at the same time. Consequently, students have to allocate their attentional resources by prioritizing one of these aspects of language over the others (Skehan, 1998). With the purpose of understanding how to enhance these language dimensions and minimize their trade-off effects, researchers continue to study the impact of the implementation of variables—such as task repetition—on students' language oral and written production.

To date, the impact of task repetition on L2 oral and written production has been examined in a number of experimental studies (e.g., Bygate, 1996; Larsen-Freeman, 2006). In general, these previous experimental studies have shown that task repetition can be beneficial for increasing the CAF dimensions, with some trade-off effects being reported (Ahmadian & Tavakoli, 2010). For example, Khezrlou (2019) investigated the effects of task repetition on learners' CAF. The students were asked to repeat a task after they received feedback in the form of corrective feedback or reformulations. His results show that the students proved to be superior in terms of accuracy and complexity. Lambert et al. (2017) conducted a study to examine the relationship between the repetition of oral monologue tasks and the L2 fluency (i.e. speech rate, frequency of clause-final and mid-clause filled pauses, and overt self-repairs) of 32 Japanese learners of English across three proficiency levels. They found that task repetition had a significant impact on learners' oral fluency regardless of their proficiency level. Another interesting study on task repetition was conducted by Ahmadian and Tavakoli (2010), who examined the effects of task repetition on language performance. In their study, 60 students in four condition groups (i.e. careful on-line planning without task repetition, pressured on-line planning with task repetition, careful on-line planning with task repetition, and pressured on-line planning without task repetition) were asked to watch a 15-minute episode of a classic silent film, and then they had to explain the film under the conditions assigned for each group. Interestingly, their results indicated significant improvements in not only fluency and accuracy, but also complexity. It is important to point out that, as shown in research into task repetition, there are no consistent findings with respect to complexity and accuracy. This makes it difficult to predict if task repetition could be specifically beneficial for both language dimensions. However, it is possible to claim that through repeating tasks, students are allowed to direct their attention towards both meaning (fluency) and form (accuracy) during task performance.

Following the above, the present case study explores the potential impact of the procedural repetition of narrative tasks (i.e. narrative tasks with the same implementation procedure but with different content) on five students' AF in their classroom. We decided to investigate the procedural repetition of the tasks to better understand whether and how the students' process of becoming familiar with the design of the narrative tasks has any impact on their levels of AF. Moreover, we specifically explored the behavior of the AF areas because research evidence suggests that in unfamiliar and complex tasks that require high levels of attention, students prioritize either fluency or accuracy (Skehan, 1998), but not both simultaneously. Hence, drawing on the suggestion that task procedural repetition is beneficial for promoting the fluency and accuracy of students'

written constructions (Ahmadian, 2012), we explore the extent to which procedural repetition shapes these two language dimensions in narrative tasks. The study is guided by the following research question:

> To what extent does the procedural repetition of narrative tasks based upon short animated video input shape students' accuracy and fluency?

The importance and originality of this study come from the fact that the study and data collection took place in the students' real classroom without modifying the teaching and learning practices and the way they normally practice writing with a view to understanding the behavior of AF in this context. Moreover, it includes qualitative data to examine the students' perceptions of the tasks, their performance, and their familiarity with the tasks/content to better illuminate whether and how the procedural repetition of narrative tasks likely shapes AF.

Materials and Methods

Participants and Background

The study took place in the country of Mexico, in the central State of Guanajuato. The location was the Language Department of the public University of Guanajuato in the capital city of the state. The focus was specifically a small group of five EFL students who attended an English class for one semester in the Language Department. The English class adopted a communicative approach (according to the teacher). The students were accustomed to working in pairs and groups and sharing their work and ideas with their group. Information about the five participants will be described in detail in the following section.

We advertised our research project in the Language Department of the university. Twelve learners expressed their desire to participate in the study. Of these 12 learners, only five learners were selected for the study based on their proficiency level. Their proficiency level was measured through the Oxford placement test, which was administered by the institution at the beginning of the semester for placement purposes. The five students had a B1 proficiency level on the Common European Framework of Reference for Languages. They were five EFL students (three males and two females, all Mexicans), between the ages of 18 and 35, and with different educational backgrounds. The participants attended the English class once a week for four hours on Friday afternoons. Table 1 shows the key information of the students.

Table 1

Participants' biographical information

Participant	Age	Gender	Written Practice Frequency	BA and BSc Areas	Time Studying English
P1	25	M	1 per week	Economics- Administrative	3 years
P2	25	M	1 per week	Industrial Engineering	2.5 years
P3	30	F	1 per week	Economics- Administrative	2.1 years
P4	25	M	1 per week	Physics Engineering	2.5 years
P5	30	F	1 per week	Economics- Administrative	2 years

Table 1 shows the participants' biographical information, such as age (a range of 25-30 years old), gender (three males and two females), education (different BA and BSc programs), frequency of their written practice (one writing activity per week), and time studying English.

Data collected from these participants was used strictly for research purposes. As shown in Table 1 and throughout this article, participant codes are used to maintain confidentiality. The participants were aware of their right to withdraw at any time and ask for any information regarding the study.

Materials

Each of the four narrative tasks used to investigate the students' AF areas was performed at weekly intervals. The four tasks followed the same procedural implementation, that is, during each session the students watched

a short animated video from YouTube two times to focus their attention on the content. The students were not allowed to take notes while watching the videos. After playing the videos twice, they were asked to narrate the story on paper with a time limit of ten minutes. We decided to use short animated videos because we believe that the use of animated video input to elicit written production would be interesting for the participants, making the task less stressful. The links to the videos can be found in Table 2.

Table 2

Short animated videos

Session	Video Name	Internet Link
1	Miss Pretty Nose	https://www.youtube.com/watch?v=YNAzHY5esBg
2	Runaway	https://youtu.be/lOReXHOSnvw
3	The Controller	https://youtu.be/2cBZrr2ZUsg
4	Course of Nature	https://youtu.be/T78ruBKK26w

The videos were selected based on their length (about four minutes each) and topics. We selected these videos because they contain short stories that we thought could be familiar to the students and thus promote the AF of their written production during task performance. The four videos include dialogues in English that were level appropriate, according to the teacher of the class. Moreover, as can be seen in Table 2, the videos changed in each session; therefore, the content was different in terms of the stories they had to narrate. Based upon the suggestion that minor changes in tasks can affect learners' performance significantly (Larsen-Freeman, 2006), we acknowledge that the diversity of the stories may have influenced the results to some extent. However, our aim was to implement the tasks following classroom practices as natural as possible. Of course, this involved changing the content of the videos with a view to encouraging the students' writing production.

After each writing task, the students were asked to answer a questionnaire that functioned as a stimulated recall instrument following Fukuta's (2016) recommendation. We included the questionnaire after each task to better understand the students' task performance from their perspective and the likely impact of the procedural repetition of the tasks on their AF. The questionnaire served as stimulated recall to explore the participants' perceptions of 1) each task, 2) their own performance during the task, and 3) content familiarity. To this end, the questionnaire included five open-ended questions (see Appendix 1) because these types of questions allow the respondents to freely express their opinions without having to limit themselves to pre-determined responses.

Data Analysis

The analysis of the present study involved a combination of quantitative and qualitative data. The goal in the quantitative analysis was to identify AF patterns in each narrative task. To achieve this, we chose measures that are reported to be reliable indices representing the corresponding constructs of AF. Regarding fluency, Wolfe-Quintero, Inagaki, and Kim (1998) mentioned that it concerns the "number of words or structural units a writer is able to include in their writing within a particular period of time (p. 14)". Following this idea, this study considered the temporary aspect of rate, that is, the number of words retrieved in a limited time and more specifically a register of the number of words per minute (Kellogg, 1996; Ong & Zhang, 2010). That is, we calculated the total number of words produced in each session, and then divided it by the total number of minutes for the task (10 minutes). Although we decided to use this measure of fluency, we acknowledge that this has been criticised. Skehan (1998) explains that measuring fluency is more contentious than the other dimensions (complexity and accuracy). This is explained by a high number of fluency measures that have been suggested. Nevertheless, Ong and Zhang (2010) contend that fluency in writing can be measured by calculating words produced per minute out of the total time spent on the task. Consistent with this, our study includes words per minute as being indicative of fluency because this measure indexes the students' ability to construct the length of written constructions based on the time limit assigned for the task (Wolfe-Quintero et al., 1998).

Regarding accuracy, this was analyzed through a global measure of percentage of error-free clauses. Specifically, we first identified and segmented all the clauses in each task, and then the clauses that did not contain any errors; the clauses which had errors in syntax, morphology, and lexis were excluded from the counting (Yuan &

Ellis, 2003). After identifying the error-free clauses, the percentages in each written production were calculated by counting the total number of error-free clauses and dividing that number by the total number of clauses, and multiplying the result by 100. We believe that by choosing these two measures of AF, the validity of the analysis was assured because these measures have been used to investigate the link between L2 writing performance and proficiency (Wolfe-Quintero et al., 1998). Below, there is a sample of data obtained from Participant 1 in Task 3, as well as the specific codes used to analyze the written data produced by the learners (Table 3):

> /Benjamin was playing videogames/* until his mom told him/* he has/* to clean his room/*, then Benjamin´s mom was trying/* to clean the controll of the videogame/ and then she was teleported into the game/*, when Benjamin realized/* that hismom is in the game/ he told her/* that they have/* to work together/* to pass all the levels in the videogame/* and then she will be free again/. Benjamin put a cheat/, later his mom beat the dragon/* and they live happy again/* playing "The controller"/*. (P1S3)

Table 3

Coding

Identifiable Utterances	Code
Correction / Hesitation	Word
Clause	/
Error-free Clause	*

It is well noted in this sample how the clauses and the error-free clauses were identified and classified to later calculate accuracy globally. The number of words per minute were also counted and listed as an attempt to measure fluency. Below, Table 4 shows how the results from the coding and calculations were gathered for analysis.

Table 4

Accuracy and fluency in Task 3 (P1)

Accuracy Measures	No.
Clauses	18
Error-Free Clauses	14
Percentage of Error-Free Clauses	77.77%
Fluency Measures	No.
Words per Task	87
Words per Minute	8.7
Words per Clause	4.83

The table shows the way the measures analyzed were put together to later compare them and explore if there was any development in terms of AF. To ensure the consistency and accuracy of the measures, all of the data were coded and measured separately by each researcher, and correlation coefficients of $r > .90$ were observed for the two measures.

Concerning the qualitative data obtained from the questionnaires completed after each task, Gery and Bernard (2000) made reference to the repetition of words, metaphors identification, and shifts in content as a resource to identify participants' constructs and meaning making. Based upon this idea, we only considered those segments in which the participants appeared to be voicing their perceptions of the tasks, performance, and how these were potentially influenced by their process of becoming familiar with the procedural design of the tasks.

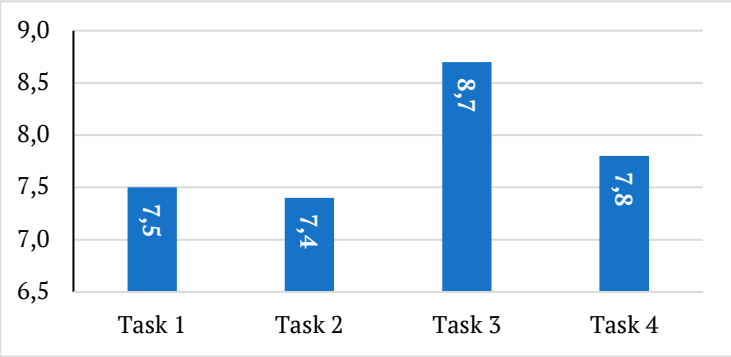
Results

This section presents the results of the study in order to answer the research question (i.e. to what extent does the procedural repetition of narrative tasks based upon short animated video input shape students' accuracy and fluency?). Graphs are used in this section to present the results and tendencies more visually. To better understand how the nature of the tasks and the repeated design shape the students' AF, data from the questionnaires are presented and discussed.

The figure below summarizes the results concerning fluency gathered from Participant 1 across all four sessions.

Figure 1

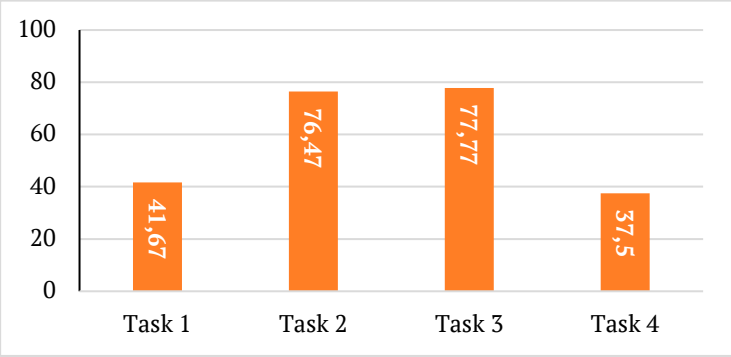
Participant 1's fluency levels



As can be seen in Figure 1, Participant 1's fluency levels varied across the four tasks. In Task 2, it was documented that the fluency level slightly decreased (7.4 words per minute) compared to Task 1 (7.5 words per minute). Interestingly, the fluency level steeply increased in Task 3 (8.7 words per minute). Moreover, in Task 4, the fluency level sharply dropped (7.8 words per minute). A similar tendency can be found in this participant's accuracy levels across the four narrative tasks. This is shown in Figure 2.

Figure 2

Participant 1's accuracy levels



As with the fluency levels, it can be seen that the accuracy levels varied significantly. Moreover, accuracy was considerably low in Task 1 (41.67%). Interestingly, we can see a significant increase in Tasks 1 and 2 (41.67% and 76.47%, respectively), and a slight increase in Tasks 2 and 3. Moreover, as with fluency, there was a steep decline in accuracy in Task 4 (37.5%). If we compare Figures 1 and 2, we can generally see that both fluency and accuracy tended to increase steadily in Tasks 2 and 3, but the levels considerably decreased in Task 4. As suggested by the data collected from the questionnaires, the increases in fluency and accuracy could be explained by the students' familiarity with the content in the video for Task 3. For example, Participant 1 after Task 3 suggested the following:

> I liked it more, also I think the topic was more familiar to me. (Participant 1, Task 3)

Thus it seems possible that the participant's familiarity with the message content of the short animated videos played a role in increasing both fluency and accuracy in Task 3. As we will see below, this suggestion is also borne out by the questionnaire data themselves, which suggested that in Task 4, the participants felt a disconnection between their own previous experiences and the content of the video played for that task, contrary to the familiarity they claimed to have with the content of Task 3.

The next figure shows the fluency performance of Participant 2 throughout the four tasks.

Figure 3

Participant 2's fluency levels

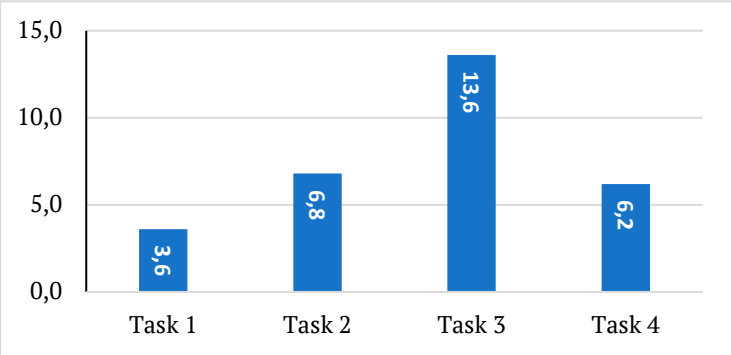
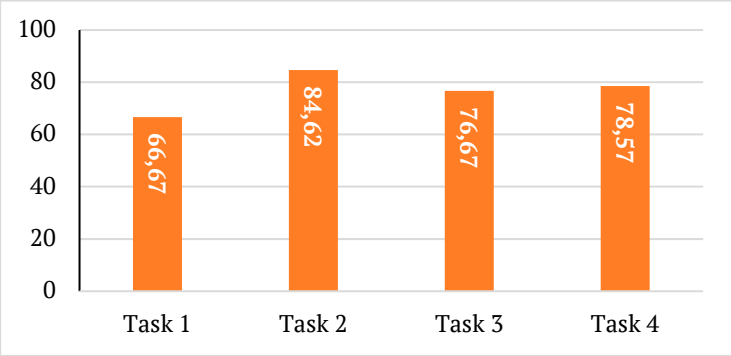


Figure 3 shows that Participant 2's fluency levels varied across the four tasks. In contrast to Participant 1, a significant increase in Participant 2's fluency can be seen from Task 1 to Task 2 (6.8 words per minute in Task 2 compared to 3.6 words per minute in Task 1). Again, there was a marked rise in the fluency level in Task 3 (13.6 words per minute), and then a sharp drop in Task 4. However, a different pattern can be observed in Participant 2's accuracy levels. They are displayed in Figure 4.

Figure 4

Participant 2's accuracy levels



As in Figure 2 (Participant 1's accuracy levels), there was an increase in accuracy from Task 1 to Task 2 (66.67% to 84.62% of error-free clauses). However, accuracy decreased slightly in Task 3 (76.67%), but then increased again in Task 4 (78.57%). In general, we can suggest that it was again Task 3 that promoted AF. It is therefore likely that the familiarity that the students claimed to have with the message content of the animated video in Task 3 appeared to promote the AF of their written constructions. For example, Participant 2 suggested the following:

> It was a topic of which I knew a bit more of vocabulary and that helped me. (Participant 2, Task 3)

Here, Participant 2 claims that he was more familiar with the vocabulary words that appeared in the dialogues. Therefore, this seems to have helped him construct more accurate and fluent utterances than in the other three tasks. The video was about a short argument between a mother and her son because the child was playing a video game instead of doing his chores. To the majority of the participants, this topic was linked to their own previous experiences. Hence, they felt more comfortable writing about it because they knew more vocabulary and they understood the situation clearly. However, in Task 2, the student showed their highest accuracy (84.62%), but rather low fluency compared to Task 3 (6.2 compared to 13.6 words per minute). It is possible to hypothesize that for cognitively demanding tasks, such as narrative tasks, fluency and accuracy may compete with each other when students are not familiar with the message content of the task. In other words, in unfamiliar tasks that require high levels of attention to be performed, students will have to prioritize where to allocate their attention (Skehan, 1998), in this case, fluency or accuracy. This suggestion is also supported by the data of Participants 4 and 5, who also appeared to prioritize only one dimension in Task 2. What is interesting in Figures 3 and 4 is the same low levels of fluency and accuracy in Task 4 compared to Tasks 2 and 3. Regarding Task 4, Participant 2 stated that they did not feel any familiarity with the plot and the story.

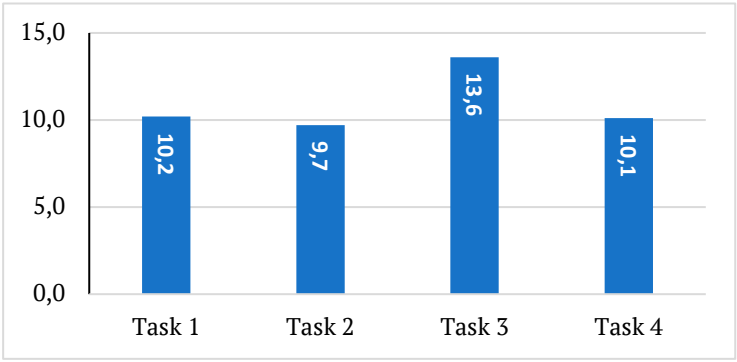
> The dialogues and the situation were a bit weird and strange for me in this video. (Participant 2, Task 4)

These low levels could be attributed to the participant's feelings of disconnection with the content, which may have shaped the way and speed in which words were produced, as it takes longer to process new information and organize the ideas.

A similar pattern to Participants 1 and 2 can be found in Figure 5, which shows Participant 3's fluency levels across the four tasks.

Figure 5

Participant 3's fluency levels



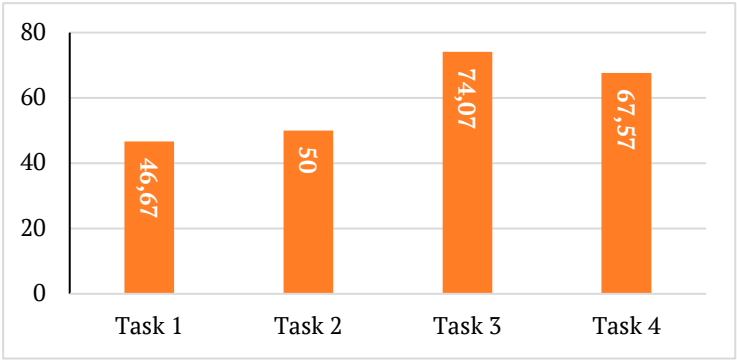
As in Figure 1, there was a slight decrease in the fluency levels when we compared Tasks 1 and 2 (9.7 compared to 10.2 words per minute). In the questionnaire administered after Task 2, the participant stated that they experienced some difficulties understanding the plot, as suggested below.

> [...] the story appeared strange to me for being fictional. (Participant 3, Task 2)

What stands out from this figure is that Participant 3's fluency significantly rose in Task 3. Moreover, fluency then fell sharply in Task 4. A similar pattern in terms of accuracy can be seen in Tasks 3 and 4 shown in Figure 6 below.

Figure 6

Participant 3's accuracy levels



From the figure above we can remark that accuracy increased slightly in Task 2 (50% error-free clauses). As we might expect, Participant 3's accuracy steeply rose in Task 3. As with Participants 1 and 2, we can link the accuracy performance to the familiarity with the task and the video content and dialogues. In the excerpt provided below, the participant suggests that he was easily able to follow the video dialogues.

> Of easy interpretation, which makes the explanation about it more simple. (Participant 3, Task 3)

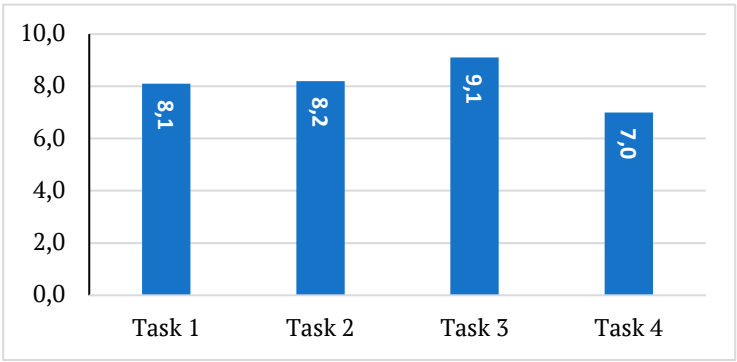
It is possible therefore that the students' familiarity with the content of the videos and dialogues enabled them to retain the visual input and, as a consequence, produce more fluent and accurate constructions in Task 3 than in the other three tasks. If we compare the participant's performance in Tasks 3 and 4, we can again observe a decrease in terms of accuracy. The last task showed a decrease in accuracy due to some disengagement from the vocabulary and dialogues used in the videos, as suggested in Participant 3's response below.

> For me there was not much relation, not in the fact of the content of the video. (Participant 3, Task 4)

This is not surprising as the fourth video used was particularly surreal and abstract. Therefore, the participants stated that they felt a lack of connection, which seems to be reflected in the fluency and accuracy reductions. This is supported by Participant 4's data as shown in Figures 7 and 8 below.

Figure 7

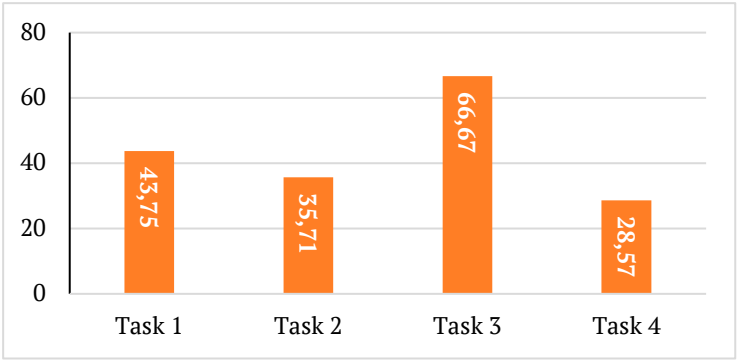
Participant 4's fluency levels



The figure shows that there was a steady increase in the levels of fluency in Tasks 1 to 3 (from 8.1 to 9.1 words per minute). Again, in Task 3, the participant showed the highest fluency level (9.1), but the lowest fluency in Task 4 (7.0). A similar pattern can be found in the accuracy levels in Tasks 3 and 4, as presented in Figure 8.

Figure 8

Participant 4's accuracy levels



Similar to Participant 1 (Figure 2), Figure 8 shows a slight decrease in accuracy in Task 2 (35.71% compared to 43.75% in Task 1), but a gradual increase in terms of fluency (Figure 7). In the questionnaires after the sessions, Participant 4 provided the following response when asked how he felt about his performance:

> When I was watching the video, I knew what I wanted to put down, but after starting to write I felt a bit nervous. (Participant 4, Task 1)

Therefore, we can suggest that when students are in the process of becoming familiar with a new task, they may experience high levels of anxiety which, alongside their limited attentional capacities (Lutz & Huitt, 2003; Skehan, 2009), potentially shape their performance as evident in their fluency and accuracy levels. As in the cases of Participants 1, 2, and 3, Participant 4 achieved the highest AF levels in Task 3. It is again possible to suggest that this represents a connection with the content; that is, the students' familiarity with the vocabulary and the content shown in the video (Task 3) contributed to the production of more fluent and accurate structures. However, fluency and accuracy levels significantly decreased in Task 4. In the questionnaire used after Task 4, there was a question posed about the participant's opinion regarding the connection between the content and the written production. The participant's response was:

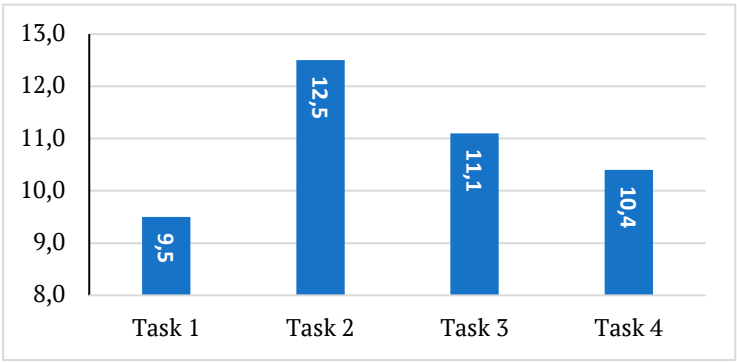
> There is not much relation. (Participant 4, Task 4)

With this response, the participant referred to a feeling of disconnection with the video content in the last session. This appeared to have affected their fluency and accuracy levels, as it might have taken longer for the participant to process the writing in terms of words and structures.

Finally, Figures 9 and 10 show the fluency and accuracy levels of Participant 5 across the four narrative tasks.

Figure 9

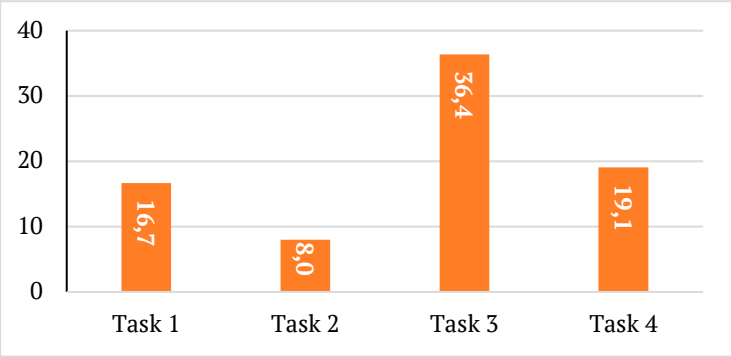
Participant 5's fluency levels



As with in the fluency levels of Participants 2 and 4, Participant 5 constructed more fluent sentences in Task 2 than in Task 1 (12.5 compared to 9.5 words per minute). Interestingly, in Task 2, this participant showed the most fluent constructions in contrast to the other participants, who tended to have the highest fluency levels in Task 3. As with the previous participants, this participant's fluency decreased in Task 4. A different pattern of accuracy can be seen in the figure below.

Figure 10

Participant 5's accuracy levels



In contrast to fluency, there was a noticeable decrease in accuracy in Task 2. It can be interpreted that because of limited attentional capacities (Skehan, 1998, 2009), the participant was compelled to focus on writing as much as possible in the time assigned, affecting in turn the accuracy level because less time was dedicated to think about the correction of language structures. That is, dedicating less time to planning often results in less accurate writing (Ahmadian & Tavakoli, 2010; Skehan, 1998). In Task 3, there was a sharp increase in the accuracy level, which can again be attributed to the participant's familiarity with the content of the video, as suggested below.

> Comfortable, it is each individual who chooses how to write what it was seen in the videos. (Participant 5, Task 3)

As suggested in her response, the participant seemed to be comfortable writing about the topic provided in Task 3. Moreover, the relation between the content and the written production was also highlighted, suggesting that the content of the videos allowed them to be creative in terms of language use when performing the task. As shown in Task 4, both accuracy and fluency decreased considerably. Once again, this can be related to the participant's lack of familiarity with the content and the low number of dialogues presented in the video.

> In my case I tried to remember the words that would complement, because they contained little dialogue. (Participant 5, Task 4)

Therefore, the participant's inability to retrieve words that could be used to perform and accomplish Task 4 appeared to have resulted in lower levels of fluency and accuracy than in Task 3.

In summary, the results discussed in this section show that the five participants' AF levels varied considerably across the four narrative tasks. Despite this variability, it was possible to identify some trends that showed that AF improved in some tasks, namely, Tasks 2 and 3. However, when the repetition practice combines with students' lack of familiarity with the content of a task, their AF may be affected in unpredictable ways.

Discussion

The purpose of the present study was to understand the effect of the procedural repetition of four narrative tasks on five students' AF with stimulated recalls from questionnaires following Fukuta's (2016) recommendation. In general, the findings showed that both fluency and accuracy tended to be considerably lower in the first task. This can be explained by the fact that, in this context, the students had not been asked to perform writing tasks to narrate stories seen on videos. Therefore, we can suggest that the students were not

familiar with the design of the first task and thus showed low levels of AF. When students perform unfamiliar and challenging tasks, their AF levels tend to decrease considerably (Qiu, 2019), because the (cognitive and instructional) demands of the task compel them to prioritize the complexity of their language constructions (Skehan, 2009, 2018). In his Trade-off Hypothesis, Skehan (2009) explained that students' inability to promote meaning and form simultaneously is believed to be a consequence of limitations in their attentional capacities, which compel them to make choices on being complex, being accurate, and/or being fluent.

After the repetition of the first task in this study, it was possible to see higher levels of AF, particularly in Tasks 2 and 3. This finding is aligned with Khezrlou's (2020) and Lynch and Maclean's (2000, 2001) studies, which also showed that task repetition tends to increase both fluency and accuracy, but in oral skills. Ahmadian and Tavakoli (2010) contended that the focus of tasks on meaning encourages students to prioritize meaning over form. This may be explained by the fact that processing meaning (in our study, the stories of the videos) requires fewer attentional resources (Muranoi, 2007). However, the fact that the students in this study were able to repeat the procedure of the narrative tasks at weekly intervals seems to have enabled them to shift their attention to more fluent and accurate written formulations (Bygate, 1996). We can, consequently, hypothesize that in the planning process of their writing system (Kellogg, 1996), as in Task 1 of our study, students scanned their memory for automated aspects of their language to deal with the task (Bygate, 1999; Qui, 2019), and stored traces of both meaning and forms (e.g., items, images or content) temporarily in their memory (Muranoi, 2007). In the second opportunity to perform the task, the students were more cognitively prepared and reactive concerning the meaning and form previously stored in the memory for their task performance (Bygate & Samuda, 2005). Since the students were in the process of becoming familiar with the implementation procedures of the task and already know what they would say in their task performance, this allowed them to have more processing space available to shift their attention to the formulation stage of the language required to express their ideas (Ellis, 2003), with the result that both accuracy and fluency are increased.

However, the figures indicated that there was a significant amount of fluctuation in terms of the AF levels in Tasks 2 and 3. We believe that in Task 2, the students were in the process of becoming familiar with the task procedures. This created a dynamic interaction between fluency and accuracy motivated by their limited attentional capacities (Skehan, 1998, 2009). These results provide further evidence in support of the notion of limited and selective attentional capacities (Ahmadian & Tavakoli, 2010; Skehan, 1998), in that the students were able to attend to fluency or accuracy but not the two simultaneously. According to Huitt (2003), when students perform an unfamiliar task, their control mechanism (for storing, encoding, and producing information) requires more processing and attentional resources. This means that they would need to dedicate more time to the planning and translating processes of the writing system (Kellogg, 1996), which would limit their focus on fluency or accuracy.

Despite the variability, it was possible to see a global tendency for higher AF in Task 3. As suggested in the students' responses, they were familiar with the story in the video and the vocabulary in the dialogues. Our findings of high fluency levels on this task are supported by Chang (1999), who found that familiarity with a topic enhanced fluency. Similarly, Skehan and Foster (1999) and Robinson (2001) found that when students have a schema of a familiar area or structure of a story, fluency levels increase significantly. Drawing on this claim, it may be the case that the schema of the procedural design of the tasks promoted the levels of both fluency and accuracy in Task 3 (see also Van de Guchte, Braaksma, Rijlaarsdam, & Bimmel, 2016). Hence, it could be conceivably hypothesized that content familiarity is a factor that may assist students in producing accurate and fluent written constructions because content familiarity frees up the load from the cognitive processes of the writing system (Kellogg, 1996), which are demanded in order to perform the task, and thus allows them to direct their attention to construct more fluent and accurate sentences (Skehan, 2014). This is also supported by Bui (2014), Bui and Huang (2018), and Lambert and Robinson (2014) who contended that content familiarity eases the cognitive load and thus benefits L2 production. In a similar vein, in the schema theory, Bartlet (1932) suggested that language production becomes easier when familiar topics or content are stored in background knowledge because this knowledge in schema interferes and restructures the interpretation of new information. With respect to Task 4, the five students' AF levels tended to fall considerably. As suggested in the questionnaire data, the students stated that they did not feel any connection with the content of the video because it contained fewer dialogues, and the story in the video was perceived to be surreal. Thus, it can be suggested that their lack of familiarity with the content and dialogues may have negatively

influenced the students' AF levels in this last task, despite the experience gained through becoming familiar with the procedures from the previous tasks.

Taken together, the initial results of this study suggest a potential interplay among the AF areas, procedural task repetition, and content familiarity. In other words, our evidence suggests that the procedural repetition of tasks and content familiarity could be beneficial for encouraging AF simultaneously. However, if this practice combines with the students' lack of familiarity with the content, it seems to initiate a dynamic interaction between fluency and accuracy motivated by their competition for attention (Skehan, 1998). In contrast, when students are familiar with the content of tasks, it may be the case that task repetition may free up students' cognitive load to direct their attention to both the fluency and accuracy of their written constructions. The present study thus raises the possibility that in order to facilitate students with "a system which remains open to noticing and to change while at the same time making some gains in terms of fluency and real-time language processing" (Skehan, 1998, p 91), language teaching should provide them with opportunities for task repetition and different degrees of content familiarity simultaneously (Qiu, 2019).

Conclusion

The present study set out to examine the effect of the procedural repetition of four narrative tasks using short animated videos on five students' AF in their classroom environment. Four narrative tasks were designed following the same procedural structure, that is, the four tasks shared the same design but different content provided by short animated videos. To understand the students' perceptions of the tasks and content familiarity, a questionnaire was administered as a stimulated recall at the end of each writing task.

Since the narrative tasks were new to the students, we expected that the repetition of the tasks would lead to a progressive rise in the levels of AF. However, the findings of this study indicated that the procedural repetition of the narrative tasks appeared to improve the fluency and accuracy of the five students' written constructions only on some tasks and to some extent. Moreover, when combined with the students' familiarity with the content of the videos, this repetition practice created significant fluctuations in the levels of AF. Particularly, when the students stated that the content of the videos was familiar to them, high levels of both fluency and accuracy were observed in the data; the opposite happened when the students claimed that the content was not familiar to them.

The findings of this study have practical implications for the EFL classroom. Firstly, task repetition should be carried out in language classrooms in order to promote students' L2 performance and to enhance language development when dealing with cognitively challenging tasks. In order to maximize the benefits of task repetition, students should first perform tasks where the content and vocabulary are familiar to them. This suggestion was supported by our data, which exposed that the highest AF levels were found in the tasks where the content appeared to be familiar to the students. However, in order to foster student autonomy and L2 development, students could gradually perform tasks that are more challenging in terms of content processing. We believe that this gradual experience with new tasks and content will enable them to develop and rely on the language resources that are beneficial for their L2 performance. This suggestion relates not only to narrative tasks but to tasks that are unfamiliar to students or cognitively challenging.

The present study was subject to some potential weaknesses. For example, this small-scale study was exploratory in nature and its objective was not to generalize the findings, but to examine the potential role of task repetition in a context where students are seen to struggle with tasks whose instructional and cognitive demands are considered to be challenging. Moreover, the lack of control regarding the content of the videos appear to have initiated significant fluctuations in the levels of AF across the tasks. Finally, this study included a small amount of data from five participants who performed a narrative task over four sessions. Notwithstanding the exploratory nature of the study and the relatively limited sample, we believe that task repetition and students' content familiarity can be used by teachers as practices that can be manipulated and adapted to promote L2 performance and thus development. These findings of course are not conclusive; more research needs to be conducted in order to understand how teachers and students can maximize the use of task procedural repetition in their contexts. We hope that this study has contributed to this purpose.

Conflicts of interest

The authors declare that they have no conflicts of interest.

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Appendix

Questionnaires for Sessions 1 to 4

Por favor, responde lo más claramente posible a las siguientes preguntas:

1. ¿Cómo te sentiste durante el desarrollo de esta actividad?
2. ¿Cómo percibiste tu desempeño durante esta actividad?
3. ¿Qué diferencia notaste en tu desempeño en esta sesión?
4. ¿Qué piensas sobre este video, comparado con los previamente mostrados, en relación a la promoción de la escritura?
5. ¿Cómo crees que influya el uso de videos cortos en la promoción de la narración escrita en el idioma inglés?

Translated version:

Please respond, as clearly as possible, to the next questions:

1. How did you feel during the development of the tasks?
2. How did you perceive your own performance during the tasks?
3. What differences did you notice in your performance in this session?
4. What do you think about this video, compared to the ones previously shown, in relation to writing encouragement?
5. How do you think that the use of short videos influences the promotion of narrative writing?

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Experiencing the Peer Feedback Activities with Teacher's Intervention through Face-to-Face and Asynchronous Online Interaction: The Impact on Students' Writing Development and Perceptions

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The objectives of this study were to compare the impact of peer feedback implementation with teacher involvement through training in the classroom and asynchronous online communication on the quality of students' writing revisions, as well as to investigate students' perceptions of peer feedback activities. Twenty-five students participated in the experimental study. Eleven students were willingly to be interviewed. Inferential statistical analysis was used to interpret the quantitative data collected from students' essay writing scores. Meanwhile, the data obtained through observations and interviews was interpreted using qualitative coding analysis. The results of the inferential statistical analysis revealed that peer feedback activities conducted through asynchronous online interactions had more significant effects compared to those conducted face to face on students' writing revision. Further, after conducting a thematic analysis, six themes emerged: 1) peer feedback activities could increase students' autonomy in learning, 2)the teacher's involvement in peer feedback activities was beneficial in terms of improving the consistency of feedback and revision, 3) peer feedback through asynchronous online interactions gave extra time to produce more beneficial comments, 4) peer feedback activities through asynchronous online interactions gave more chances to become a writing audience, 5) communicating via Facebook made the students feel awkward, and 6) recorded feedback via Facebook comments was more beneficial for students' revision. The implication of the research is that teachers of English needs to consider asynchronous online interactions for students' writing revision when teaching writing.

***Keywords*:** asynchronous online interaction, face-to-face interactions, peer feedback, teacher's intervention, writing development

Introduction

The process writing approach has been implemented in writing classes since the 1980s. Harmer (2014) mentioned that brainstorming, writing a first draft, revising, editing, and reviewing are the five stages of the process approach to writing. Those steps are commonly conducted in sequence but certain steps can be done repeatedly when it necessary (Hayes, 2012). For instance, the brainstorming stage can be done in two or three repeated stages. Thus, the main goal of the process writing approach actually is not about accomplishing the written text as the product of writing itself but it is more about helping the learners go through each step in the process.

In the stage of revising and editing, feedback is needed to improve the quality of each draft. Raihany (2014) mentioned that one of important aspects in the process writing approach is feedback. Feedback is a kind of input from the writing audience or readers. It can be in the form of comments or even questions delivered to the writer. It is required to improve the written product in terms of writing aspects such as content, paragraph organization, unity, grammar, and mechanics.

The sources of feedback could be from the teacher or from peers. Raihany (2014) added that feedback from either the instructor or one's classmates could come in the form of both written and oral feedback. Feedback from students is called peer feedback or what others call peer review, peer editing, or peer revision (Lei, 2017). Both teacher feedback and peer feedback are commonly use when teaching writing in EFL and ESL contexts.

Some researchers have claimed that teacher feedback has not been successful since the students only copy what the teachers revises in their writing without comprehending the intention of the revisions (Pan, 2010; Skipper & Douglas, 2015). The tendency of students to just follow the teacher's instruction is merely because most students believe that the teacher has absolute power where they feel that they have no option but to accept the teacher's authority (Ferris, 2014; Kangni, 2015).

Due to the lack of teacher reviews, peer feedback has become commonplace in writing practices. There are many research studies that consider peer feedback beneficial for students. First, peer feedback in writing activities could foster students' writing academic performance (Huisman, Saab, Broek, & Driel, 2018; Noorozi & Hatami, 2019). Secondly, Yalch, Vitale, and Ford (2019) asserted that by sharing feedback with their peers, the students become more critical, and by receiving feedback the quality of their writing increased. As a result of sharing comments, students become accustomed to analyzing their peers' writing and recognizing their peers' errors. The activity also made the students aware of not committing on writing mistakes (Patchan & Schunn, 2015). Additionally, by experiencing peer feedback activities, the students' learning autonomy and social awareness developed (Astrid, Rukmini, Sofwan, & Fitriati, 2017; Kuyyogsuy, 2019).

However, some researchers have indicated that not all peer feedback implementation is successful. Peer feedback fails due to several factors. The first is students' inability to give beneficial feedback for their peers' submissions (Bijami, Kashef, & Sharafinejad, 2013; Kangni, 2015). The second is students' cultural factors such as their hesitance to comment on their peers' writing drafts and the tendency to fully trust their teacher's feedback but not feedback from their friends' (Fin, 2018) Finally, time restrictions can limit the number ofcomments other students can make when revising their writing (Al-Bashir, Kabir, & Rahman, 2016).

In order to solve these problems, some experts have proposed teachers' intervention training during peer feedback sessions. The training can be done prior to the feedback session (Hojeij & Baroudi, 2018; Hyland, 2003; Naranjo, 2019; Rollinson, 2005) and during the peer feedback session (Ferris, 2014; Hyland, 2003; Rollinson, 2005). Research has shown that peer feedback training may help students improve the quantity and consistency of the feedback on their peers' writing (Hojeij & Baraoudi, 2018; Min, 2005) and improve the quality of their drafts (Esmaeeli, Abasi, & Soori, 2014; Min, 2006).

Nowadays, the trend to use technology in language teaching is increasing. Th technology used in teaching writing can also be beneficial for developing students' writing performance (Miftah, 2018). One product for technology is the internet. It has been used as a gateway for communicating and learning through the computer. Due to the increased familiarity with the use of computers as a medium for communication, the term CMC (Computer Mediated Communication) has become popular as the internet is used to help students interact during language learning activities. The process of interaction through CMC can be done in two different modes: asynchronous and synchronous communication. Asynchronous CMC is thought to be a good way to improve students' writing skills since the students have more time to compose, provide feedback on their peers' essays, and reflect on theirdrafts (Balaji & Chakrabarti, 2010; Kitade, 2008; McCarthy, 2010). The importance of online learning processes, especially in teaching English at schools and universities, has been growing since the COVID-19 pandemic began, especially so in Indonesia.

Facebook is a popular social media platform in Indonesia. By 2020, Indonesia's Facebook user base grew to 140 million (Jemadu & Prastya, 2021). The use of Facebook has also become familiar with English teachers and many of them have used Facebook as a learning medium when teaching English writing. Several researchers have published on the advantages of using Facebook for writing practice where by having Facebook writing activities, students' writing performance was improved (Ping & Maniam, 2015; Yunus, Salehi, & Chenzi, 2012).

Only a few research studies have compared how students' writing draft quality improved from their first draft to the final revision as a result of exchanging feedback (Astrid & Marzulina, 2018; Hidayat, 2020; Moloudi, 2011). However, no study has compared the consistency of students' revisions in terms of writing elements

such as substance, coherence, grammar, word selection, and mechanics, between classroom and asynchronous online communication peer feedback, and there is no research study which compares students' perceptions after experiencing those two kinds of peer feedback interactions.

As a result, we wanted to conduct a study to compare the impact of implementing peer feedback activities with teacher's training through face-to-face and asynchronous Facebook interactions on the quality of students' drafts and to explore their perceptions of those peer feedback activities.

Literature Review

As a crucial element of the process writing approach, feedback provides input given by a reader to the writer to help them revise any mistakes or point out any confusing sections found in the writing draft (Huisman, Saab, Driel, & Broek, 2018). As a result of sharing comments and doing revisions, the students' understanding of writing mistakes that are likely to be made on the writing draft can increase. Feedback can be in the form of criticism, suggestions, or even questions to consider when revising the draft.

There are two sources of feedback: feedback from teachers and feedback from students. The two forms of teacher feedback are written feedback and oral conferences. There are three types of teacher's written feedback: requests, criticism, and praise (Zahidah, Farrah, & Zaru, 2014). Each type of feedback has a different focus. The feedback can focus on language aspects, content, genre, and the process of writing (Hyland, 2003). Further, oral feedback is given in the form of an oral writing conference. It is a form of consultation, where the teacher can give feedback orally and the students could consult on their writing with their teacher. In this session, the students have an opportunity to clarify any written feedback given on their essay that they did not understand.

Peer feedback is a type of feedback that is provided by peers in which students are responsible for providing corrections to their peers' essays in groups. The action takes place in a small group consisting of four to five students. In the group, the students are required to read each of their peers' drafts and share comments. After sharing feedback, the studentsrevise their writing by employing those comments (Cao, Yu, & Huang, 2019; Huisman, et al. 2018).

Since the implementation of peer feedback is not always successful, some researchers have proposed the teacher's intervention, which involves the teacher giving the students training prior to the peer feedback sessions (Naranjo, 2019; Rollinson, 2005). The main goals of pre-training session are first to increase students' recognition on the intention of the peer feedback activities, second to make students ready to convey their thoughts in a group properly and to practice the appropriate language used in feedback sharing sessions, and finally to illustrate the way to give beneficial feedback and the way to manage the feedback when revising.

Intervention training should be given to the students in the middle of the writing process, (Rollinson, 2005). The goals of the training are to increase the effectiveness of giving feedback to peers' writing. In this session, the process of peer feedback that has been conducted is reviewed. Then, mistakes frequently found during the activity related to the way of giving feedback and revising the writing drafts are discussed. Following that, several recommendations are made in order to increase the efficiency of the reviewing sessions.

Rather than having a teacher intervene in peer feedback via direct contact in the classroom, peer feedback can be done online through computer mediated communication (CMC). CMC peer feedback is a promising way to improve students' writing skills (Latifi, Noorozi, Hatami, & Biemans, 2019). The use of online media for conducting peer feedback is becoming popular when teaching writing since it creates an environment where the students can write, share feedback, and make revisions without time and space restrictions (Latifi et al., 2019; Noorozi, Biemans, & Mulder, 2016; Noroozi et al., 2020). Guidance on giving feedback could also be embedded in such an online environment to help students provide more relevant feedback (Latifi, Noorozi, & Talaee, 2021)

When implementing online peer feedback, the learning activities are done through asynchronous interactions where the communication does not occur at a certain time and place (Faja, 2013; Veldhuis-Diermanse, 2002, as cited in Espasa, Guasch, & Alvarez, 2013). Social media sites such as Facebook can be used as a communication platform (Boas, 2011). Facebook is very comfortable to utilize since it provides space to write

as many characters as we want, to share feedback as a comment, and to send pictures and videos. Facebook also allows users to form groups (Yunus & Salehi, 2012).

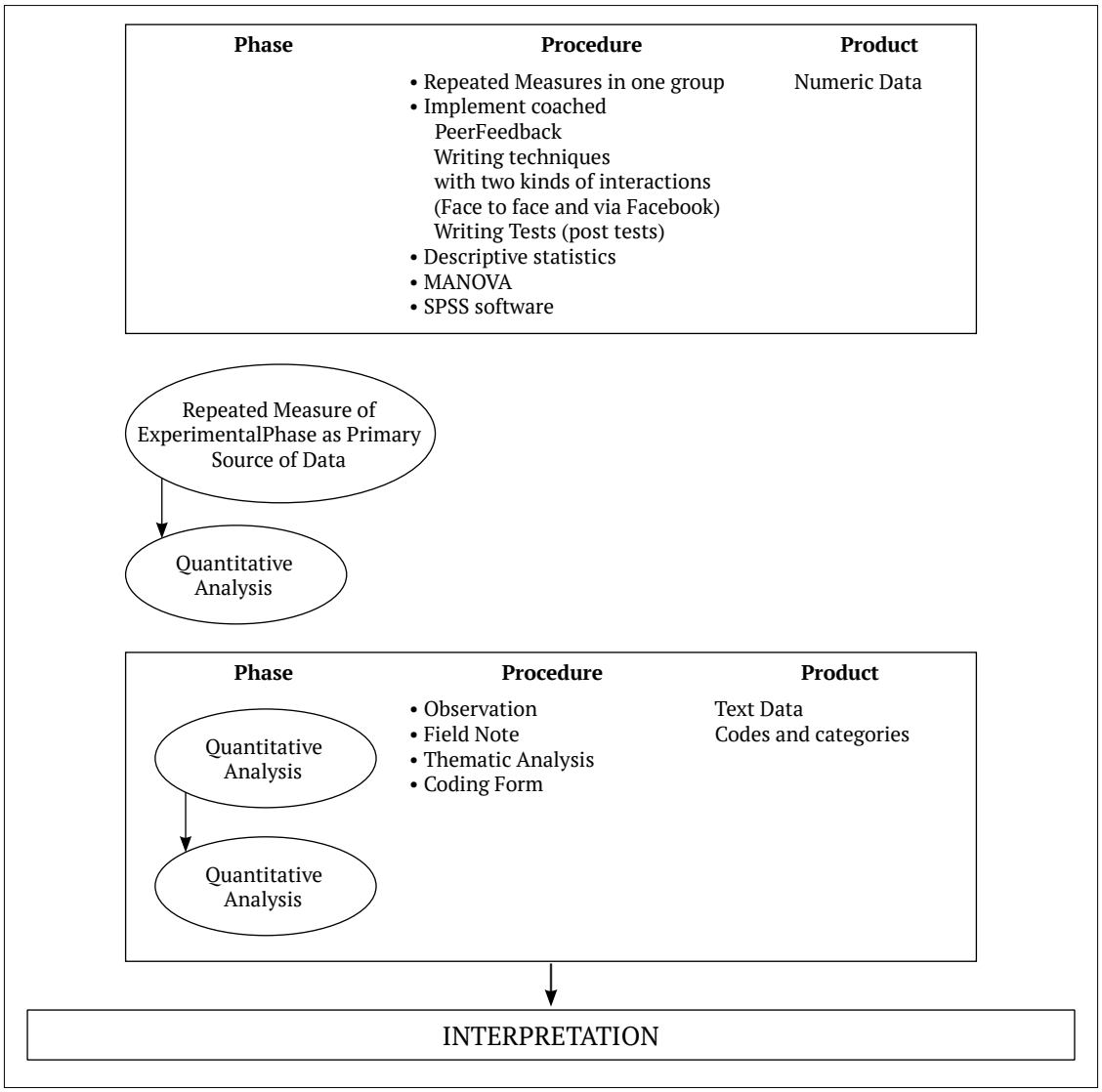
Materials and Methods

Research Design

An embedded mixed methods design was used in this research (Creswell, 2012).During the experimental study, all kinds of data were obtained simultaneously. The embedded mixed methods design used in this study is depicted in the diagram below:

Figure 1

Visual diagram of embedded mix method design procedure

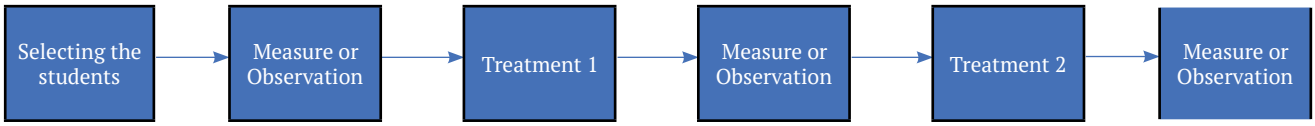


The design used for the experimental phase was a repeated measures design. In this research, there was only a group of students. The students were handled by using peer feedback in writing activities with two types of interactions: synchronous in-class interactions and asynchronous online interactions through Facebook. The students' writing performance after the first treatment (exchanging feedback with face-to-face interactions)

was compared to their writing performance after the second treatment (peer feedback with online interactions). The repeated measures design is illustrated below.

Figure 2

Visual diagram of the repeated measures design



Note. From "Educational research: Planning, conducting and evaluating quantitative and qualitative research," by *Creswell*, 2013. Copyright 2013 by Pearson.

Research Setting and Participants

The research was conducted in a writing class at an Islamic university in Palembang, South Sumatera, Indonesia. Twenty-five students participated in this research. The participants were fourth-semester students. Their average age is 21. The students were from the class of one of the writers, who was their writing lecturer and knows well their prior writing ability. The head of the study program allowed the class to be observed and treated during the research. Those 25 students joined an essay writing class as one of the prerequisite subjects to be taken in the fourth semester. For the sake of their rights and research ethics, the students were told in advance that their identities would be kept anonymous. Then, the students were asked to fill out the consent form on their willingness to become the participants of the research. All 25 students submitted their consent form to become participants of the experimental phase of the research.Out of the 25 students, 11 students were willing to be interviewed.

Data Collection

After the treatments, data in the form of students' revision writing scores was collected in the quantitative process of data collection. The experiment was done in 16 writing class meetings by implementing face-to-face peer feedback with teacher's intervention (Naranjo, 2019; Min, 2006; Yang, Badger & Yu, 2006; Rollinson, 2005) and asynchronous online interactions (Annamalai, 2018). Firstly, the students were taught by implementing face-to-face peer feedback. They were taught how to brainstorm and outline their ideas. After that, they were required to write their first writing draft. Then, the students were grouped into groups of four in order to have peer feedback sessions. Prior to the sessions, the students were trained on how to provide appropriate feedback in terms of communicating their feedback to their peers, responding to peer feedback, and providing useful feedback in terms of writing aspects (writing substance, paragraph organization, diction, grammar, and mechanics). The students had their first peer feedback session after the pre-training session. Based on their peers' comments, the students were asked to rewrite their first essay's draft. Following that, the lecturer provided intervention training. The training was aimed to help students develop their ability to provide useful writing feedback. After the training, the students were invited to engage in a second peer feedback session. In this second session, the students had to revise their draft as a final revised draft. After all the steps of the face-to-face interaction were completed, the next peer feedback activities were conducted through asynchronous online interactions by employing Facebook as the medium of communication.

The final revision drafts from both the direct classroom and the Facebook interactions were scored to compare the students' writing performance after receiving comments. To reduce subjectivity, two independent raters from another university were asked to score the final drafts. The writing rubric proposed by Hyland (2003) was used as the guideline to score the students' writing. The rubric consists of three scoring criteria of writing aspects: (1) format and content (FC); (2) organization and coherence (OCh) and (3) sentence construction & vocabulary (SCV).

The qualitative data were collected as supporting data during the qualitative process. This was done to explore how the students perceived the peer feedback activities. In this qualitative phase of data collection, interviews and observations were employed. Observations were done during meetings to see if the students participated

in peer feedback events, either face to face or through Facebook interactions. All of the phenomena that took place during the observations were noted. After all of the treatments, the students were interviewed to find out how they felt about the learning experiences.

Data Analysis

Parametric tests were used to evaluate the quantitative data obtained from students' final draft scores. Parametric tests were used since it was assumed that the shape or variance of the writing scores in the population were normally distributed. Multivariate Analysis of Variance (MANOVA) was the inferential statistic. SPSS 22 was used to perform the statistical analysis(Santoso, 2014).

Meanwhile, the qualitative data from the observations and the results of the students' interviews were interpreted using coding analysis (Heigham & Croker, 2009; Heriyanto, 2018). The steps of coding analysis were as follows: first, before any coding can begin, the data were organized by data grouping; then, the collected data were reduced, where the data to be analyzed were selected based on the research questions; next, the data were read thoroughly; then the codes were assigned to represent the students' perceptions; finally, the data were coded and refined to detect emerging themes.

Moreover, the data were checked in terms of their trustworthiness as a requirement of qualitative studies (Creswell, 2012; Heigham & Croker, 2009). In order to assure the credibility of this study, prolonged and persistent observations were conducted. After interviewing the research participants, a member checking method was used. In this session, the respondents were required to re-read the interview transcript to ensure that the contents of the interview transcript were appropriate to what the respondents had shared during the interviews. Finally, data triangulation was employed, where the qualitative data were obtained from multiple sources of data, the observation field notes and interviews.

Results and Discussion

Results

The Impact of the Face-to-Face Peer Feedback Compared to that of Asynchronous Online Interactions

The results of incorporating face-to-face and asynchronous online contact peer reviews were compared using the MANOVA statistical tool. The aim of the study was to compare the impact of implementing face-to-face and asynchronous online interactive peer feedback activities on the quality of students' revision drafts in terms of writing aspects such as format & content (FC), organization & coherence (OCh), and structure & vocabulary (SV). The results of the analysis are displayed in Table 1.

Table 1

Multivariate tests

Effect		Value	F	Hypothesis df	Error df	Sig.	Noncent. Parameter	Observed Power[c]
Intercept	Pillai's Trace	,960	365,667[b]	3,000	46,000	,000	1097,000	1,000
	Wilks' Lambda	,040	365,667[b]	3,000	46,000	,000	1097,000	1,000
	Hotelling's Trace	23,848	365,667[b]	3,000	46,000	,000	1097,000	1,000
	Roy's Largest Root	23,848	365,667[b]	3,000	46,000	,000	1097,000	1,000
peerfeedback	Pillai's Trace	,479	14,086[b]	3,000	46,000	,000	42,257	1,000
	Wilks' Lambda	,521	14,086[b]	3,000	46,000	,000	42,257	1,000
	Hotelling's Trace	,919	14,086[b]	3,000	46,000	,000	42,257	1,000
	Roy's Largest Root	,919	14,086[b]	3,000	46,000	,000	42,257	1,000

According to the results of the multivariate analyses, all of the sig. values from each test were 0.00, which is less than 0.05. As a result, the impact of direct and asynchronous Facebook peer feedback on the students' writing performance differs significantly.

Finally, tests of between-subjects effects were used to see whether there was a significant difference in the influence of each implementation of peer feedback interactions on each element of writing. Table 2 shows the outcome of the analysis.

Table 2

Tests of between-subjects effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Noncent. Parameter	Observed Power[d]
Corrected Model	FC	414,720[a]	1	414,720	15,052	,000	15,052	,967
	OCh	,320[b]	1	,320	,042	,839	,042	,055
	SV	584,820[c]	1	584,820	14,781	,000	14,781	,965
Intercept	FC	30950,720	1	30950,720	1123,302	,000	1123,302	1,000
	OCh	5745,920	1	5745,920	749,957	,000	749,957	1,000
	SV	29136,980	1	29136,980	736,402	,000	736,402	1,000
peerfeedback	FC	414,720	1	414,720	15,052	,000	15,052	,967
	OCh	,320	1	,320	,042	,839	,042	,055
	SV	584,820	1	584,820	14,781	,000	14,781	,965
Error	FC	1322,560	48	27,553				
	OCh	367,760	48	7,662				
	SV	1899,200	48	39,567				
Total	FC	32688,000	50					
	OCh	6114,000	50					
	SV	31621,000	50					
Corrected Total	FC	1737,280	49					
	OCh	368,080	49					
	SV	2484,020	49					

The data listed in Table 2 points out that the sig. values for the aspects of Format & Content (FC) and Sentence structure & Vocabulary (SV) were 0.00, which are lower than 0.05, meanwhile the sig. value for the aspect of Organization & coherence (OCh) was 0.893, which is higher than 0.05. Thus, there was a substantial difference in the impact of implementing peer input by face-to-face and asynchronous online interactions on the aspects of format and content, sentence structure, and vocabulary, but not on the aspect of organization and coherence. The results of each peer feedback implementation on each writing element are compared in Table 3.

The data listed in Table 3 revealed that the implementation of asynchronous Facebook interaction peer feedback had more of an effect more on the aspect of FC and SV compared to that of face-to-face interactions. The influence of these two peer feedback practices on the aspect of OCh, however, did not vary significantly.

Students' Perceptions toward Face-to-Face and Asynchronous Online Interactive Peer Feedback Activities

The results of the coding analysis revealed how the students viewed peer feedback practices in both face-to-face and online interactions. Seven themes that emerged and they are described below.

Table 3

Descriptive statistics

	peerfeedback	Mean	Standard Deviation	N
Format and Content (FC)	Face to Face (FTF)	22,0000	5,97216	25
	online	27,7600	4,40908	25
	Total	24,8800	5,95438	50
Organization and Coherence (Och)	Face to Face (FTF)	10,6400	2,89943	25
	online	10,8000	2,62996	25
	Total	10,7200	2,74077	50
Structure and Vocabulary (SV)	Face to Face (FTF)	20,7200	6,68655	25
	online	27,5600	5,86714	25
	Total	24,1400	7,11999	50

Both Peer Feedback Activities Could Increase Students' Autonomy In Learning

It was apparent from the observations and interviews that students had become self-sufficient in their learning. This was because the peer feedback sessions encouraged the students to become more independent by trying to identify their peers' mistakes in writing and give feedback for revisions.

Based on the observations done in the class during peer feedback activities, it can be stated that all of the students were actively engaged in the process of sharing comments through both direct and online interactions. All of the students in the groups for peer discussions could share their feedback after reading their peers' writing. Most of students could identify mistakes in their friends' drafts and make corrections related to those mistakes. This also happened when the same students were required to give peer feedback through Facebook. The students actively gave feedback to their peers' drafts in groups and they did it on time based on the schedule.

Moreover, it was clear that the students became independent when they were required to undertake the peer feedback activities. They read their friends' essays seriously, tried to identify mistakes, and tried to give beneficial comments for corrections.One of the students named M clarified in the interview, "When I was required to give feedback on my friends' writing, firstly I was awkward, since I know that my capability in writing is bad, but I tried hard to give beneficial comments." Another student named A added, "When I was asked to read and to give feedback to my peers' writing, I read those essays carefully. I identified the mistakes and corrected those mistakes. In order to make sure that my corrections were appropriate, I re-read my books and consulted my dictionary."

The Lecturer's Involvement in Peer Feedback Activities Was Beneficial in Terms of Improving the Consistency of Feedback and Revision

We learned from the interviews and observations that the lecturer's intervention, through both face-to-face and asynchronous online interactions, was well executed. The students thought that the lecturer's presence during peer feedback activities, both through direct and asynchronous online contact, was helpful in guiding them to exchange feedback with their friends and update their essays based on input from their colleagues in the group. For example, a student named Y said, "The way my lecturer guided us on how to conduct peer feedback was clear. I got the idea on how to give feedback to my friends' essays and revised mine as well." Another student named J added, "From intervention training I could realize what I had done wrong related to the content of my comments to my friends and the way to revise my essay. After the instruction from my lecturer, I did not do the mistakes again."

Peer Feedback Through Asynchronous Online Interactions Gave Extra Time to Produce More Beneficial Comments

After analyzing the data, it became apparent that asynchronous interactions through Facebook allowed the students to have more time to read and give comments to their peers' writing. The extra time gave the students

chances to read their peers' writing in detail and offer complete corrections. As a result, the students' feedback on Facebook appeared to be more informative than the feedback provided through face-to-face communication.

Furthermore, we learned that most students felt free to give comments anytime and anywhere through asynchronous online interactions. They were not forced to do peer feedback activities in a limited amount of time. For example, one student named T said in the interview session, "When I was asked to read and give comments to my peers' drafts through Facebook, I could determine when and where I could do those activities. I had more space to read the essays. I even could manage to read the essays more than once. By reading carefully, I felt I could give more comments that I feel were more beneficial compared to those I gave when I was required to do peer feedback activities in the class." Another student named E clarified, "I felt that I could not be maximal in giving feedback to my peers' essays because the time was very inadequate. I did not have enough time to read my peers' essay thoroughly. That was why sometimes I just gave general comments or even I could not recognize the mistakes made by friends in their essays." In addition, a student named R added, "When the process of giving feedback was conducted through Facebook, I felt I could perform well. After identifying my friends' mistakes, I had enough time to consult my books as references to make sure whether my feedback was already okay or not."

Additionally, it appeared that some students felt uncomfortable with the noisy class situation. Some of them preferred a quiet situation to perform better. As a result, the comments given were not maximal. Most of comments were related to grammar and mechanics. There were rarely comments about the content of the essay and about coherence. For example, one student named B mentioned in the interview, "I lost my concentration whenever I was in such a noisy situation. Thus, I could not get the message the writer intended to say. Since I was not in the mood to read, I only gave comments related to the mistakes my friends made in terms of grammar, spelling, and punctuation."

The information we got from the interviews was in line with that we learned from the observations. From the observations, we found that everything ran well while peer feedback was being conducted in the class. However, the activities seemed chaotic. The class became noisy. Peer feedback activities in the class seemed to be conducted in a rush. Students were instructed to give comments for at least three of their friends' essays within a limited time, about two hours. This limited time period made the process of reading and giving comments unfavorable.

Peer Feedback Activities Conducted through Asynchronous Online Interactions Gave More Chances to Become a Writing Audience

The results of the data analysis revealed that peer feedback sessions, whether performed face to face or asynchronously through Facebook, provided students with the opportunity to read their friends' essays in a group setting. However, some students acknowledged that they had more time because they were receiving reviews from their peers via Facebook. They had the opportunity to read many more essays from their friends, even those who were not in the same group. Students can learn how to write, recognize errors, and learn not make the same mistakes as their friends by reading more essays shared on online.

In the interview session, one student named N clarified, "In the Facebook sessions, I was required to read and share feedback on my peers' essays in the group. However, I was curious to read my other friends' essays since they were posted openly. From reading those essays, I could get the benefit such as learning the patterns of a good essay from the essays which I considered better." Another student named M said, "I also found that there were some mistakes made by my friends in their essay. By identifying the mistakes I was aware not to make the same mistakes."

Communicating Via Asynchronous Online Interactions Made the Students Feel Awkward

We can see from the results of the data analysis that the students felt awkward when they were required to communicate with their friends and lecturer through Facebook during peer feedback activities. From the interviews, most of students admitted that they preferred direct communication to online communication. One student named A said, "I felt reluctant to give feedback to my friends because I could not see their faces directly. By seeing their faces I can be sure whether they could understand what I said to them or not." Another student named C said, "I preferred to have direct communication with my friends and my lecturer. When I gave feedback to my peers in the discussion session, I could catch their facial expressions that could give me clues whether or

not they understood what I said to them." Finally, one student named R said, "I prefer to have my lecturer's explanation through face-to-face interactions compared to online interactions. This was because I could see her face directly when I asked a question to her. This made me much more comfortable."

Recorded Feedback Via Facebook Comments Was More Beneficial for Students' Revisions

Based on the information we got from the interviews, most students took advantage of the feedback given by their friends and recorded in comments section. Since all of the comments were recorded, it was beneficial for the students to re-read the comments any time they wanted to revise their essays. One student named S said, "The feedback given from my friends recorded in the Facebook section was beneficial. I could crosscheck the comments whenever I wanted to revise my essay." Then, one student named A said, "Sometimes I could not catch the feedback from my friends while we had oral sessions in peer feedback activities. Then, when I had to revise my essay, I could not even read my notes since I wrote them in a hurry, thus my revision was not maximal."

Discussion

In terms of format and content, as well as sentence structure and vocabulary, the consistency of the students' revisions was evident after completing peer feedback activities through asynchronous online interactions compared to those conducted face to face, according to the study. This was caused by the opportunity given to the students to have more space and time to give feedback and to do revisions. This is in line with Balaji and Chakrabarti (2010), Kitade (2008), and McCarthy (2010), who mentioned that by conducting peer feedback activities through asynchronous online interactions, students could decide when they had time to give feedback and responses to their friends. This could not happen when they were required to carry out peer feedback activities in the class, where it seemed like they were forced to do everything simultaneously.

It was also believed that the teacher's participation in peer feedback practice, whether in face-to-face or asynchronous online interactions, was beneficial to the students. They acknowledged that from the training given by the lecturer, the students understood the way to give beneficial feedback to their peers' writing draft, the guidelines for writing aspects that must be commented on, and the way to communicate well in group discussions. The review session in the middle of the activity was also considered beneficial to help make sure everything ran well. This fact relates to Hyland (2003), who asserted that the intervention from teachers in peer feedback activities is considered important since the students in the EFL context commonly have lower language competence.

Moreover, the research illustrated that by having a longer time and wider space to give comments, the students had more chances to read their friends' essays thoroughly and considered the feedback more detailed and clearer compared to when they were asked to share comments among their friends in a limited amount of time. This is in agreement with the research carried out by Aydawati, Rukmini, Bharati, and Fitriati (2018) stating that peer feedback activities organized in online environments made the students more focused. As a result, despite only giving corrections on local aspects such as grammar and mechanics, students provided more comments on global writing elements like content and ideas as well as paragraph organization (Jones, Garralda, Li, & Lock, 2006; Liu & Sadler, 2003).

The students also perceived that peer feedback activities could give them more chances to become a writing audience. Becoming a writing audience as one advantage of peer feedback has been asserted by Rollinson (2005). He said that by being aware of becoming a writing audience when the students are required to do peer activities, they will become critical readers. As the result, they will produce more critical comments and be able to revise their friends' essays, and even their own. Since Facebook is a social media platform where everything posted could be seen by everyone in the group, the students had more opportunity to become readers of their friends' essays compared to during in-class activities.

According to the findings of this study, peer feedback, whether given face to face or through asynchronous online interactions, may improve students' learning autonomy. To put it another way, the students were independent in their learning. Apriani et al. (2020) claimed that peer feedback activities were advantageous thanks to the freedom to make decisions during the learning process. As a result, students' writing abilities will

improve. Shih (2011) claimed that learning in an online environment lets the students become independent to learn and acquire knowledge from many sources provided online.

Further, the students in this study admitted that they could read the comments from their friends any time they wanted to revise their essays because they were recorded in the comments section on Facebook. This is in line with Balaji and Chakrabarti (2010), who mentioned that in online interactions, comments are stored permanently and that makes them easier for students to access.

Some researchers have claimed that peer feedback activities failed due to the cultural backgrounds of their students, especially in Asia. Carson and Nelson (1994) as cited in Levine, Oded, Connor, and Assons (2002) discovered that students' cultural backgrounds influence the way they give feedback. This was found to be the case for Chinese studentsgiving peer feedback in an ESL class (Yang, Badger, & Yu, 2006). Peer feedback was unsuccessfully implemented because the students were unable to criticize their peers' writing. However, in this research, most of the students claimed that they were more comfortable communicating with their friends and lecturer face to face compared to through Facebook. This was because by having communication face to face they could see their peers' facial expressions directly when they had to give feedback and it made them much more comfortable. Thus, the important benefit of blended learning the ability to combine face-to-face and online interactions. As Kintu, Zhu, and Kagambe (2017) mentioned, blended learning is a concept that integrates the learning process through synchronous interactions in the class and online asynchronous interactions.

The comments section provided in Facebook saved all of the students' comments. This made it easy for the students to re-read all the comments when revising their essays. This is in line with Balaji and Chakrabarti (2010), who said that there is no data loss for online direct feedback since published posts from students are saved virtually where they can be accessed and read at any time.

To conclude, peer feedback has the ability to improve students' writing skills if the tasks are well-managed in terms of how to group the students and how to organize the feedback sharing session and revision activities. Thus, even though peer feedback activities are centralized on students, the roles of the teachers cannot be neglected. In the middle of a sharing feedback session, teachers still have to monitor the activities in order to ensure that everything runs properly. Finally, writing in an online environment was shown to alleviate students' tension in writing. However, face-to-face communication either with the teacher or with their peers cannot be neglected.

Conclusion

There were two conclusions of this study. First, peer feedback activities conducted through asynchronous online interactions had a more significant effect compared to those conducted face to face on students' writing revision. The second, students gave more positive responses to peer feedback activities conducted through asynchronous online interactions than face to face. There were six themes based on the thematic analysis to address the second objective. Those were 1) peer feedback activities could increase students' autonomy in learning, 2)the lecturer's involvement in peer feedback activities was beneficial in terms of improving the consistency of feedback and revision, 3) peer feedback through asynchronous online interactions gave extra time to produce more beneficial comments, 4) peer feedback activities through asynchronous online interactions gave more chances to become a writing audience, 5) communicating via Facebook made the students feel awkward, and 6) recorded feedback via Facebook comments made it more beneficial for the students' revision. Finally, we realize that the number of participants in this study was small. This was because we would prefer to investigate the issues more deeply from a smaller number of the students. As a result, it is suggested that future researchers conduct similar studies with a larger sample size and a broader scope.

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Conflicts of interest

The authors declare that they have no conflicts of interest.

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Exploring How Rhetorical Organization Contributes to the Readability of Essays

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The facilitative benefits of genre-specific reading have often been cited as a truism in the field of writing education. In line with this, writing center self-access libraries typically provide a selection of composition texts, including rhetorics (anthologies of model paragraphs and essays). Readability formulae (e.g., the Lexile Readability Formula) are often used to determine whether these texts will be a good fit for potential readers, and although the Lexile Formula reliably and validly assesses two features (i.e., semantic and syntactic), it does not consider other contributing features during the text selection process (e.g., rhetorical organization). To address this, this sequential, mixed-methods study explored the effects of rhetorical organization on undergraduate English language learners' perceptions of difficulty when reading exemplars (i.e., essays) excerpted from rhetorics. The results indicated that rhetorical organization influences readability both as (a) a primary (i.e., an isolated feature) and (b) a conjoined feature (i.e., comprising two or more associated entities where the second impacts the first). The article also provides a suggestion for writing education professionals and the publishing industry: Readability formulae should be administered in a hybrid fashion, where additional features such as rhetorical organization are subjectively considered when assessing the difficulty of exemplars.

Keywords: lexile, readability, rhetorical organization, text selection, rhetorics, model essays, second language writing, writing center administration

Introduction

The facilitative benefits of genre-specific reading have often been cited as a truism in the field of writing education (Hyland, 2007), especially as genre-specific reading provides heuristics that result in better writing (Johns, 2003), with correlations of .50 to .70 (Grabe & Zhang, 2016). Therefore, writing center self-access libraries typically provide a selection of composition texts, including rhetorics (Baker, 2020), "rhetorically organized anthologies of paragraphs and essays which explicate rhetorical forms, present sample texts exemplifying major rhetorical patterns, and offer procedures to show student writers how to reproduce such genre in their own writing" (Ferris & Hedgcock, 2005, p. 130). Accepting that rhetorical knowledge supports good writing (Liao & Chen, 2009), that collections of model essays are facilitative (Abe, 2008; Qi & Lapkin, 2001), and that providing rhetorics is a standard writing center self-access resource library practice (Chromik, 2002), it is imperative to consider whether such texts will be a good fit for potential users' reading levels (Mesmer, 2008), "the study of which … has come to be called readability" (Gilliand, 1972, p. 12).

The field of readability has received a considerable amount of attention in the last century (Dubay, 2007a); consequently, there are many definitions of readability (Gilliand, 1972; Harrison, 1980; Kintsch & Miller, 1981; Kintsch & Vipond, 1979; Klare, 1963; Schirmer & Lockman, 2001). The consensus is, as Dale and Chall (1949) aptly pointed out, that readability is "the sum total (including all the interactions) of all those elements within a given piece of printed material that affect the success a group of readers have with it" (p. 23). One metaphorical definition, however, stands out as especially illuminating (Chall et al., 1996), as it compares readability to an iceberg: "Beneath the surface, there are various sources of difficulty. The more difficult the passage, the greater the ice beneath" (p. 6). This definition is elucidating because it highlights that readability, like an iceberg, is not

a solid, homogeneously opaque entity. Rather, it is a heterogeneous mix of features that make up the complex phenomenon known as reading (Goodman, 1967; Koda, 2005).

Explorations of readability span back as far as 900 AD (Lorge, 1944), receiving greater attention in the early 20th century (Pearson et al., 2016). Historical accounts show that these early investigations were primarily quantitative (measuring semantic features, syntactic features, or a mix of the two[1]) (Gunning, 2003; Klare, 1984; Mesmer, 2008), thus providing the theoretical underpinning of the first readability formula (i.e., Lively & Pressey, 1923), which Klare (1963) has termed a predictive device that provides quantitative, objective estimates of difficulty. Since then, formulae have traditionally utilized these two features, which have been repeatedly shown to be reliable indicators of readability (Dubay, 2007b). Soon after the introduction of the first formula, however, Ojemann (1932), Gray and Leary (1935), and recently others (Armbruster, 2016; Chall & Dale, 1995; Fry, 2002; Gunning, 2003; Kintsch & Vipond, 1979; Lexile, 2010; Meyer, 2003) have recognized that additional features need to be taken into account in the course of comprehensive text/reader combination assessments, a position that continues to be held today (Baker, 2019).

Accepting that a comprehensive assessment process requires moving beyond a single-step formula and adopting a two-stage approach (using a formula and subjective criteria together) reduces the risk of providing seemingly appropriate texts but "ones readers cannot read due to format, language, structure, or content" (Weaver, 2000, p. 33), the field has been undergoing a paradigm shift toward a hybrid approach (Baker, 2019) in which a readability formula is first utilized and then other features are explored qualitatively (Fry, 2002).

Looking back to Pressey and Lively (1923), hundreds of formulae have been published; however, only a few remain in popular use. One of the most frequently used is the Lexile Readability Formula (Lexile, 2010), and while this formula reliably assesses two features (i.e., semantic and syntactic), there has been a growing call in the literature for users to utilize a more holistic hybrid approach (Gunning, 2003; Lexile, 2010). Gunning (2003), for instance, illustrated this concern, suggesting that "although teachers might use Lexiles …, they need to go beyond the numbers … [and] complement the objective data yielded by the formula with subjective judgment" (pp. 182-186).Unfortunately, the in-depth study of additional features is an understudied area. In order to address this gap, this sequential mixed-methods study investigated what effects (benefits and difficulties) one feature, rhetorical organization, has on undergraduate English language learners' (ELLs) perceptions of difficulty when they read exemplars (i.e., essays) excerpted from rhetorics.

Literature Review

Discussions of how rhetorical organization influences readability often begin with a delineation of text types, which are typically considered to be in one of two major categories based on rhetorical organization: narrative or expository. The structure of expository texts is then further classified. Drawing on the literature on rhetoric (i.e., Aristotle) and linguistics (Grimes, 1975), Meyer (1975) identified five basic ways to organize expository discourse: (a) causation, (b) collection, (c) comparison, (d) description, and (e) problem/solution. These are not the only ways texts have been categorized. In fact, although these terms are frequently used, empirical taxonomy investigations have added to and adapted them, and they often vary among researchers.

Taxonomy Studies

Drawing on the themes of text complexity and student awareness, a limited amount of empirical work has discussed which text types native English speakers (NESs) and ELLs find the most difficult. Pointing to a lack of published taxonomies, Bereiter (1978), using more detailed text-type descriptors (e.g., narrative-fictional and factual, abstract topical exposition), conducted an early study with NES text complexity and proposed a taxonomy of text types from easiest to most difficult based on the complexity of each text type's organization, listing the narrative type as easiest and expository types as more difficult.

[1] "Readability measures use similar factors to predict comprehension difficulty--some aspect of word difficulty measured either as word familiarity, word frequency, abstract versus concrete words, or word length--number of syllables, number of letters, or affixes, etc.--and some measure of sentence complexity, measured either by average sentence length, or by complex versus simple sentences" (Chall, 1996, p. 24).

Other empirical works using variations of text-type terms closer to those in use today and employed in this study (e.g., illustration, process, description, narrative, cause/effect, comparison/contrast, and argumentation/persuasion) have reported taxonomies regarding how difficult NES and ELL readers find different text types. However, these studies provide an inconclusive picture. Although several are replication studies, the results are inconsistent. Further confusion arises as the foci (text types) and methodology vary from one study to another. Finally, the texts and the participants' reading levels are insufficiently described.

Table 1

Taxonomies of Text Types

	Easy ← Difficult
Carrell (1984a)	comparison— causation — problem/solution — collection of descriptions[a]
Meyer & Freedle (1984)	comparison — problem/solution — causation — collection of descriptions
Fooh (1989)	problem/solution — collection of descriptions
Goh (1990)	comparison. *, *, *[b]
Freedle & Kostin (1991)	comparative — argumentative
Talbot, et al., (1991)	causation — collection of descriptions —comparison — problem/solution
Freedle & Kostin (1993)	list/describe — problem/solution
Sharp (2002)	description — problem/solution — listing — cause/effect
Yali & Jiliang (2007)	narrative — cause
Zhang (2008)	description — problem/solution — comparison/contrast
Lei (2010)	collection — problem/solution

Note.

a. Only two structures were examined.

b. Text types followed Carrell (1984a), but ranking varied across proficiency levels.

Accepting that the results of the aforementioned taxonomy studies are inconsistent, that is which text types are more difficult than others has not been consistently determined, a moderate amount of research has explored what factors contribute to such incongruity.

Sources of Rhetorical Organization Difficulty

Expanding on Meyer's (1975) work and the taxonomy studies that followed, a limited number of historical studies have been undertaken with NESs and ELLs to determine which factors contribute to rhetorical organizational difficulty. Two major sources of difficulty have been cited. The first is the relative complexity of each text type (rhetorical organization). Narratives, for example, have been found to be less complex than expository texts, and certain types of expository texts have been found to be less complex than others. A second source of difficulty cited is how familiar readers are with the text types, which Carrell (1987) referred to as formal schemata: "knowledge relative to the formal, rhetorical organizational structures of different types of texts" (p. 481). Spiro and Taylor (1980) elaborated on both of these themes, pointing out that conducting research to determine which text types are more difficult or easier for students is difficult because what constitutes a text type is not standardly defined. They also highlighted that complexity can occur because text-type characteristics are not found exclusively in one type of text or the other; that is, while a text may be defined by its major rhetorical structure, it may include other text types. A narrative text type, for example, "can possess many of the typical characteristics of exposition and vice versa" (p. 1). With regard to awareness, Spiro and Taylor (1980) further elucidated that it is difficult to hold students' formal schemata of organizational structures constant.

A similar warning regarding the complexity of text structure and students' awareness was given about conducting research with ELLs. Selinker et al. (1976), in an early work, emphasized and demonstrated that the definition of text type may actually be a rhetorical mixture that contains elements of cause and effect, classification, comparison, and description. They also identified that the main difficulty lies in whether the reader can recognize these forms. Specifically, they explained:

> The nonnative reader often lacks those abilities which will allow him to recognize the existence of certain types of implicit presuppositional rhetorical information ... and gain access to the total informational content of that discourse. (p. 282)

Calfee and Curley (1984) presented a similar observation, reporting that ELLs are often unable to comprehend the complete meaning of text types "even when they understand all of the words in each sentence and all of the sentences that make up the discourse" (p. 282). Flick and Anderson (1980) reached similar conclusions about student awareness, but they noted that the lack of rhetorical awareness is not unique to ELLs.

A third area of cited difficulty is how vocabulary (the number of unfamiliar, abstract, figurative, or technical words in a text) contributes to readers' perceptions of difficulty. Davis (1944), in one of the few studies in this area (rhetorical organization's relationship with other factors), identified several hundred factors that influence reading comprehension, many of which overlapped. Specifically, he argued that readers' ability to follow the organization of a passage corelated with their ability to understand the vocabulary therein. More recently, as mentioned above, Freedle and Kostin (1991, 1993) conducted a series of studies to determine which variables contribute to reading passage difficulty in standardized tests (SAT, TOEFL). They reported that vocabulary contributed significantly to text difficulty, although the foci of the cline of difficulty differed in each study. Specifically, they argued that vocabulary was related to students' ability to make inferences related to texts that violated traditional text structure.

The fourth conjoined area is titles. Bock (1980), in an exploration of the effects of meaningful titles on NES undergraduates' identification of text types, found that "titles provide the starting point for setting up text structures" (p. 308). Schwartz and Flammer (1981) similarly found that titles have an effect on NES undergraduates' understanding of text structure.

Materials and Methods

This sequential mixed-methods study explored the effects (benefits and difficulties) rhetorical organization has on undergraduate ELLs' perceptions of difficulty when they read essay exemplars excerpted from rhetorics[2].

Setting

The study was conducted at a university in northern Taiwan that maintains a writing center which serves the university's 9,000 students. The writing center receives a variety of visitors. These include (a) students from writing courses offered for English majors (two years of requisite composition courses, Freshman and Sophomore Composition, and a requisite business writing course), (b) students from the English department and 15 other disciplines whose courses include writing components, and (c) students seeking help with other writing needs.

Overall Design

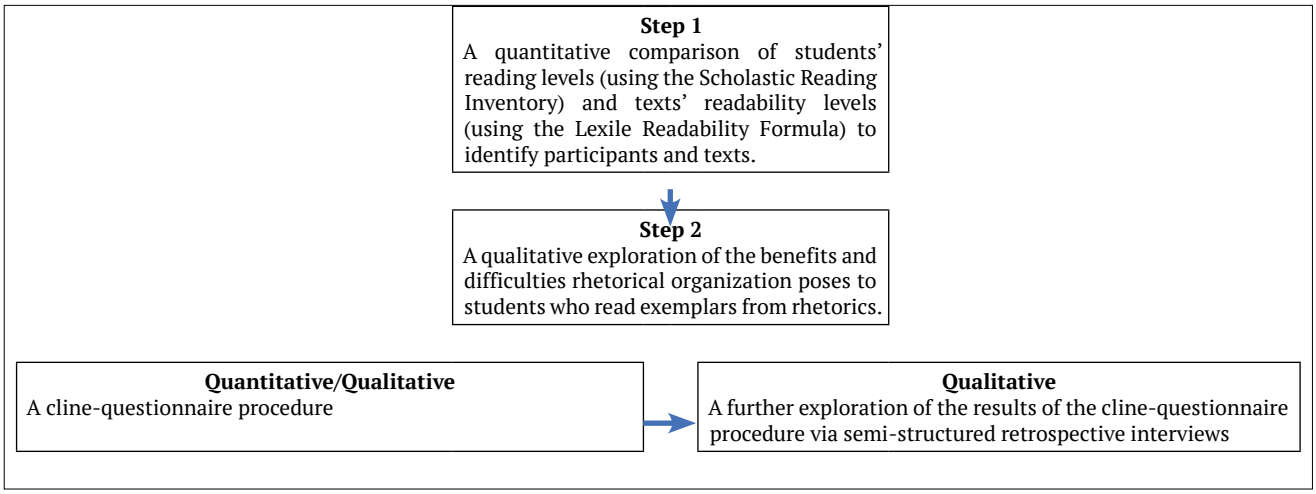
This study explored one research question: What effects (benefits and difficulties) doesrhetorical organization have on undergraduate English language learners' (ELLs) perceptions of difficulty when they read exemplars (i.e., essays) excerpted from rhetorics? To explore this research question, a sequential mixed-methods adaption of Creswell's (2013) design was utilized (Figure 1).

Following the sequential mixed-methods design, the researcher, who was both the writing center director and course instructor for one of the sections of Sophomore Composition, administered two steps and their relevant stages: (a) Identifying participants and texts (exemplars) and (b) Exploring the benefits and difficulties of rhetorical organization for students who read exemplars from rhetorics.

[2] This article reports the results of a larger unpublished sequential, mixed-methods study (i.e., a doctoral dissertation) that explored the effects of textual features on postsecondary ELLs' perceptions of difficulty when reading exemplars from rhetorics. The methodology presented in this paper was adapted from the larger study.

Figure 1

Sequential mixed-methods research design



Identifying Participants and Texts (Exemplars)

To identify participants and texts for this study, three stages were undertaken: (a) an examination of the target sample's reading levels, (b) an examination of the rhetorics' (i.e., the exemplars therein) Lexile levels, and (c) a comparison of the two.

To identify potential participants, the Scholastic Reading Inventory (SRI) was administered to a purposive sample (N = 91) of students registered in sections of Sophomore Composition. This cluster group was selected as (a) the members of this group comprised the majority of writing center visitors and (b) they had (as a result of attending the English department's composition course) been introduced to the text-type terms used in the questionnaire (e.g., rhetorical organization, process, description, narrative, comparison, and argumentation/persuasion). However no attempts were made to control for awareness.

To identify the exemplars for study, rhetorics available on the local market (N = 12) and the exemplars therein (n = 893), were measured with a computerized version of the Lexile Analyzer. To determine which exemplars are accessible to the reading levels of the selected participants, the participants' reading levels and exemplars' Lexile levels were compared.

In accordance with qualitative theory, the participants were purposively selected to help the researcher explore the phenomenon. Considering sample sizes for homogeneous purposive samples (3–10, Creswell, 2013; 6–8, Kuzel, 1992; 10 + 3, Francis, et al., 2010; 15 ± 10; Kvale, 1996), a cluster sample of informants (n = 14) was purposively identified according to their SRI scores, the top 15% of the students enrolled in sections of Sophomore Composition (828–928L), thus allowing them to compare a wide range of exemplars in order to aid the researcher in holistically exploring the research question (Merriam, 1991).

The identified participants were queried by e-mail for consent to a follow-up post-course interview. Twelve informants assented and were provided with pseudonyms, females (n = 7; mean age 20.14 years), and males (n = 5; mean age 20.8 years). Eleven reported to the test site and 10 successfully completed the procedures, thus providing useful data. The sample composition was indicated by the students' Lexile measures rather than any purposeful intent of the sampling procedure (e.g., age, ethnicity, gender).

Five exemplars (range 610–1010L) (Table 2) were purposively selected to be below, within, and slightly above the informants' Lexile range. This number of exemplars (n = 5) was chosen in order to provide sufficient rhetorical diversity for the informants to engage in thoughtful comparisons but modest enough so that the cline could be performed and articulated within a reasonable period of time (via the questionnaire and interview), such that usable data could be collected but informant fatigue could be prevented.

Table 2

Exemplars

	Titles	Lexile	Type
a.	Traig, J. A. (2008). Guide to proper hand-washing technique. In M. L. Conlin (Ed.). *Patterns plus: A short prose reader with argumentation* (pp. 176-178). Houghton Mifflin.	610L	Process
b.	Hughes, L. Salvation. (2007). In S. V. Buscemi, & C. Smith (Eds.) *75 readings plus* (pp. 10-14). McGraw-Hill.	740L	Narrative
c.	McDonald, C. P. A. (2003). A view from the bridge. In T. Cooley (Ed.). *The Norton sampler: Short essays for composition* (pp. 37-41). Norton & Company.	810L	Description
d.	Harris, S. (2001). Freedom and security. In G. Levin (Ed.). *Prose models* (pp. 389-392). Wadsworth.	910L	Argumentation
e.	Dalfonos, D. (2003). Grammy rewards. In T. Cooley (Ed.). *The Norton sampler: Short essays for composition* (pp. 206-208). Norton & Company.	1010L	Contrast

Description of the Exemplars

According to Table 2, the "A Guide to Proper Hand-washing Technique" essay is rated as the easiest of the five (i.e., 610L). The rhetoric's editor describes the essay's organization as a process essay, one that outlines a "method of doing a task or a job, usually in orderly steps, to achieve a desired result" (p. 163); in this case, describing how one is to wash one's hands. The "Salvation" essay is rated as the second least difficult (i.e., 740L), described as a narrative that offers an autobiographical account of the author's childhood experience at a church revival meeting. The "A View from the Bridge" essay is rated as the third most difficult (i.e., 810L), described as a descriptive essay, a "mode of writing that appeals most directly to the senses by showing or telling us what something looks like, or how it sounds, smells, feels, or tastes" (p. 21); in this case a jogger's encounter with a visually impaired young fisherman. The editor notes that the essay, as is common in descriptive essays, also contains elements of narration. The "Freedom and Security" essay is rated as the second most difficult (910L), and is described as an argumentative/persuasion essay, one that presents an argument, guiding the reader through "the process of inference of reasoning from a general truth to another general truth or a particular instance" (p. 386). The topic of the essay is that we can disagree with ideas while respecting the people who hold them. "Grammy Rewards," rated as the most difficult of the five essays (1010L), is described as a contrast essay that uses a point-by-point structure to contrast two grandmothers on the basis of how they interact with their granddaughter.

Exploring the Benefits and Difficulties of Rhetorical Organization for Students Who Read Exemplars from Rhetorics

Following the identification of the participants and the texts, the effects of rhetorical organization were explored via an untimed two-stage process: (a) a quantitative cline-questionnaire procedure and (b) qualitative semi-structured retrospective interviews.

The Quantitative Cline-Questionnaire Procedure

The quantitative cline-questionnaire procedure had two phases. These are discussed in the following sections.

The Cline Phase. In the cline phase, the participants read the essays (n = 5) and constructed a cline (an arrangement of the exemplars from easiest to most difficult). The exemplars were arranged in random order and given to the informants in a plain brown envelope. Ranking criteria were withheld to facilitate the sort of decision-making processes that readers normally undertake when making such judgments (Chall et al., 1996), thus allowing the participants to reflect on what contributed to their rankings (perceptions of difficulty) during the next phase, the questionnaire phase.

The Questionnaire Phase. Following the completion of the clines, a five-point Likert-scale questionnaire was administered to encourage informants to reflect on why they ordered the essays in the sequence they did and explain this in a way that would provide insight into what factors other than those measured by the Lexile Readability Formula (i.e., rhetorical organization) contributed to their perceptions of difficulty. The questionnaire addressed a variety of features related to comprehension (e.g., background knowledge, sentence

length, titles, vocabulary, vocabulary in context). The question regarding rhetorical organization is listed in Table 3.

Table 3

Excerpt from the questionnaire

Logical Rhetorical Organization: How the ideas were arranged in each text to help them flow logically from one to another influenced my decision about how to arrange the texts in the way that I did.
1. Strongly Agree
2. Agree
3. Neither Agree nor Disagree
4. Disagree
5. Strongly Disagree

Note. The participants, as a result of attending the university's composition course, were familiar with the term logical rhetorical organization, understanding it to refer to terms used in this study: *process*, *description*, *narrative*, *comparison*, and *argumentation/ persuasion*.

To avoid language ambiguities, the questionnaire was translated from English and administered in the students' L1 (i.e., Mandarin). The translation was verified by a second translator and pre-tested with participants not included in the sample (n = 2).

Qualitative Semi-structured Retrospective Interviews

The data from the questionnaire were triangulated with semi-structured retrospective interviews following Creswell's (2013) protocol. Enquiries commenced with structured items from the questionnaire (e.g., background knowledge, rhetorical organization, sentence length, titles, vocabulary, vocabulary in context) and were elaborated on through semi-structured prompts, which later became open-ended (Nunan, 1996). This was done to provide greater breadth and scope regarding the data provided by thequantitative cline and questionnaire.

The researcher conducted the interviews, a bilingual research assistant assisted with language difficulties, and an observational protocol (audio and video taping) was followed. The interviews continued until data saturation was reached (mean 32.5 minutes; range 19.3–57.4 minutes; variation was dependent on the degree of information offered and translation required). Audio recordings were transcribed and member checked, the data were coded using emergent category analysis (Erlandson et al., 1993), and a second-level group debate procedure was undertaken to "add strength and fertility to the entire analysis" (p. 128).

Results

This sequential mixed-methods study explored the effects (benefits and difficulties) rhetorical organization has on undergraduate ELLs' perceptions of difficulty when they read essay exemplars (i.e., essays) excerpted from rhetorics. To explore this, two steps were undertaken. The first identified the texts (N = 5) and participants (N = 10). The second explored the research question: What effects (benefits and difficulties) does rhetorical organization have on undergraduate English language learners' (ELLs) perceptions of difficulty when they read exemplars (i.e., essays) excerpted from rhetorics?

Overall, the results suggest that rhetorical organization influences students' perceptions of readability both as (a) a primary (i.e., an isolated feature) and (b) a conjoined feature (i.e., comprising two or more associated entities where the second impacts the first).These results are subsequently elaborated further in two areas: (a) the results of the cline-questionnaire procedure and (b) the results of the qualitative semi-structured retrospective interviews and its subsections.

Results of the Cline-Questionnaire Procedure

The results of the cline procedure are shown in Table 4. The essays, labeled a-e, are arranged according to the informants' rankings from easiest to difficult.

Table 4

The results of the informants' cline ordering

	Annie	Ben	Dan	Eve	Harold	Jacob	Kala	Linda	Marsha	Nelson
Easiest	a	a	a	a	a	a	a	a	a	a
	d	d	b	c	d	e	e	e	e	d
	b	b	e	e	e	d	d	d	d	c
	c	c	c	b	b	b	b	c	c	e
Difficult	e	e	d	d	c	c	c	b	b	b

Note:
a_Process, b_Narrative, c_Description, d_Argumentation, e_Contrast

The data were analyzed using SPSS 21, specifically the Friedman test. The results (mean rank table) (Table 5) demonstrated that the process essay had a low average difficulty (m = 1.0), while the descriptive essay had the highest average difficulty (m = 4.0). Considering the results below, the process essay (m = 1.0) was found to be the easiest, followed by argumentation (m = 3.0), contrast (m = 3.10), narrative (m = 3.90), and description (m = 4.0).

Table 5

Descriptive statistics

	N	Mean	Std. Deviation	Minimum	Maximum
a_Process	10	1.0000	.00000	1.00	1.00
b_Narrative	10	3.9000	.99443	2.00	5.00
c_Description	10	4.0000	.94281	2.00	5.00
d_Argumentation	10	3.0000	1.15470	2.00	5.00
e_Contrast	10	3.1000	1.19722	2.00	5.00

The results, as shown in Table 6, reveal that there was a significant difference in the ranking of each essay (χ^2 (4) = 23.28, p < .001), thus demonstrating that the informants made definitive choices in their rankings.

Table 6

Friedman test statistics

Test Statistics	
N	10
Chi-Square	23.280
Df	4
Asymp. Sig.	.000

Examining the predictive Lexile measures alongside the students' rankings (Table 7), the results illustrate that the student rankings (a, d, e, b, c) contradict the Lexile results (a, b, c, d, e).

Table 7

Comparison of Lexile and participants' rankings

Lexile Cline	Student Cline	Mean
a_Process (610L)	a_Process (610L)	1.00
b_Narrative (740L)	d_Argumentation (910L)	3.00
c_Description (810L)	e_Contrast (1010L)	3.10
d_Argumentation (910L)	b_Narrative (740L)	3.90
e_Contrast (1010L)	c_Description (810L)	4.00

Results of the Questionnaire

After the informants finished their clines, they completed the closed-response questionnaire. The results of the questionnaire indicated that the informants found rhetorical organization to be one of 15 primary (isolated) features that contributed to the readability of the exemplars in the rhetorics. Interestingly, rhetorical organization approached the level of effect held by the first feature measured by the Lexile Readability Formula (i.e., semantic). Nine of the ten informants (90%) cited vocabulary and vocabulary in context as influential, and 80% reported similar results for rhetorical organization. Moreover, rhetorical organization had a larger impact than the second feature employed by readability formulae (i.e., syntactic and sentence length). Eighty percent of the participants reported rhetorical organization to be influential as a primary feature, whereas only 50% reported similar results for sentence length. This unexpected result is likely due to the fact that the overall impact of sentence length as a mediating factor is not considered only as a primary feature, as its influence is also compounded by its conjoined properties (e.g., grammar, punctuation, and vocabulary) (Dubay, 2007b).

Results of the Qualitative Semi-Structured Retrospective Interviews

After the informants completed the questionnaire, they engaged in semi-structured retrospective interviews. An analysis of the informants' qualitative responses further demonstrated that the informants as a group perceived rhetorical organization to be a primary feature (i.e., an isolated feature). The results also demonstrated that the informants perceived logical organization to be a conjoined feature (i.e., consisting of two or more associated entities where the second impacts the first). These results are discussed in the following sections.

Primary Feature

Logical organizationwas again, as was done in the questionnaire, cited as a primary feature by eight (80%) of the informants (Annie, Ben, Eve, Harold, Jacob, Linda, Marsha, Nelson).Examining the informants' responses, their perceptions appeared to stem from an entangled mix of two causes: (a) the informants' awareness of (or lack of awareness of) the type of rhetorical organization exemplified in the essays and therhetorical organization of the essays themselves. Eve illustrated an example of both by demonstrating a strong awareness of rhetorical structure by naming the rhetorical organization of each essay, explaining that she felt each organization style was easier than the last.Eve's comments are related to previous taxonomy literature which reported that the logical organization of a text can impact readers' perceptions of difficulty (Bereiter, 1978 as cited in Calfee & Curley, 1984; Carrell, 1984a; Fooh, 1989; Freedle & Kostin 1991, 1993; Goh, 1990; Lei, 2010; Meyer & Freedle, 1984; Lei, 2010; Sharp, 2002; Talbot, Ng, & Allan, 1991; Yali & Jiliang, 2007; Zhang, 2008).A second informant, Ben, further demonstrated how a lack of awareness can play a part.Discussing the contrast organization of the "Grammy Rewards" essay and the essay's place in his cline, he pointed out that he felt that the essay's point-by-point structure was hard to understand because "the two grandmothers show up in the same paragraph."Ben's report supports literature which explains that a readers' "knowledge relative to the formal, rhetorical organizational structures of different types of texts" (Carrell 1987, p. 481) contributes to perceptions of difficulty.

Conjoined Features

The results of the interviews showed that rhetorical organization is conjoined with other features (Table 8). Forty percent of the respondents (Annie, Ben, Dan, Kala) explained that they perceived rhetorical organization to be directionally influential as a conjoined feature, conjoined with three features: (a) vocabulary, (b) background knowledge, and (c) titles. Rhetorical organization was also found to influence one other primary feature, vocabulary in context.

Table 8

Features the informants reported to be conjoined with other features

Conjoined Features	←	Influential Features	Influence
Rhetorical Organization		Vocabulary	-
Rhetorical Organization		Background Knowledge	+
Rhetorical Organization		Title	+
Vocabulary in Context		Rhetorical Organization	+

Note.+ denotes a positive influence; - denotes a negative influence.

Rhetorical Organization and Its Relationship with Vocabulary and Vocabulary in Context. Rhetorical organization was found to have a negative relationship with vocabulary and a positive relationship with vocabulary in context. Two (20%) of the informants (Annie, Kala) explained that they felt the amount of unfamiliar vocabulary in an essay diminished their ability to understand its logical organization. Kala, for example, referring to the "A View from the Bridge" essay, explained that she felt that the vocabulary in the essay was so difficult that she could not understand the essay's organization. Kala's report is related to Hirsch and Nation's (1992) work, which showed that students need to have a minimum command of vocabulary to access a text. Her report is also related to Carrell's (1983b) work, which has shown that when students are presented with texts beyond their ability, the students may remain linguistically tied to the text, unable to access other features that would normally help them process the material.One informant, Dan, also reported that he felt vocabulary in context was influenced by logical organization. He explained that he had trouble fully understanding the concepts *freedom* and *security* when he first came across them in the title of the "Freedom and Security" essay, but that he was later able to understand them because of the essay's logical contrast organization. Dan's report is associated with Dubin and Olshtain's (1993) work, which showed that comparison or contrast clues can assist readers' ability to make inferences. It also supports others' reports that inference clues at the sentence and paragraph level are helpful (Bengeleil & Paribakht, 2004; Paribakht & Wesche, 1999).

Rhetorical Organization and Its Relationship with Background Knowledge and Titles. For the remaining two features (i.e., background knowledge and titles), one response was offered for each. For the first, background knowledge, Ben, explained that he felt that his background knowledge about hand washing (i.e., the topic of the "A Guide to Proper Hand-washing Technique" essay) helped him identify its rhetorical organization (process), which in turn helped him anticipate and follow the text. For the second feature, titles, Dan explained why he considered the title of the essay, "A Guide to Proper Hand-Washing Technique," to be assistive. He reported that the essay's title helped him understand the essay's logical organization because he could anticipate that the essay would be reporting a procedure. Dan's report is in accordance with Bock's (1980) work, which explained that titles can help informants set up ideas about forthcoming logical organization. Ben's report is loosely related to others who have reported a link between background knowledge and comprehension (Carrell, 1983a; Dochy, et al., 1999), but no direct links between rhetorical organization and background knowledge were found during the literature review for this study.

Discussion and Conclusion

Accepting that readability is a worthy area of inquiry (Mesmer, 2008), even though the readability of essays found in rhetorics is underexplored (Baker, 2019), this study investigated the effects of rhetorical organization on ELL apprenticing writers' perceptions of text difficulty when reading exemplars excerpted from rhetorics.

As mentioned in the previous section, the results suggest that rhetorical organization influences students' perceptions of readability both as (a) a primary (i.e., an isolated feature) and (b) a conjoined feature (i.e., comprising two or more associated entities where the second impacts the first). These results were borne out by two procedures and the resulting data:(a) results of the cline-questionnaire procedure and (b) results of the qualitative semi-structured retrospective interviews and its subsections. These results are further elaborated on in this section to illustrate how these procedures' resulting data relate to and inform each other and thus further readability literature.

According to the results of the cline procedure, the process essay was reported to be the easiest, followed by argumentation, contrast, narrative, and description. Although the purpose of this study was not to provide a taxonomy, these results offer an important contribution to rhetorical organization taxonomy literature (Carrell, 1984b; Fooh, 1989; Freedle & Kostin, 1991, 1993; Goh, 1990; Lei, 2010; Meyer & Freedle, 1984; Sharp, 2002; Talbot et al., 1991; Yali & Jiliang, 2007; Zhang, 2008), as previous studies have not sufficiently reported the reading levels of texts and participants. This study also furthers the discussion as the essays (and accompanying analysis) are identified with terms commonly used in modern composition texts (i.e., process, description, narrative, cause/effect, comparison/contrast, and argumentation/persuasion), thus facilitating interpretation and replication.

Regarding what contributes to readers' perceptions of difficulty, the results indicated that rhetorical organization impacts readability as (a) a primary (isolated feature) and (b) a conjoined feature (consisting of two or more associated entities where the second affects the first, i.e., a feature influences the impact of rhetorical organization or rhetorical organization impacts another feature). As a primary feature driven by readers' formal schemata, the findings extend the literature that argues that readers' perceptions of rhetorical organizational difficulty are related to readers' formal schemata (Calfee & Curley,1984; Carrell, 1987; Flick & Anderson, 1980; Selinker et al., 1976).

As a conjoined feature, the results also extend readability literature; that is, in the areas of vocabulary, background knowledge, and titles. With regard to vocabulary, the results support the argument that readers' understanding of rhetorical structure is influenced by their ability to comprehend the associated vocabulary (Davis,1944; Freedle & Kostin,1991, 1993; Hirsch & Nation, 1992). The findings also extend the literature on the confluence of titles and organizational structure, in that readers' ability to understand organizational structure is assisted by titles (Bock, 1980; Schwartz & Flammer, 1981). The work also makes a unique contribution to readability literature by identifying a conjoined relationship between rhetorical organization and background knowledge (content schemata).

These findings corroborate and further the literature that argues that considerations of readability need to go beyond the measurements of only two features (semantic and syntactic) and take into consideration the heterogeneous mix of features that contribute to a good fit between text and reader (Baker, 2020; Goodman;1967; Koda, 2005).

This study makes a significant contribution to readability literature as it demonstrates how rhetorical organization contributes to ELL apprenticing writers' perceptions of difficulty when reading essays excerpted from rhetorics. Overall, the results can be interpreted to mean that rhetorical organization is a contributory feature, but one that is slightly less influential than the two features utilized by quantitative readability formulae (i.e., semantic and syntactic). This result extends the work of Chall and Dale (1995) and others (Fry, 2002; Gunning, 2003; Lexile, 2010; Meyer, 2003; Weaver, 2000; Zakaluk & Samuels, 1988), which posit that while quantitative readability formulae are worthy initial starting blocks for readability assessments, other features that formulae do not measure (e.g., rhetorical organization) need to be considered sequentially, first by employing quantitative readability formulae and then qualitatively considering the influence of subjective features that are not measured by readability formulae.

Implications

This study provides several unique contributions to the literature. First, it advances readability literature with regard to rhetorical organization and ELL apprenticing writers' perceptions of text difficulty when reading exemplars excerpted from rhetorics. The findings also provide practical implications in the area of text

selection for those engaged with writing education (e.g., instructors, writing center staff, and the research community as a whole), as the teaching of writing, writing centers, and writing center self-access libraries are becoming standard in L2 university contexts (Baker, 2018; Devanadera, 2018; Paiz, 2017). Specifically, that rhetorical organization's contribution to the readability mix as a primary feature, and in conjunction with its conjoining features, needs to be considered during the hybrid text selection process. Similarly, the findings provide practical implications for the publishing community, as readability is a crucial consideration when selecting exemplars for inclusion in the 200-plus rhetorics published annually (Bloom, 1999).

Limitations and Suggestions for Future Research

While the study makes several unique contributions, the resulting data raise questions that may guide future explorations. First, in keeping with qualitative theory, the informants were purposively selected to better understand the problem (Creswell & Creswell, 2018) and adhered to Kvale (1996) and others' (Creswell, 2013; Francis et al., 2010; Kuzel, 1992) purposive sample recommendations, namely15 ± 10, a size common in interview studies. However, investigations employing more extensive samples may provide alternative results. A second related limitation is that although the study's results may be generalizable beyond the study's context, replicability and generalizability theory are important concerns (Strube, 2000). In other words, given that replicationis key to scientific research (National Academies of Sciences, 2019), additional studies should be undertaken, as different populations in other contexts may have alternate experiences. Third, although this study has furthered readability literature, rhetorical organization is still a much-understudied area, especially the readability of exemplars found in rhetorics in other contexts. Moreover, further discussions of other features that contribute to the readability of essays found in rhetorics still need to take place. It is, therefore, hoped that this paper will provide a foundation for future investigations. In keeping with this, this empirical study provides detailed literature review, methodology, and results sections to help mark a starting point for replication studies and further discussions of how rhetorical organization and other features impact the readability of essay exemplars.

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Exploring the Relationship Between Language Learning Strategies, Academic Achievement, Grade Level, and Gender

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Learning efficacy can be substantially improved through the frequent use of learning strategies, whose practicality has been confirmed through extensive research. Thus, the purpose of the current study is to contribute to this wealth of research by determining whether learning strategies are significant predictors of students' achievement in learning English as a foreign language (EFL) as well as by exploring strategy awareness and variations in strategy use by gender, grade level, and overall grade point average (GPA) among 206 high school students. The results indicated that cognitive strategies are significant positive predictors, while memory and affective strategies are significant negative predictors of students' achievement in foreign language learning. Moreover, the findings revealed a significant impact of overall GPA and an insignificant impact of gender and grade level on the use of strategy subtypes, with the most frequently used strategies being metacognitive and the least frequently used being affective strategies. Furthermore, this research highlights the importance of incorporating strategies-based instruction methods into foreign language curriculums in the Bosnian context and also aims to raise teachers' awareness of the importance of their application in the classroom milieu.

***Keywords*:** language learning strategies, grade level, GPA, gender, achievement

Introduction

In the last few decades, language education has witnessed a progressive shift of focus from teaching to learning and the responsibility for learning has slowly transferred to the learners themselves, who have become the focal point of both processes and education research. The main concern of educational theorists has been learner autonomy (Little, 1991), which, if achieved, can enhance the effectiveness of the overall learning process. As claimed by Wong and Nunan (2011), two dimensions that can help students become effective and autonomous learners are learning strategies and learning-how-to-learn, which need to be incorporated into curricula, and language curricula in particular.

Learning strategies, particularly language learning strategies, appear to be among the major factors impacting second or foreign language (L2) performance and helping establish how and how well language learners acquire a second or a foreign language (Oxford, 2003). They have captured special research attention, with the findings predominantly pointing to their efficacy across different groups of learners and demonstrating the effectiveness of their practical implementation through adequate strategy instruction. Thus, the current study aims to reveal how strongly and adequately language learning strategies are represented in the Bosnian context through systematic exploration of their use and patterns of variation by gender, grade level, and grade point average. As a strategic approach to language learning can result in an increase in language proficiency, any research that might contribute to the adoption of such an approach is very useful. This is particularly so in the EFL context of Bosnia and Herzegovina where English proficiency is deemed indispensable due to the language's widespread and noticeable presence across different domains (Dubravac et al., 2018).

Literature Review

Language learning strategies are particular actions employed by language learners to ease their development of foreign language skills (Green & Oxford, 1995). They incorporate and foster awareness and conscious mastery over language learning (Schraw, 1998), thus increasing learner autonomy and making the learning process faster, simpler, more enjoyable, as well as more self-directed and effective (Little, 1991; Oxford, 2001). Definitions and classifications of language learning strategies have been very diverse (Cohen, 2007; Griffiths & Oxford, 2014; O'Malley & Chamot, 1990; O'Malley et al., 1985; Oxford, 1990; Oxford & Cohen, 1992) and it has been claimed that they can be confusing and lack hierarchical arrangement (O'Malley et al., 1985; Oxford, 1990). Likewise, the concept of strategies itself has been referred to as "fuzzy" (Ellis, 1994, p. 529) and "elusive" (Wenden & Rubin, 1987, p. 7). Still, one classification has surfaced as the most comprehensive one and that is Oxford's taxonomy of language learning strategies (SILL in Oxford, 1990). This taxonomy groups language learning strategies into direct and indirect ones, the former directly involving the target language through revising and practicing, and the latter indirectly easing the process of language learning through planning, collaborating and finding opportunities. Direct language learning strategies are further classified into memory (related to learning and retrieving new information via sounds, images, body movements, and other ways), compensation (related to compensating for their knowledge gaps through the use of synonyms, talking around the missing word, etc.) and cognitive strategies (related to thinking about the language, deep analysis, note-taking, and summarizing to produce knowledge structures). On the other hand, indirect language learning strategies are grouped into affective (related to the ability to identify feelings and discuss them, as well as to the use of positive self-encouragement), metacognitive (which include good management of the learning process through planning tasks and evaluating accomplishments, etc.), and social strategies (which involve an interaction with other students as a significant component of the learning process through asking for help or clarification) (Oxford, 1990; 2003). This strategy inventory is claimed to provide a solid theoretical base for understanding language learning strategies (Griffiths, 2004) despite the criticism it faced and it has been used as such in numerous studies, the current study being one of them.

The research approach to language learning strategies using Oxford's inventory as a theoretical construct has been multifaceted and focused on establishing whether the use of strategies is associated with L2 proficiency, which strategies are used most extensively, whether and how strategy awareness can be developed, and whether individual learner differences, inborn or acquired, have an impact on strategy use. A large number of studies explored which learning strategies are more frequently employed by L2 learners in different contexts (Cohen et al., 1998; Habók & Magyar, 2018; Magogwe & Oliver, 2007; Nyikos & Oxford, 1993; Oxford & Burry-Stock, 1995; Wharton, 2000; Wu, 2008). No common pattern can be established, but a very common strategy use order was compensation, metacognitive, and cognitive strategies (Wu, 2008) as well as social, metacognitive, and cognitive strategies (Habók & Magyar, 2018; Magogwe & Oliver, 2007), with the order as well as specific strategy use being dependent upon students' age (Habók & Magyar, 2018; Magogwe & Oliver, 2007), gender (Ehrman & Oxford, 1989; Goh & Foong, 1997, Green & Oxford, 1995; Oxford & Nyikos, 1989), and very frequently upon the context in which the research was conducted, as claimed by Chamot (2004).

A close link has also been established between learning strategies and L2 proficiency (Agathopoulou, 2016; Griffiths & Oxford, 2014), with more proficient students using language learning strategies more frequently than less proficient students (Dreyer & Oxford, 1996; Habók & Magyar, 2018; Magogwe & Oliver, 2007; Oxford & Ehrman, 1995; Wharton, 2000; Wu, 2008). Most strategy subtypes have been found significantly associated with L2 proficiency in different EFL and ESL contexts, namely cognitive (Oxford & Ehrman, 1995; Wu, 2008), metacognitive (Dreyer & Oxford, 1996), compensation (Oxford & Ehrman, 1995), and affective and social strategies (Dreyer & Oxford, 1996; Oxford & Ehrman, 1995). On the other hand, no positive relation has been found between memory strategies and L2 proficiency (Wu, 2008) and in some studies these strategies even exhibit a negative impact on students' performance (Purpura, 1997). In Wu (2008), the difference in the use of language learning strategies by higher and lower proficiency students was significant overall and individually for all the strategy subtypes except for memory strategies, but the impact of cognitive strategies on L2 proficiency was most profound. Only in some studies was the difference in the use of memory strategies between lower and higher proficiency students found to be significant (Habók & Magyar, 2018), with a significant difference between younger low and high proficiency students existing in the use of memory, cognitive, metacognitive, and social strategies, and between older students of opposing proficiency levels in the use of all strategy subtypes.

Some research studies also explored the impact of strategy usage on overall academic achievement (Delić & Bećirović, 2017; Habók & Magyar, 2018; Shawer, 2016). Namely, Habók and Magyar (2018) measured how language learning strategies impact foreign language attitudes and through this, two other variables, namely foreign language marks and average general GPA, i.e. general school achievement, of the fifth and eighth grade students. The findings indicated that the impact of strategies on attitudes towards foreign language learning was rather high in the fifth grade, particularly within the domain of metacognitive strategies, and that attitudes towards the foreign language produced a significant effect on foreign language marks. Similar findings were confirmed in the eighth grade, as the effect of the eighth grade students' strategy usage on foreign language attitudes was also rather high, with metacognitive strategies having the highest effect, memory strategies the lowest effect, and the effect of social strategies being non-existent. Moreover, the impact of foreign language attitudes on students' foreign language marks was remarkably similar to the one measured in the fifth grade, while the impact of foreign language marks on general school achievement increased twice as much when compared to the impact measured in the fifth grade (Habók & Magyar, 2018). Shawer (2016) also showed that language learning strategy subtypes jointly predicted academic achievement, but that only social and metacognitive strategies were found to be significant predictors.

Language learners are often not completely aware of the practicality of language learning strategies, and they cannot exploit their full potential unless they receive proper instruction and utilize them appropriately and more widely (Dervić & Bećirović, 2019; Nyikos & Oxford, 1993; Oxford, 1990). Hence, strategies-based instruction has also captured research attention (Gunning & Oxford, 2014; Rubin et al., 2007) and some new instructional models have been proposed (Chamot & O'Malley, 1996; Cohen, 1998).However, although teachers play a prominent role in the process of strategy instruction, the learning process starts with the learners themselves, and varies according to learners' individual differences, such as age, gender, education, and other factors that have been proven to affect strategy usage and the learning process (Oxford et al., 2018).

The largest variation in the use of strategies can be found with respect to gender and the research has commonly pointed to mixed gender-related findings (Takeuchi et al., 2007). Gender has thus often surfaced as a significant factor impacting strategy usage (Doró & Habók, 2013; Ehrman & Oxford, 1989; Goh & Foong, 1997, Green & Oxford, 1995; Kazamia, 2016; Oxford & Nyikos, 1989), but has also frequently proven to be insignificant (Brdarević-Čeljo & Asotić, 2017; Radwan, 2011; Wharton, 2000). Generally, females use strategies more frequently than males, either all of the strategy subtypes (Doró & Habók, 2013; Goh & Foong, 1997; Green & Oxford, 1995) or only some of them (Ehrman & Oxford, 1989; Oxford & Nyikos, 1989; Yilmaz, 2010) and have frequently been reported to be better language learners (Ellis, 1994). However, in some studies, males reported using strategies slightly more frequently than females, either all strategy subtypes (Wharton, 2000) or only some (Brdarević-Čeljo & Asotić, 2017; Radwan, 2011). Takeuchi et al. (2007) specifically pointed to the discrepancy in gender-related learning strategy research and stated that care needs to be taken when claiming that females are better language learners.

Grade level, correlative to age, has also been explored as a factor impacting strategy use, although to a lesser extent than gender. It has also been shown that the grade level is a significant factor impacting learning strategy use (Brdarević-Čeljo & Asotić, 2017; Chen, 2009; 2014; Gavriilidou & Petrogiannis, 2016; Magogwe & Oliver, 2007; Oxford & Nyikos, 1989), with only a few studies demonstrating that the impact is insignificant (e.g. Doró & Habók, 2013). Hence, Chen (2009) indicated that a preference for strategy usage significantly changes over the years and there is a relationship between grade level and all strategy subtypes individually. In addition, Chen's (2014) and Magogwe and Oliver's (2007) comprehensive research conducted at all educational levels, namely at elementary, secondary and tertiary levels, revealed significant differences between strategy usage and grade level, with some differences in the use of specific strategy subtypes emerging. Similar results were obtained in the Greek EFL context. Gavriilidou and Petrogiannis (2016) pointed to significant differences in the use of language learning strategies between elementary and high school students, with younger elementary-level students achieving higher scores and thus were considered more frequent strategy users than older high school students. Mitits et al. (2016) also indicated that elementary school students use all language learning strategies except for compensation strategies significantly more frequently than high school students. However, when only high school students, aged 13 to 15, were included in the research (Kazamia, 2016), the results revealed that the difference in strategy usage was significant only in the domain of compensation strategies.

The Present Study and Hypotheses

Research into factors impacting language learning strategies spans different socio-cultural contexts, but has never been carried out in the Bosnian context, particularly in the high school educational milieu. Even though strategy research is extensive, not all of the factors have been equally researched, for example grade level (Chen, 2009; 2014; Takeuchi et al., 2007), and those researched broadly, gender in particular, quite often yield rather conflicting results. Thus, a need for research into language learning strategies has often been highlighted (Chen, 2009), with a particular emphasis placed on factors determining strategy use. Thus, the present study aims to add to the previous research by determining whether the use of language learning strategies predicts students' achievement in learning English as a foreign language and whether the use varies according to students' gender, grade level, and general school achievement, i.e. students' overall GPA. By identifying factors that impact or are impacted by strategy usage, the study also aims to offer new insights and develop clear guidelines on how strategies ought to be taught in the EFL context of Bosnia and Herzegovina. Based on the adopted approach, the following hypotheses will be tested:

H1 There will be a statistically significant difference in the application of language learning strategies based on grade level.
H2 Students' overall GPA will have a significant impact on the application of language learning strategies.
H3 There will be a statistically significant difference in the application of language learning strategies based on gender.
H4 Language learning strategies, namely memory, compensation, cognitive, affective, metacognitive, and social, will be significant predictors of students' achievement in learning English as a foreign language.

Materials and Methods

Participants

Stratified random sampling was employed in the process of participant selection. This method of participant selection requires the recruitment of participants "based on their membership in a particular subgroup or stratum" (Vanderstoep & Johnson, 2008, p. 32). The research sample comprised 206 students studying in high schools in Bosnia and Herzegovina, including 92 (44.7%) female and 114 (55.3%) male students, with an age range from 15 to 18 (M = 17.1, SD = 1.01). Of the 206 participants, 38 (18.4%) attend the first grade, 36 (17.5%) the second grade, 107 (51.9%) the third grade, and 25 (12.1%) attend the fourth grade. In this sample, 75 students (36.4%) achieved the highest overall GPA, ranging between 4.5 and 5.0. Half of the students, namely 103, have an overall GPA between 3.5 and 4.4, while 21 students (10.2%) obtained a GPA between 2.5 and 3.4. Seven students (3.4%) with a failing overall GPA were excluded from further calculations as the number of participants in question was below the threshold for the application of adequate statistical tests. With reference to students' GPA in English, 62 students (30.1%) achieved the highest grade, that is 5, 54 students (26.2%) received grade 4, 42 (20.4%) attained grade 3, and 46 (22.3%) grade 2. Only two participants (1.0%) received a failing grade and were thus excluded from further analysis, the reason for that being the same as the one cited for the overall GPA (Table 1).

Table 1

Descriptive analysis of the participants

		N	Percent
Grade level	1st	38	18.4
	2nd	36	17.5
	3rd	107	51.9
	4th	25	12.1
Gender	Female	92	44.7
	Male	114	55.3

		N	Percent
GPA in English	1	2	1.0
	2	46	22.3
	3	42	20.4
	4	54	26.2
	5	62	30.1
GPA in general	1.0	7	3.4
	2.5-3.4	21	10.2
	3.5-4.4	103	50.0
	4.5-5.0	75	36.4
Total		206	100.0

Assessments and Measures

For data collection, the Strategy Inventory for Language Learning (SILL), originally devised and validated by Oxford (1990), was applied. Overall, the instrument comprises 50 items using a 5-point Likert scale, ranging from 1 ("Never or almost never true of me") to 5 ("Always or almost always true of me"). It is composed of six language learning strategy subscales, namely A, "memory", containing 9 items (e.g. "I use flashcards to remember new FL words") B, "cognitive", consisting of 14 items (e.g. "I try to find patterns in the FL"), C, "compensation", incorporating 6 items (e.g. "When I can't think of a word during a conversation in the FL, I use gestures"),D, "metacognitive", containing 9 items (e.g. "I try to find out how to be a better learner of the FL"), E, "affective", including 6 items (e.g. "I talk to someone else about how I feel when I am learning the FL"), and F, "social", with 6 items (e.g. "I practice the FL with other students"). The reliability of data was determined by means of Cronbach's alpha, which shows acceptable and high levels of internal consistency: memory $\alpha = .69$, cognitive $\alpha = .78$, compensation $\alpha = .85$, metacognitive $\alpha = .74$, affective $\alpha = .68$, and social $\alpha = .78$, with the internal consistency of the combined dependent variable of language learning strategy being $\alpha = .92$.

Besides the Strategy Inventory for Language Learning (SILL), the questionnaire included demographic items, namely the students' grade level, overall GPA, GPA in English as a foreign language, gender, and age. There are two types of high schools in Bosnia and Herzegovina, namely grammar schools and vocational schools, and the English language is taught as a mandatory curricular EFL course in both. The number of hours of English language classes varies and is different in these two school types. In grammar schools, the curricular requirement of three hours of classes per week needs to be met, whereas in vocational schools the number is reduced to two. The current study's participants were proportionally selected from both types of schools. Thus, one group is neither overrepresented nor underrepresented (Vanderstoep & Johnson, 2008). Concerning students' GPA, it should be noted that in the school system in Bosnia and Herzegovina, 5 is the highest grade, while 1 is the lowest (failing) grade. The data on students' overall GPA and grade in their English language course were received from class instructors and they refer to the summative final grades obtained at the end of the fall semester of the academic year 2019/20.

After obtaining informed consent from the schools' administration, school instructors, and students themselves, the instrument was administered to the students during regular classes on school premises. The participants were asked to read each survey statement carefully and respond to it sincerely. The average time needed for completing the survey was 15 minutes.

Data Analysis

Data analysis was performed by using the Statistical Package for the Social Sciences (SPSS), version 23. As the first step in the process, the data were examined for missing data as well as for outliers. Descriptive statistical analyses, including means, standard deviation, and frequencies, were conducted. Cronbach's alpha coefficient was calculated to determine the internal consistency. In order to identify correlations between language learning strategies, the Pearson product-moment correlation coefficient was computed. Before testing the hypothesis, the underlying assumptions for the application of multivariate statistical procedures in terms of normality, linearity, homoscedasticity, and homogeneity of variance-covariance matrices were examined and

confirmed (Mertler & Reinhart, 2016). The hypotheses were tested by performing a one-way MANOVA and a standard multiple regression analysis. In the MANOVA tests, students' grade levels, GPA, and gender were independent variables, while the six language learning strategies were dependent variables. A standard multiple regression analysis was performed to examine how the six language learning strategies predicted the students' EFL achievement.

Results

According to the conducted descriptive analysis, the students achieved the highest score in the use of metacognitive strategies (M=3.54, SD=.79), followed by cognitive (M=3.41, SD=.65), and compensation strategies (M=3.28, SD=.71), then social (M=3.09, SD=.93) and memory strategies (M=3.07, SD=.64). The least frequently used strategies were affective strategies (M=2.67, SD=.79).

A Pearson product-moment correlation coefficient was computed to determine the correlations between the dependent variables. The strongest positive and significant correlations were found between cognitive and metacognitive learning strategies (r=.73, p < .001), then social and cognitive (r=.63, p < .001), social and metacognitive (r=.58, p < .001), as well as between cognitive and compensation learning strategies (r=.53, p < .001). The associations between memory and cognitive (r=.52, p < .001), and memory and metacognitive learning strategies (r=.52, p < .001) were equally strong, positive, and significant. There was a medium, positive, and significant correlation between affective and social (r=.46, p < .001), compensation and metacognitive (r=.42, p < .001), compensation and social (r=.42, p < .001), memory and social (r=.42, p < .001), memory and affective (r=.39, p < .001), metacognitive and affective (r=.39, p < .001), memory and compensation (r=.37, p < .001), and between affective and compensation strategies (r=.31, p < .001). Furthermore, the association between affective and cognitive learning strategies (r=.25, p < .001) was small but positive and significant. Table 2 displays the descriptive statistics and correlations between the dependent variables.

Table 2

Means, standard deviations, reliabilities, and correlations for language learning strategies

Strategy	N	M	SD	α	1	2	3	4	5	6	7
Memory	192	3.07	.64	.69	1						
Cognitive	192	3.41	.65	.78	.52**	1					
Compensation	192	3.28	.71	.85	.37**	.53**	1				
Metacognitive	192	3.54	.79	.74	.52**	.73**	.42**	1			
Affective	192	2.67	.79	.68	.39**	.28**	.31**	.39**	1		
Social	192	3.09	.93	.78	.42**	.63**	.42**	.58**	.46**	1	
All Strategies	192	3.23	.56	.92	.72**	.87**	.65**	.85**	.58**	78**	1

Note. ** Correlation is significant at the 0.01 level (2-tailed)

A one-way MANOVA was conducted to determine the differences in the application of language learning strategies based on grade level. The independent variable grade level comprised four groups (1st, 2nd, 3rd, and 4th grade level) while the combined dependent variables of language learning strategies included six strategy subtypes, namely memory, cognitive, compensation, metacognitive, affective, and social. The outcomes of the one-way MANOVA revealed that grade level had no significant effect on the combined dependent variables of language learning strategies, Wilks' Lambda λ=0.933, F (18, 518.087)=.719, p=.792, with a small effect size η^2=.023. Even though there was no significant influence of grade level on the combined dependent variables of language learning strategies, it was worth checking whether there was a significant influence of grade level on any of the individual dependent variables. Univariate ANOVA tests were conducted as follow-up tests. The analysis of variance on each dependent variable identified that grade level had no significant influence on any of language learning strategies, memory F (18, 518.087)=.902, p=.441, η^2=.014, cognitive F (18, 518.087)=.638, p=.592, η^2=.010, compensation F (18, 518.087)=1.317, p=.270, η^2=.021, metacognitive F (18, 518.087)=.242, p=.867, η^2=.004, affective F (18, 518.087)=1.187, p=.316, η^2=.019, and social F (18, 518.087)=.576, p=.631, η^2=.009.

Table 3

Multivariate ANOVA between grade level groups on language learning strategies

Strategy	1st grade		2nd grade		3rd grade		4th grade			
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	p	η^2
Memory	3.00	.68	2.94	.61	3.13	.63	3.12	.64	.441	.014
Cognitive	3.42	.64	3.34	.73	3.46	.64	3.29	.55	.592	.010
Compen.	3.30	.71	3.07	.76	3.33	.67	3.35	.73	.270	.021
Metacog.	3.47	.88	3.47	.87	3.57	.77	3.59	.68	.867	.004
Affective	2.54	.93	2.54	.81	2.70	.76	2.87	.71	.316	.019
Social	3.13	.79	2.92	1.02	3.15	.95	3.02	.92	.631	.009

Table 3 shows that metacognitive language learning strategies were the most commonly used strategies by students at all grade levels, 1st grade (M=3.47, SD=.93), 2nd grade (M=3.47, SD=.87), 3rd grade (M=3.57, SD=.77), and 4th grade (M=3.59, SD=.68). The second most frequently used strategies within the first three years were cognitive learning strategies, i.e. in the 1st (M=3.43, SD=.54), 2nd (M=3.34, SD=.73), and 3rd grade (M=3.46, SD=.64). In the fourth grade, the most frequently used strategies were compensation strategies (M=3.35, SD=.73). Likewise, compensation strategies were the third most frequently employed strategies in the 1st (M=3.30, SD=.71), 2nd (M=3.07, SD=.76), and 3rd grade (M=3.33, SD=.67), while cognitive strategies were the third most frequently used strategies in the 4th grade (M=3.29, SD=.55). The fourth most commonly used strategies in the 1st (M=3.23, SD=.70) and 3rd grade (M=3.15, SD=.95) were social strategies, whereas the fourth most commonly used strategies in the 2nd (M=2.94, SD=.61) and 4th grade (M=3.12, SD=.64) were memory strategies. Following these were memory strategies in the 1st (M=3.00, SD=.68) and 3rd grade (M=3.13, SD=.63) and social strategies in the 2nd (M=2.92, SD=1.02) and 4th grade (M=3.02, SD=.92). Affective strategies were the least commonly applied language learning strategies in all grades, namely in the 1st (M=2.54, SD=.93), 2nd (M=2.54, SD=.81), 3rd (M=2.70, SD=.76) and 4th grade (M=2.97, SD=.71).

A one-way MANOVA was also conducted to determine the differences in the use of language learning strategies based on overall GPA. The independent variable 'overall GPA' included three groups (low: 2.5-3.4, moderate: 3.5-4.4, and high 4.5-5.0), while the combined dependent variables of language learning strategies comprised the six aforesaid subscales.

The results of the one-way MANOVA indicated a significant influence of the overall GPA, Wilks' Lambda λ=0.836, F (12, 370)=2.873, p=.001, with a medium effect size η^2=.086, on the combined dependent variable of language learning strategies. In order to provide further understanding of the usage of language learning strategies across different GPA groups, univariate ANOVA tests were conducted as follow-up tests. The analysis of variance on each dependent variable revealed that overall GPA had a significant influence on memory F (12, 370)=8.608, p < .001, η^2=.083, cognitive F (12, 370)=7.797, p=.001, η^2=.076, compensation F (12, 370)=3.273, p=.040, η^2=.033, metacognitive F (12, 370)=5.034, p=.007, η^2=.051, and affective strategies F (12, 370)=3.453, p=.034, η^2=.035, but did not have a significant influence on social strategies F (12, 370)=2.850, p=.060, η^2=.029.

Table 4

Multivariate ANOVA between GPA groups on language learning strategies

Strategy	2.5-3.4 (low)		3.5-4.4 (medium)		4.5-5.0 (high)		Total			
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*p*	η^2
Memory	3.55	.53	2.94	.65	3.13	.60	3.07	.64	<.001	.083
Cognitive	3.54	.75	3.24	.64	3.61	.57	3.41	.65	.001	.076
Compensation	3.38	.82	3.16	.69	3.42	.67	3.28	.71	.040	.033
Metacognitive	3.66	.68	3.37	.83	3.74	.72	3.54	.79	.007	.051
Affective	2.93	.85	2.53	.84	2.78	.68	2.67	.79	.034	.035
Social	3.43	.76	2.95	.91	3.19	.97	3.09	.93	.060	.029

As presented in Table 4, metacognitive language learning strategies were the most frequently employed by all participants (M=3.54, SD=.79) regardless of their overall GPA. Likewise, the students with the highest overall GPA (4.5-5.0) applied metacognitive strategies the most frequently (M=3.74, SD=.72), followed by cognitive (M=3.61, SD=.57), and compensation strategies (M=3.42, SD=.67). Relatively less commonly used strategies were social (M=3.19, SD=.97), memory (M=3.13, SD=.60), and affective strategies (M=2.78, SD=.68). The use of strategies by the students with the medium overall GPA level (ranging between 3.5 and 4.4) was equally ranked, with the use of metacognitive strategies being most frequent (M=3.37, SD=.83), followed by cognitive (M=3.24, SD=.64), compensation (M=3.16, SD=.69), social (M=2.95 SD=.91), memory (M=2.94, SD=.65) and affective strategies (M=2.53, SD=.84). The students with a low overall GPA (2.5-3.4) revealed somewhat different preferences in their strategy usage. While their most commonly applied language learning strategies were also metacognitive (M=3.66, SD=.68), they were followed by memory strategies (M=3.55, SD=.53), which were, rather interestingly, the second least used strategies by those students with a higher overall GPA. The third most frequently used strategy among the students with a low overall GPA was cognitive (M=3.54, SD=.75), followed by social (M=3.43, SD=.76), and compensation strategies (M=3.38, SD=.82), the third most frequently used strategy by students with a higher overall GPA. Similar to the wo better performing groups, affective strategies (M=2.93, SD=.85) were the least frequently used strategies among the students with a low overall GPA in the process of language learning.

A one-way MANOVA was also conducted to identify whether there were any differences in the application of language learning strategies based on gender. The results indicated that there was no significant difference in the use of language learning strategies between male and female students, Wilks' Lambda λ=0.944, F (6, 185)=1.839, p=.094, with a medium effect size η^2=.056. Univariate ANOVA tests were conducted as follow-up tests for further understanding of the use of language learning strategies by female and male students. The analysis of variance on each of the six language learning strategy subscales shows that gender had a significant influence only on memory F (6, 185)=5.880, p=.016, η^2=.030 and affective strategies F (6, 185)=7.389, p=.007, η^2=.037. However, there was no significant effect of gender on cognitive F (6, 185)=2.239, p=.136, η^2=.012, compensation F (6, 185)=.092, p=.763, η^2=.000, metacognitive F (6, 185)=3.353, p=.069, η^2=.017, and social strategies F (6, 185)=2.142, p=.145, η^2=.011.

Table 5

Multivariate ANOVA between gender groups on language learning strategies

Strategy	Female		Male		Total			
	M	***SD***	***M***	***SD***	***M***	***SD***	***p***	η^2
Memory	3.19	.62	2.97	.65	3.07	.64	.016	.030
Cognitive	3.49	.65	3.35	.64	3.41	.65	.136	.012
Compensation	3.30	.75	3.26	.75	3.28	.71	.763	.000
Metacognitive	3.65	.80	3.44	.78	3.54	. 79	.069	.017
Affective	2.83	.73	2.53	.82	2.67	.79	.007	.037
Social	3.20	.98	3.00	.88	3.09	.93	.145	.011

As shown in Table 5, both female (M=3.65, SD=.80) and male (M=3.44, SD=.78) students applied metacognitive language learning strategies most frequently, followed by cognitive strategies (female (M=3.49, SD=.65) and male (M=3.35, SD=.64)), and compensation strategies (female (M=3.30, SD=.75) and male (M=3.26, SD=.75)). Social strategies were the fourth most frequently used strategies by female (M=3.20, SD=.98) and male students (M=3.00, SD=.88), followed by memory strategies (female (M=3.19, SD=.62) and male (M=2.97, SD=.65)), while affective strategies were the least commonly used strategies by both female (M=2.83, SD=.73) and male students (M=2.53, SD=.82).

Students employ different learning strategies to acquire the content of various school subjects and these strategies might have a direct impact on their academic achievement. As for foreign language learning strategies, the model developed by Oxford (1990) was tested. Thus, a standard multiple regression analysis was carried out utilizing students' academic achievement learning English as a foreign language as a criterion variable and memory, cognitive, compensation, metacognitive, affective, and social language learning strategies

as predictor variables to determine if students' academic achievement in learning English as a foreign language could be predicted by language learning strategies. The results of the regression were found to be statistically significant [R^2 =.218, R^2_{adj}=.192, F (6, 185)=8.579, p<.001], indicating that language learning strategies (memory, cognitive, compensation, metacognitive, affective, and social) are good predictors of students' academic achievement in learning English as a foreign language. This model accounts for 22% of variance as indexed by the adjusted R^2 statistic. A summary of regression coefficients is presented in Table 6 and shows that three strategy subtypes, namely memory (B=-.546, p < .001), cognitive (B=.505, p=.010), and affective strategies (B=-.433, p < .001) contributed significantly to the model, while compensation (B=.146, p=.247), metacognitive (B=.152, p=.296), and social strategies (B=.103, p=.356) did not.

Table 6

Coefficients for language learning strategies

Strategy	*B*	β	*t*	*p*	Bivariate *r*	Partial *r*
Memory	-.546	-.311	-3.825	<.001	-.156	-.271
Cognitive	.505	.289	2.599	.010	.223	.188
Compensation	.146	.091	1.160	.247	.114	.085
Metacognitive	.152	.107	1.048	.296	.124	.077
Affective	-.433	-.305	-3.906	<.001	-.238	-.276
Social	.103	.085	.926	.356	.097	.068

The results suggest that memory and affective language learning strategies had a significant negative influence on students' EFL achievement, while cognitive language learning strategies had a significant positive effect on their EFL academic achievement. The effect of compensation, metacognitive, and social strategies was also positive but insignificant. Such findings indicate that as the students' use of memory and affective strategies increases, their EFL achievement tends to decrease, whereas their greater use of cognitive strategies causes an increase in their EFL achievement.

Discussion and Conclusion

The current study aimed at investigating the grade level, GPA, and gender-based differences in the use of language learning strategies, namely memory, cognitive, compensation, metacognitive, affective, and social, by high school students in Bosnia and Herzegovina. Furthermore, it sought to determine the influence of specific language learning strategy subtypes on students' L2 proficiency. Overall, the current study participants reported a high use of metacognitive strategies and a moderate use of cognitive, compensation, social, memory, and affective strategies, according to the assessment of strategy usage provided in Oxford and Burry-Stock (1995). The findings pointed to the most frequent use of metacognitive strategies, which lends support to some previous findings measuring the use of language learning strategies by means of SILL (Brdarević-Čeljo & Asotić, 2017; Doró & Habók, 2013; Green & Oxford, 1995; Habók & Magyar, 2018; Radwan, 2011). Green and Oxford (1995) and Goh and Foong (1997) reported the most frequent use of metacognitive strategies by students at all proficiency levels, which is not the case with Magogwe and Oliver's study (2007) indicating that high school and university-level students used metacognitive strategies most frequently, whereas elementary school students reported using social strategies most frequently followed by metacognitive. The least frequently used strategies were memory and affective learning strategies, which corroborates the findings of Yilmaz (2010), in which the overall pattern and order of strategy usage resembled the one presented in the current study. Due to the fact that the current study's participants are high school students who have already become reasonably proficient in their L2, these findings are not surprising and they point to the fact that these participants successfully plan L2 tasks, organize materials, detect their mistakes and manage the learning process overall, which indicates a high level of metacognition,but they do not use memory and affective strategies, i.e. memorization and self-encouragement as much.

The first hypothesis stating that there will be a significant difference in the participants' use of language learning strategies based on grade level was rejected, as the impact of grade level on the use of all language

learning strategies was measured insignificant in the context of the current study. The most frequently used learning strategy subtype by students at all four grade levels was metacognitive, while the least frequently applied subtype was affective, with some slight differences existing in the ranking of the remaining strategy subtypes at different grade levels. These results appear to be well substantiated by the findings in Doró and Habók (2013) and Kazamia (2016), which also revealed insignificant differences in the high school students' use of language learning strategies. Devlin (1996) investigated the influence of maturity on the use of learning strategies and suggested that more mature students tend to apply more affective learning strategies than less mature students, which was not corroborated by the current study's findings.

Variations in the application of all or some strategy subtypes at different grade levels was observed and measured as significant in other studies (Bećirović et al., 2017; Brdarević-Čeljo & Asotić, 2017; Chen, 2009; 2014; Gavriilidou & Petrogiannis, 2016; Habók & Magyar, 2018; Magogwe & Oliver, 2007; Mitits et al., 2016), which is not aligned with the current study's findings, which even suggested that high school seniors reported the same or lower strategy use. This discordance with the stated results was slightly unanticipated as four years in the period of adolescence is a rather lengthy timeframe for students' cognitive and emotional development and increased self-awareness, and is expected to produce an increase in strategy awareness. However, such results might point to the fact that strategies-based instruction has not been properly implemented in language learning or teaching in high schools in Bosnia and Herzegovina and that language teachers should devote more attention to the development of strategy awareness in Bosnian high schools. This could be achieved through proper strategy instruction, which would entail language teachers introducing some new useful strategies and preparing some exercises developing them and leading to their more frequent use by language learners.

The second hypothesis proposing that there will be a significant difference in the students' usage of language learning strategies based on their overall GPA was supported. The results showed that the students with a higher overall GPA use metacognitive and cognitive language learning strategies significantly more frequently than those with a lower overall GPA. On the other hand, memory strategies were the second most frequently used strategies by students with the lower overall GPAs while they were the second least frequently used strategies by learners with middle to high overall GPAs. Such results confirm Habók and Magyar's (2018) findings, which showed that overall school achievement has a significant impact on the application of language learning strategies and that high performing students are frequent users of metacognitive strategies. They are also in concordance with Shawer's (2016) findings indicating that the use of strategies overall and metacognitive and social strategies individually predict students' general school achievement.

Thus, the students with a higher overall GPA seem to have expanded their strategy usage far beyond language learning and they used them across disciplines, which contributed to their overall achievement. This is particularly the case with metacognitive and cognitive strategies, which have proven highly efficient due to their ability to manage the learning process and orchestrate the material through the use of higher-order thinking skills (Oxford, 1990; 2003). A possible explanation for the current findings might be that less successful high school learners use lower-level thinking skills, such as memorisation, more frequently than the more successful ones (Marzano & Kendall, 2007). Thus, the current study's participants with higher overall achievement have been shown to be more successful strategy users who exploit strategies, particularly metacognitive and cognitive strategies, in the process of learning, both language learning and beyond, than the students with a lower overall achievement.

The third hypothesis suggesting that there would be a significant difference in the application of language learning strategies based on gender was rejected, as no significant differences between male and female learners in the use of language learning strategies in the context of the present study were identified. Regardless of gender, the students shared the same preferences for learning strategies, with females using each strategy subtype more frequently than their male colleagues but to an insignificant extent. The current study's findings are in concordance with some previous findings where gender-related insignificancy in strategy usage was observed (Brdarević-Čeljo & Asotić, 2017; Radwan, 2011; Wharton, 2000). Still, in the aforementioned studies, males were reported to be more frequent strategy users than females, which was not substantiated by the current findings indicating a higher strategy usage by females than males, similar to Doró and Habók (2013), Goh and Foong (1997) and Green and Oxford (1995). The current study's results are not aligned with the research findings of some other studies conducted in the same socio-cultural context (Bećirović, et al., 2017, Bećirović et al., 2018, Mašić et al., 2020), which pointed to significant differences in strategy use.However, the

results are in line with Bećirović (2017), whose study showed no significant influence of gender on students' achievement in EFL learning, and Rizvić and Bećirović (2017), who identified no significant differences between female and male learners regarding their willingness to communicate in English as a foreign language.

The present study also aimed to explore whether language learning strategies are significant predictors of students' achievement in learning English as a foreign language and the results indicated that cognitive strategies have a significant positive effect while compensation, metacognitive, and social strategies have an insignificant positive effect on L2 achievement. On the other hand, memory and affective language learning strategies have a significant negative impact on L2 achievement. Such results confirm some previous findings, which also indicated that cognitive strategies have the most profound effect on L2 proficiency (Wu, 2008) and that memory strategies are not positively related to L2 proficiency (Wu, 2008) and even have a negative impact on students' performance (Purpura, 1997), as well as that affective strategies have negative effects on foreign language attitudes and L2 proficiency (Habók & Magyar, 2018). During the process of achieving L2 proficiency, learners are more in need of cognitive, metacognitive, and social strategies than affective and memory strategies (Oxford, 2003), and this was confirmed by the current study's findings, which even indicated that these strategies negatively impact the participants' L2 learning. One of the possible explanations for the negative impact of memory and affective strategies in the present study could be that the participants' time spent receiving formal English language instruction is seven to eleven years and they are now at higher stages of language learning and have made considerable progress towards L2 proficiency and thus do not need these strategies as much as they needed them in their initial stages of language learning. The greater use of other strategies by these high school participants, cognitive strategies in particular, causes an increase in self-efficacy and L2 proficiency (Oxford, 2003), which obviates their need to use affective and memory strategies and to rely on different forms of positive self-talk, self-reward, or memorization of vocabulary or language structures at this stage of language learning.

This study has some important pedagogical implications, as it might help develop strategy awareness and highlight the need to incorporate strategies-based instruction in the foreign language curriculum. Hence, a language teacher can discuss strategy usage within the class and ask students to prepare a list of the strategies they employ. While analysing the lists, the teacher needs to take students' individual differences into consideration, i.e. their gender, grade level, GPA, and L2 proficiency and based on that adopt a different approach to strategy teaching for each group with similar characteristics. Then, the teacher might introduce some new useful strategies and consciously focus on providing specific exercises that develop these strategies and lead to their more frequent use. Eventually, teachers may also encourage students to start thinking about adopting a personal strategic approach towards language learning and the learning process in general, which will help them achieve learner autonomy.

Some limitations and suggestions for further research also need to be noted and taken into consideration for similar future research endeavours. Namely, students' English language proficiency was measured by the summative GPA in their English language courses. Although these grades are awarded by certified EFL teachers, a proficiency test might give a clearer picture of students' real EFL performance. Likewise, the research sample included participants from grammar and vocational schools. Further research may incorporate the differences in the usage of language learning strategies between students studying at different types of schools.

Conflicts of interest

The authors declare that they have no conflicts of interest.

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The Effect of Text Messaging on EFL Learners' Lexical Depth and Breadth

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Using technology in the classroom context can be an effective way to learn a foreign or second language. Vocabulary is considered one of the important skills for identifying a learner's performance in various academic and non-academic contexts. The present paper investigated the effect of text messaging on learners' lexical knowledge and vocabulary size by using mobile learning (m-learning). After the administration of an Oxford Placement Test, a total of 37 EFL learners were selected as the sample of the study. Before the treatment process, a word association test (WAT) and the updated vocabulary level test (UVLT) were administered as pre-tests. The learners received six vocabulary items selected from their coursebook through SMSs three times a week in addition to the in-class instruction. After finishing the treatment process, the WAT and the UVLT tests were administered again as post-tests to assess the learners' achievement and the effectiveness of the treatment. Since the normality of data distribution was not confirmed, the Wilcoxon signed-rank test was run for mean comparisons. The findings showed no meaningful difference between the pre-tests and post-tests regarding the vocabulary depth scores, while there was a statistically significant difference based on vocabulary breadth. Therefore, it can be claimed that text messaging via m-learning had a significant impact on learners' vocabulary breadth. Curriculum developers and EFL teachers can benefit from the findings of the current study by considering the significance of text messaging for teaching different aspects of lexical knowledge.

***Keywords*:** m-learning, text messaging, vocabulary breadth, vocabulary depth

Introduction

Due to the rapid development of science and technology, distance communication utilizing technology, especially wireless networks, has rapidly become ubiquitous. Mobile phones, as part of the current technologies and as multifunctional instruments, have become essential parts of our daily lives. The application of mobile technology has changed the way people communicate and interact with each other, as well as their perspective of education (Liaw, Hatala, & Huang, 2010; Liu & Chen, 2008). The widespread availability of these up-to-date devices with competitive prices has altered the process of mobile learning (m-learning) dramatically in many different ways (Farangi, Kamyab, Izanlu, & Ghodrat, 2017).

As stated by Kukulska-Hulme (2013), mobile learning involves using any portable educational devices, such as portable radios, cell phones, audio cassettes, etc. in educational settings. Based on Alexander's (2004) definition, m-learning is viewed as every sort of learning that occurs while mediating via a mobile device and has accepted the legitimacy of 'nomadic' students.

The fast growth of the English language learner (ELL) population should cause a modification in academic instruction and, therefore, the manner educators take into account the classroom context. ELLs create a heterogeneous cluster with a variety of racial, ethnic, cultural, linguistic, and socio-economic backgrounds, as well as theirstrengths and weaknesses. The cultural and linguistic variations affect the way ELLs learn the language and its related skills and sub-skills. Accordingly, preparing learners for their future in society requires teaching them how to create personal meaning by employing the knowledge they can use to communicate, learn, analyze, give a reason, evaluate, and be conveniently flexible by being able to easily adapt to various communicative situations in a wide range of settings.

Through the growing application of communicative approaches in the teaching process, the need for an appropriate word list becomes evident in order to be accessible when learners make an attempt to communicate. Lexical knowledge is a substantial part of a foreign language. Without adequate lexical knowledge, communicative interactions can be hard to achieve. When individuals try to transfer a message, they may be capable of sending it with inadequate knowledge of structure, but it seems quite problematic to communicate a message with a lack of an appropriate level of basic lexical knowledge (Agdam & Sadeghi, 2014).

There are multiple dimensions for lexical knowledge ranging from the lowest degree of knowledge (unfamiliar words) to the highest degree of perceiving the word (familiar words and their meanings). Paribakht and Wesche (1993, as cited in Mehrpour & Montasseri, 2019) categorize lexical knowledge into the following steps:

1. Learners may have never faced the word before and cannot identify the word;
2. Learners may have heard the word but cannot define it;
3. Learners identify the word considering its context of use or voice tone, but their understanding of its meaning is not clear;
4. Learners understand the word meaning in general but are not able to explain its meaning clearly;
5. Learners can identify different meanings of the word and are able to use it fluently (p. 104).

Based on the findings of a large number of studies (Chapelle, 1998; Nation, 1990; Qian, 2002), lexical knowledge is a multidimensional construct (Henriksen, 1999; Kieffer & Lesaux, 2012b; Read, 2000; Schmitt, 2014). Qian (2002) presents four distinctive classifications of lexical knowledge: (a) vocabulary breadth, (b) vocabulary depth, (c), automaticity of receptive-productive knowledge, and (d) lexical organization. However, Qian (1999), Wesche and Paribakht (1996), and Read (1989) acknowledge that lexical knowledge requires encompassing at least two aspects, i.e., vocabulary size or breadth and vocabulary quality or vocabulary depth. It should be mentioned that vocabulary size or breadth refers to the number of words a student knows, and vocabulary depth reveals how profoundly a student has knowledge of a word (Qian, 2005; Qian & Schedl, 2004).

To learn the new vocabulary, different types of instructional aids are available to the students, among which mobile devices are one of the most popular and influential ones. Mobile phones can be considered helpful devices for learning and teaching because of their inclusive features such as «accessibility, personalizability, and portability» (Saran & Seferoglu, 2010, p. 253), the physical aspects, input capabilities, output capabilities, the storage capacity and retrieval, the speed of the processor, and the «low+ error rates» (Alzu'bi & Sabha, 2013, p. 179).

Literature Review

While reviewing the literature, it was noted that some of the studies that reported the application of mobile devices in vocabulary learning could be categorized as the use of SMS – MMS (Alemi, Sarab, & Lari, 2012; Çavuş & İbrahim, 2009; Hayati et al., 2013; Hu, 2013; Zhang, Song, & Burston, 2011), the use of email (Thornton & Houser, 2005), the use of some programs developed by individual researchers (Başoğlu & Akdemir, 2010; Chen & Chung, 2008; Stockwell, 2007, 2010), and the use of other mobile features (Ağca & Özdemir, 2013; Dağdeler, Konca, & Demiröz, 2020; Liu & Chen, 2014). These studies have mainly suggested the positive effects of mobile device applications during the learning process. It was shown that the learners in experimental groups receiving instruction via mobile technology were more successful than those in the control groups studying through conventional methods (Başoğlu & Akdemir, 2010; Hayati et al., 2013; Liu & Chen, 2014; Lu, 2008, Zhang et al., 2011). Considering the learned vocabulary retention, some studies reported that there was not a notable difference between groups (Lu, 2008; Zhang et al., 2011) while others revealed that the use of SMSs provided retention of target vocabularies (Alemi et al., 2012; Saran, Seferoglu, & Cagiltay, 2012).

Lexical Knowledge

The lexical knowledge is one of the main readers' variables that identifies language learners' performance on different kinds of tests. As Shen (2008) points out, vocabulary is a key component in language, and vocabulary learning has gained much attention in the English language teaching (ELT) research field. According to Schmitt (2008), lexical knowledge plays a major role, and one thing that learners, trainers, syllabus designers, and researchers can come to a consensus on is that vocabulary learning is an indispensable part of mastering an L2.

Theoretically, distinguishing lexical knowledge may not be clear cut. A prominent framework for lexical knowledge was presented by Richards (1976), considering the seven dimensions of register, associations, frequency, form, meaning-concept, position, and meaning-associations. Later, Nation (1990) suggested eight types of lexical knowledge, determined both for productive and receptive knowledge, consisting of spoken form, written form, concept, associations, grammatical patterns, collocations, frequency, and appropriateness. Chapelle (1998) proposed four aspects of lexical knowledge: vocabulary size, the knowledge of word features, organization of lexicon, and vocabulary processes. Henriksen (1999) distinguished three aspects of lexical knowledge: knowledge of partial to precise, the depth of knowledge, and receptive to productive usability, and Qian (2002) classified four dimensions using the existing frameworks: vocabulary depth of knowledge, breadth of knowledge, automaticity of receptive-productive knowledge, and lexical organization. Despite a lack of agreement on the multidimensional nature of vocabulary knowledge, such a claim that this knowledge should have only two basic features, breadth (or size) and depth (or quality), appears to have been generally accepted (Anderson & Freebody, 1981; Qian, 1999, 2002; Read, 1993; Wesche & Paribakht, 1996). Alderson and Freebody (1981) wrote that the breadth aspect of lexical knowledge refers to the number of words that a speaker knows, while on the other hand, vocabulary depth refers to the understanding or quality of the words. The effect of these aspects of lexical knowledge has been mainly investigated in studies in the reading comprehension area (e.g., Kaivanpanah & Zandi, 2009; Nassaji, 2004, 2006).Based on Aviad and Laufer (2013), lexical knowledge can be measured both qualitatively and quantitatively regarding depth and breadth of knowledge and strength of knowledge of meaning as well.

The depth aspect of vocabulary deals with paradigmatic and syntagmatic relations, which involve synonyms, superordinates, and collocations (Schoonen & Verhallen, 2008). It is the quality of lexical knowledge that shows the dominance of students over each vocabulary item or the effectiveness of word formation in the student's mental lexicon. Lexical depth deals with the aspects that are connected to the improvement of literacy skills. According to Schmitt (2000), the depth of vocabulary refers to syntactic attributes, semantic representation, possible collocations, and pragmatic rules of the words or concepts. Studies have indicated the intricacy and multidimensionality of lexical knowledge have approached the construct of depth in a number of different ways (Read, 2004). Although this aspect of lexical knowledge has not received adequate attention, it is significant, particularly for those who are thinking in two languages simultaneously.

On the contrary, vocabulary breadth refers to the quantity of the words or the surface-level knowledge of many words that learners have at their disposal to use both productively and receptively (Read, 2000). This aspect of lexical knowledge has been defined as an individual's vocabulary size, or the approximate number of lexical items that a person knows (Nassaji, 2004; Qian, 2002; Zareva, 2005).

It can be observed that vocabulary depth and breadth are considered to be two different terms; however, they share a close empirical and conceptual relationship. Qian (1999, 2002) stated that the correlation between the vocabulary breadth and depth of L2 university students were .82 and 0.70 accordingly. In another study, Vermeer (2001) found a correlation of .85 for the depth and breadth of vocabulary among Dutch monolingual students at the kindergarten level and a correlation of .76 among their bilingual classmates; thus, she discussed that a significant difference between vocabulary depth and breadth could not be observed. Nurweni and Read (1999) stated that vocabulary breadth and depth might be connected if the students are at advanced proficiency levels, while the difference can be observed at lower proficiency levels. Such high correlations between these two dimensions of lexical knowledge show that vocabulary breadth and depth facilitate one another (Li & Kirby, 2015). Li and Kirby (2015) also stated that at the beginning of language development, few words could be learned on the basis of their basic meanings. Nevertheless, with increases in the experience level of the learners, the learned words can be explained in more detail and associated with the vocabulary in various contexts, which contributes to the learning of new words (Haastrup & Henriksen, 2000; Ma, 2009; Perfetti, 2007).

M-Learning in Education

Krashen (1989) predicted that a set of instructional aids aimed at language acquisition would motivate acquisition at the fastest possible rate. This language acquisition device would be verypowerful and effective in the future due to the progress and enhancements of second language learning and acquisition tools. In this regard, the 'chalk and talk' classroom, printed books, and methods used traditionally can be compared with the

current strategies in language acquisition through the optimal use of technology (Govindasamy, Yunus, & Hashim, 2019).

Implementing mobile technology in teaching and learning processes affected the paradigms of time, place, and the ways in which the school would be delivering the instruction. Such an aspect of technology would increase the considerations towards learning materials; it can improve learning and raise learners' motivation for a lifetime (Kristoffersen & Ljungberg, 1998). Mobile learning is considered one of the extended versions of e-learning. One of the practical advantages of m-learning is that it is accessible for students free from time and place restrictions. M-learning acts as a facilitator that supports the performance of students in learning environments. The flexibility of m-learning as it provides education for students who are in the process of learning at their own speed can be considered as another advantage. M-learning provides two-way communication to include the shy students who are unwilling to communicate more in the classes as well as the students who can share ideas with the teachers and peers easily. Teachers can use m-learning to send instructions to a large group of students in any academic context. Finally, m-learning is self-disciplined and self-motivated, which supports learning outside of time limitations and place restrictions (Alalawan, Alzahrani, & Sarrab, 2013).

M-learning provides a distinct opportunity for both learners and teachers. The teachers greatly shorten the effort and time needed for organizing and repeating the lessons, while learners are able to repeat the lessons at any time and as often as they want. It should be mentioned that e-learning can take place inside and outside the classrooms, and especially that m-learning is popular among younger learners who grew up using mobile devices and who could be eager to keep learning outside the borders of a traditional classroom.

M-learning and Vocabulary Learning

There are several language-related experiments in m-learning literature that have integrated the recent innovations of mobile phone technologies into their pedagogical practices (e.g., Comas-Quinn, Mardomingo, & Valentine, 2009; Hayati et al., 2013; Klimova, 2020; Mahdi, 2018; Nah, White, & Sussex, 2008; Stockwell, 2007; Todd & Tepsuriwong, 2008; Wang, 2017). The learning of vocabulary can be facilitated by technology in general and mobile devices in particular.

Govindasamy et al. (2019) made an attempt to examine the effectiveness of mobile phones to find the meaning of vocabulary in comparison to the conventional way of using a printed dictionary. To collect the required data, vocabulary pre- and post-tests were performed. The results revealed that mobile phones improved learners' knowledge in deeper vocabulary learning and vocabulary meaning compared to the printed dictionary.

Wang and Shih (2015) implemented some of the applications of vocabulary learning in their study with 93 Mandarin-speaking students in northern Taiwan and found that the results from the experimental group were remarkably better than from the control one, which employed the usage of traditional printed materials. WhatsApp, as an example of a functional application, gives users the ability to communicate and exchange texts freely, carry on individual conversations, and make calls. This famous application is accessible on all mobile platforms, such as Android, IOS, Symbian, Windows Mobile, etc.

In another research, Wu (2015) produced Word Learning-CET6, a mobile application, for teaching vocabulary to Chinese EFL learners. The experimental group received instruction using the application, while the control group was instructed to study and learn the lexicon themselves. The post-test scores showed a significant result between the two groups in favor of the experimental group.

Texting in Education

One of the extensively used characteristics of mobile phones that was initially under consideration in various research studies was the Short Message Service. SMSs as a communication tool transfer short text messages up to 160 characters by means of the Global System for Mobile Communication (GSM) enabled on mobile phones. This form of text messaging is one of the famous communication instruments, with 2.4 billion users around the world[1]. Many young people exchange SMSs with friends, with an average message length of 71 characters

[1] Short Message Service. (2008). http://en.wikipedia.org/wiki/Short_message_service.

(Grinter & Eldridge, 2003). The term SMS illustrates both the messages and the medium (Kasesniemi & Rautianen, 2002).

The process of teaching has changed over the years. The engagement of the learners in their learning process has increased, and essential opportunities have been given to them to explore the solutions. The usage of texting helps learners build foundational reading skills like phonological awareness and word recognition. Tomita (2009) states that text messaging motivates learners to write more and gives them additional communication opportunities. Some adversaries believe that texting can be motivational for those learners with low-level writing abilities; however, research reports have indicated that learners have the ability to distinguish between formal and informal writing.

In addition, text messaging provides learners with the ability to participate in silent communication (Katz & Aakhus, 2002). In this type of communication, there is no need for the third party to know what any two other interlocutors are discussing, except when content is intentionally made known to a third party. Opinions are negotiated by text interlocutors without much interference or noise. As a consequence, learners naturally find it more comfortable to use text messages, specifically if they find themselves in conditions that are not able to make a call (North, Johnston, & Ophoff, 2014). Therefore, learners use text messaging conveniently because it is quick, cheap, and affordable for transferring information (Mahmoud, 2013).

Many research studies have made a comparison between SMS-based vocabulary teaching and traditional methods of instructions. For instance, Zhang et al. (2011) and Lu (2008) tried to find the comparative effects of SMSs and printed materials. The findings of their research reports revealed that the group that received the SMSs performed better than the control group, in which the participants received printed materials, during the post-test. By the same token, Suwantarathip and Orawiwatnakul (2015) carried out a study to compare the effectiveness of teaching and practicing new words inside of the class via drills through SMSs for six weeks. The findings showed a positive and significant performance among the learners in the experimental group in comparison to their counterparts.

Hayati et al. (2013) examined the effects of teaching idioms to Iranian EFL learners. Participants were divided into three groups that were receiving various types of instruction. One of the groups, the self-stuy one, received the idioms along with the definitions and examples via printed materials. In the second group, the experimental one, the idioms were sent through SMSs, including four idioms, along with their meanings and sample examples. Finally, the last group, the control one, received short texts rather than sentence examples and the definitions. The findings revealed that all three groups had remarkably different scores. The group that received the SMSs achieved the highest marks, and those with self-study instruction received the lowest marks. Moreover, learners stated that mobile phones and SMSs were effective and desirable teaching tools.

In some research studies, the researchers compared the use of SMS with traditional approaches for teaching vocabulary to see which was better for learners. Tabatabaei and Goojani (2012) carried out a mobile phone-based study to investigate the effects of SMS on L2 English vocabulary acquisition. The participants wrote sentences between five and six words, which were sent through SMSs to their teacher and fellow students. The results showed that the experimental group which received SMSs significantly outperformed the control group on a vocabulary post-test. Both learners and their teachers indicated positive attitudes towards using SMSs for vocabulary learning.

Although a great number of studies showed that using SMSs and other applications on mobile phones are effective for vocabulary learning, the feasibility of such devices is limited. For example, SMSs can be pricey (Çavuş & Ibrahim, 2009), or computer applications need to be adjusted for mobile phones, which may negatively affect their quality (Thornton & Houser, 2005). Fortunately, mobile phone applications, which are popular and effective, can considerably facilitate mobile-learning activities. In addition, mobile-learning applications are beneficial to language instruction (Godwin-Jones, 2011).

Regarding the issues mentioned above, educators and researchers have attempted to incorporate texting into language teaching and self-regulated learning treatments to help L2 learners develop various skills (Cavus & Ibrahim, 2009; Hayati, Jalilifar, & Mashhadi, 2013; Kennedy & Levy, 2008). Few research studies have examined the educational usage of mobile devices in learning vocabulary deeply (Browne & Culligan, 2008; Kennedy &

Levy, 2008; Lu, 2008; Saran et al., 2012, Stockwell, 2008, 2010; Thornton & Houser, 2005; Wong & Looi, 2010; Zhang et al., 2011). Considering Qian's (2002) classification of lexical knowledge, the current study will focus on two out of the four dimensions, i.e., the breadth and depth of Iranian EFL learners' vocabulary items acquired with the use of text messaging. This study is part of a larger project of the researchers, following the line of two previous studies. In the first study, we investigated the reflection of vocabulary implementation through educational text messaging on EFL learners' reading skills. The results of the study revealed no meaningful discrepancy between the experimental and control groups based on their reading scores (Behforouz & Frumuselu, 2021). In the second study, the efficiency of text messaging as an EFL instructional tool for learner autonomy and their perception toward the use of mobile-assisted language learning was investigated. The findings revealed that there were significant differences between the experimental and control groups' mean learner autonomy scores and learners showed positive views towards MALL and technology-based language learning (Behforouz & Frumuselu, 2020). Considering the unavoidable relationship between lexical knowledge and reading comprehension discussed in many studies (Al-Khasawneh, 2019; Jamalipour &Farahani, 2015; Kamal, 2019; Karakoç & Köse, 2017; Rydland, et al., 2012; Zhang & Annual, 2008), this study aims to analyze the effect of text messaging on EFL learners' vocabulary depth and breadth. Few studies could be found in the literature that applied SMS text messaging to pre-teaching vocabulary to EFL learners in Iran. There is a gap in the literature and the current study is expected to fill it.

It should be mentioned that the participants of the current study had no connection, a poor connection, or sometimes lacked a connection to the internet. This made it difficult for the students to receive the vocabulary items on a regular basis, which may have led to significant negative effects on the results. Still, they had access to their mobile phones, and sending the vocabulary by SMS was manageable for the researchers and an appropriate channel of communication for the students. Therefore, the researcher decided to use SMS text messaging to implement the vocabulary items as the treatment.

The current paper aims at answering the following questions:

RQ1: Does text messaging have a statistically significant impact on Iranian EFL learners' vocabulary depth?
RQ2: Does text messaging have a statistically remarkable impact on Iranian EFL learners' vocabulary breadth?

Materials and Methods

This section presents the method used to design the study and how data collection was undertaken. The study aimed to investigate if text messaging had any statistical significance on Iranian EFL learners' vocabulary depth and breadth. To this end, the comprehensive procedure including sampling, instrumentation, data collection, and data analysis is explained in detail.

Participants

A total of 37 learners within the age range of 21 to 26 years old were the final participants of the study. They were university students with different majors (Chemistry, Computer Science, Civil Engineering, and Electrical Engineering) studying general English at the Islamic Azad University-South Tehran Branch. To measure the homogeneity of the sample population on the basis of their English proficiency level, the first step was the administration of the Oxford Placement Test (OPT). Consideringthe OPT scale, those participants who scored from 28 to 36 were selected as the research sample of the present study. Based on the OPT scale, scores from 28-36 are regarded to be at the pre-intermediate level of language proficiency.They were Persian native speakers and all of them had a mobile phone to use for the study. It should be mentioned that the students were taking a reading comprehension course in the same semester as part of their regular English curriculum.

Design of the Study

This study is an experiment with a one-group pre-test post-test design. It is worth mentioning that learners received 108 vocabulary items through SMS text messages three times a week for six weeks. Thus, they received six vocabulary items per session.

Instruments

Oxford Placement Test

In order to gather sufficient information, the following tools were used, respectively. An OPT was administered to measure participants' ability to communicate in English. This test was used in this study since it is easy to administer based on produced doctorate theses and articles in Iran, and it is well-known among academics. The OPT is a quick way of assessing the approximate level of learners' knowledge of English grammar and usage. The allocated time to complete the test was 55 minutes. This test consists of two parts with 60 multiple-choice items and cloze tests. The first part consists of 40 questions, and the second part includes 20 questions. Participants were instructed to read the items and then choose the correct answers among the choices. The incorrect answers did not result in negative points. Based on the norms of the test, the participants` scores were ranked from beginner to advanced levels. Table 1 shows the OPT scale.

Table 1

Oxford Placement Test Scale

Beginners	Elementary	Lower-Intermediate	Upper-Intermediate	Advanced	Very Advanced
1-17	18-27	28-36	37-47	48-55	56-60

Word Associate Test (WAT)

The second instrument used for this study was a word associate test (WAT), which is a well-known method of measuring learners' vocabulary depth. The WAT was devised by Read (1993, 1998) to estimate L2 learners' depth of lexical knowledge on the basis of three relationships among mental lexicon words: paradigmatic (meaning), syntagmatic (collocation), and polysemy. It includes 40 items, including one stimulus word (an adjective) and two boxes, one box contains four adjectives that are either synonyms or polysemous with the stimulus word, andthe other contains nouns that can collocate with the stimulus word. There are always four correct options for each item. Read (1993) reported the reliability of the test as 0.93; later, Qian (1999, 2002) and Nassaji (2004) estimated above 0.90. To score the WAT, one point is awarded for the correct match of each word; therefore, 160 is the highest score. Figure 1 is an excerpt from this test.

Figure 1

A Sample Item from the WAT (Read, 1998)

Sudden ☐ beautiful■ quick■ surprising☐ thirsty	■ change☐ doctor■ noise☐ school

The Updated Vocabulary Level Test (UVLT)

The updated vocabulary level test (UVLT) was the third instrument of this study to assess the learners' vocabulary size/breadth. The UVLT is probably the commonly used instrument to assess L2 learners' lexical knowledge (Read, 2000). It was initially created by Nation (1983) and later modified by Schmitt, Schmitt, and Clapham (2001) to identify how well learners know useful English words and the extent to which learners could distinguish the form-meaning relations of words at four levels of word frequency (2000, 3000, 5000, 10000) and an academic vocabulary level. These four levels of frequency are based on the General Service List (GSL) (West, 1953), Kučera and Francis (1967), and Thorndike and Lorge's (1944) list, while the other section (academic) is based onXue and Nation's (1984) University Word List.

The researchers of the present study used the UVLT developed and validated by Webb, Sasao, and Balance (2017) at five levels of word frequency (1000, 2000, 3000, 4000, and 5000). It is worth noting that this test has the potential to measure all the levels together or measure the levels individually. There are 10 clusters with six words, including distractors and keys along with three definitions in each level. Participants are asked to put a checkmark (☐) under the word corresponding with each meaning.

Unlike multiple-choice tests, the UVLT decreases the percentage of guessing the answer because the test shows the same type of vocabulary, so there are not any syntactic clues for the correct responses. The test-takers

should match three words to their definitions. To score the UVLT, a correct check earns one point for each word; therefore, the highest score is 150 points. Regarding the abovementioned information, the test used in the present study was the modified for use as a vocabulary size test or a breadth of lexical knowledge test. Figure 2 shows a sample item from the UVLT.

Figure 2

An Example from the UVLT (Webb, Sasao, & Balance, 2017)

	game	**island**	**mouth**	**movie**	**song**	**yard**
land with water all around it		√				
part of your body used for eating and talking			√			
piece of music					√	

Procedure

This study was conducted during the reading module of the fall semester in the 2019-2020 academic year, over a period of an 18-session treatment lasting six consecutive weeks. The participants received SMSs three times a week with vocabulary items related to the content of their coursebook. 108 relevant vocabulary items were selected and they received six vocabulary items via SMS every session. The researchers used text messaging through m-learning to improve their students' vocabulary depth and breadth.

To collect data for the present study, the researcher went through the following procedure: After the administration of an Oxford Placement Test (OPT), 37 undergraduate Iranian EFL learners aging from 21 to 26 studying at the Islamic Azad University-South Tehran Branch were selected as the sample of the current study. Since this study is a part of a larger study, the initial population consisted of 88 participants. Based on their scores on the OPT scale, the participants were placed in the pre-intermediate level.

The second step was devoted to the administration of the UVLT and the WAT to assess the learners' breadth and depth of lexical knowledge. Both tests were administered during one session. Based on Schmitt et al. (2001), the allocated time of the UVLT was 31 minutes; as Qian (1999, 2002) and Nassaji (2004) stated, the time for completing the WAT was 30 minutes. However, in this study, the time allocated for completing both tests (UVLT & WAT) was 70 minutes. The participants were told to select the option that best described the meaning of the stem word in the absence of some context, and they were supposed to select the option that matched the meaning of the stem word and do this for all the items. It was mentioned that their selection should not be random, and they should choose precisely. There were no negative points for incorrect answers. The UVLT and WAT tests were administered to all the participants before the beginning of the treatment.

After administrating the WAT and UVLT as pre-tests, the treatment procedure began.A list of vocabulary words from their coursebook and also the number of words from the updated vocabulary level test appropriate for pre-intermediate learners were selected and delivered to them via SMS, six items in an SMS three times a week. They received SMSs containing vocabulary items for 18 sessions over six consecutive weeks. Each word was used in one short sentence, with a synonym and a single-word Persian translation at the end of the sentence in parentheses. The SMSs were delivered to a group of 37 learners at once.

At the end of the experiment, the WAT and the UVLT tests were given as post-tests to see the effect of text messaging on the depth and breadth of their lexical knowledge, and the scores of pre-test and post-test were compared employing the nonparametric Wilcoxon signed-rank tests.

Data Analysis and Findings

In this section, the analysis and the interpretation of data collected over a period of six weeks at the Islamic Azad University-South Tehran Branch are presented. After collecting the required data from the research instruments, descriptive analysis, focusing on the basic features of the data, and inferential analysis, the researched attempted to reach conclusions that extended beyond the immediate data.

To have a homogenized population based on the English proficiency level, the OPT was conducted. 37 students received similar OPT scores, ranging from 28 to 36 (pre-intermediate level). Table 2 shows the descriptive statistics of the homogenized participants in which the mean and the standard deviation of the homogenized participants were 31.66 and 2.22, respectively. The standard deviation means that most of the scores are close to the average; therefore, the participants' scores show that they had a homogenous general English proficiency level. Since the participants of this study were participating in another study, 74 of them were selected primarily, but later on, for the purpose of the current study, 37 pre-intermediate students were selected as the sample.

Table 2

The Descriptive Statistics of the Oxford Placement Test

	N	Minimum	Maximum	Mean	Std. Deviation
OPT Homogenized	37	28.00	36.00	31.35	2.54
Valid N (listwise)	37				

The first research question investigated whether text messaging via m-learning could have any statistically significant effect on the learners' vocabulary depth. Before testing this research hypothesis, it was necessary to check whether the data were normally distributed. Therefore, a One-Sample Shapiro-Wilk test was run. Table 3 below displays the results of the One-Sample Shapiro-Wilk test.

Table 3

One- Sample Shapiro-Wilk Test of Normality

	Shapiro-Wilk		
	Statistic	df	Sig.
Depth_Pre	.900	37	.003
Depth_Post	.903	37	.004

As indicated in Table 3, the normality of data distribution was not confirmed (P< .05). It means that the data were not normally distributed; therefore, a nonparametric test should be used. As a result, the nonparametric Wilcoxon signed-rank test was used for mean comparison. Table 4 shows the result.

Table 4

Analysis of the Pre-test/Post-test based on Depth Scores

	N	Min	Max	Mean	SD
Depth_Pre	37	64.00	87.00	73.189	7.615
Depth_Post	37	64.00	88.00	73.243	7.646
Valid N (listwise)	37				

Table 4 reveals that mean of the post-test was higher than the mean score of the pre-test (Mpost= 73.24>Mpre= 73.18).Table 5 below reveals the analysis of the Wilcoxon signed-rank test.

Table 5

Analysis of Wilcoxon Signed-Rank Test Based on the Depth Scores

	Depth_Post - Depth_Pre
Z	-1.000[b]
Asymp. Sig. (2-tailed)	.317

The Wilcoxon signed-rank test revealed no statistically meaningful discrepancy between the pre-test and post-test of the depth scores (Z = -1, p = 0.317). Thus, text messaging via m-learning did not have any statistically significant effect on learners' vocabulary depth.

The second question of this study sought to investigate whether text messaging via m-learning could have any statistically significant effect on learners' vocabulary breadth. Before testing this research hypothesis, it was necessary to check whether there was a normality of the data distribution for the pre-/post-test scores. To do this, the researchers conducted a One-Sample Shapiro-Wilk test. Table 6 below displays the results.

Table 6

One- Sample Shapiro-Wilk Test of Normality

	Shapiro-Wilk		
	Statistic	**df**	**Sig.**
Breadth_Pre	.940	37	.048
Breadth_Post	.875	37	.001

As indicated in Table 6, the normality of data distribution was not confirmed (P< .05). It means that the sample data was not drawn from a normally distributed population. Therefore, the nonparametric Wilcoxon signed-rank test was used for mean comparison. Table 7 below shows the results.

Table 7

Analysis of the Pre-test/Post-test of the Breadth Scores

	N	**Min**	**Max**	**Mean**	**SD**
Breadth_Pre	37	66.00	84.00	74.135	5.266
Breadth_Post	37	69.00	92.00	76.108	6.393
Valid N (listwise)	37				

According to Table 7 above, the mean score of the post-test was higher than the mean score of the pre-test (Mpost= 76.10>Mpre= 74.13). To analyze further, a Wilcoxon signed-rank test was conducted.

Table 8

Analysis of the Wilcoxon Signed-Rank Test Based on the Breadth Scores

	Breadth_Post - Breadth_Pre
Z	-5.005[b]
Asymp. Sig. (2-tailed)	.000

The test showed a statistically meaningful difference between the pre-test and post-test on the learners` vocabulary breadth scores (Z = -5, p < .05). Therefore, the results enabled the researchers to claim that text messaging via m-learning had a statistically significant effect on the learners' vocabulary breadth. This means that the use of text messaging increased the learners' vocabulary size.

Discussion

Since the process of learning vocabulary is one of the substantial features of language teaching, the present study addressed Iranian EFL learners' breadth and depth of lexical knowledge via the use of m-learning text messages.

The findings of this study revealed the effects of text messaging via m-learning on EFL learners' lexical knowledge in general, and breadth in particular. Based on the results related to the first research question, no

significant differences were found between the learners' pre-test and post-test scores on the WAT. This may lead to the conclusion that text messaging via m-learning did not improve learners' depth of lexical knowledge. The Iranian EFL learners' lack of improvement in vocabulary depth may have several causes, which will be discussed below. Remembering vocabulary items sent via SMS may be possible for a short period of time, but the effects may not be long lasting, so the post-test employed after the six-week treatment did not reveal encouraging results in this sense. In contrast, if weekly tests were to be collected, better results and performance may be expected in a shorter term. Additionally, we believe that more practice exercises related to the vocabulary items in communicative situations should have been employed in order for the learners to acquire them more efficiently. In this sense, the SMS tool was used as a one-way form of communication, which is coming from the teacher side only. As there were no activities to foster teacher-student or student-student communication, the results did not reveal visible improvement in the learners' vocabulary quality of understanding. The words and the definitions that can be sent by SMSs are limited, and this might be problematic for students who have lower proficiency levels (beginner, elementary, and pre-intermediate levels) in the EFL context because they would need further support to develop their lexical knowledge.

As mentioned earlier, this study is a part of a larger one. The findings of the previous study carried out by Behforouz and Frumuselu (2021) showed that vocabulary learning via short messages did not affect Iranian EFL learners` ability to comprehend pre-intermediate-level texts. This is in line with the studies carried out by Li and Kirby (2014) and Rahman, Iqbh, and Zanal (2019), which stated that vocabulary depth can contribute to and predict reading comprehension improvement.

Thus, the findings of this study based on the results of vocabulary depth are consistent with Alemi et al. (2012), who examined the impact of texting on Iranian learners' vocabulary detainment and learning. They found nosignificant difference between the groups on the pre- and post-tests. However, the results are not in line with the findings of several research studies (Lu, 2008; Saran & Seferoglu, 2010; Zhang et al., 2011) in which the experimental groups received the materials by MMS or SMS, while the control group continued with a traditional style of material delivery and they reported substantial benefits and gains in terms of vocabulary acquisition. Therefore, further investigation is needed in order to elaborate on this aspect and find the appropriate methodology and types of materials to foster interactions and enhance learners' vocabulary deep learning. Analyzing this tool in a different context with different types of students coming from other backgrounds could lead to contrasting findings, so employing a variety of methods and analyzing learners' reactions and vocabulary acquisition should be vital for using SMSs as an educational tool effectively.

The second research question sought to investigate whether text messaging via m-learning had any statistically significant effect on the learners' vocabulary breadth. The results of the Wilcoxon signed-rank test for the breadth scores show a statistically meaningful discrepancy between the breadth scores on the pre- and post-tests. It means that the learners' vocabulary size improved significantly after the treatment. Indeed, using SMS as an educational tool has hadapositiveimpactonthe learners' lexicalknowledge.The difference suggests that there was an improvement in the performance of the participants in terms of their vocabulary breadth before and after the treatment. Although there are different perspectives on the proper threshold level, Sutarsyah, Nation, and Kennedy (1994) suggested a level of 4,000-5,000 word families, while Coady et al. (1993) proposed an explicit understanding of the words at the level of 3,000 word families. The current results are encouraging and show positive effects in this sense.

The findings related to the second research question based on vocabulary size are in line with many previous research studies. Motallebzadeh and Ganjali (2011) conducted a study in a university context in which the experimental group received some vocabulary through short messages, while the control group received paper-based instruction. The results of the study revealed that the participants of the experimental group showed better performance on the vocabulary test. Some other research studies were conducted by Başoğlu and Akdemir (2010), Liu and Chen (2014), Lu (2008), Rahimi and Miri (2014), Saran et al. (2012), Wu (2015), and Zhang et al. (2011) that are in line with the findings of this study. They investigated the role of mobile applications, SMS, and mobile systems in vocabulary learning, and the performance of the experimental groups showed that participants who received vocabulary through electronic platforms outperformed those who received the instructions on paper. Basoglu and Akdemir (2010) also showed that using mobile phones to teach vocabulary can have more positive impact on the learners than teaching them using flashcards. In another study, Suwantarathip and Orawiwatnakul (2015) stated that students in the experimental group receiving

mobile-assisted vocabulary activities performed better than the students of the control group who received paper-based exercises. Saricoban and Ozturan (2013) conducted a study to measure the effect of mobile phone on teaching technical words and sentences. The findings of the study showed that those students who received the treatment by means of mobile phones were motivated and learned the vocabulary efficiently. Thus, the findings of our study are in line with the aforementioned studies and using SMSs as an educational tool in the EFL context could lead to vocabulary size improvement and foster their acquisition over the long term. It should also be mentioned that the positive results could be explained in terms of learners' motivation and openness to experience learning outside the so-called 'traditional' environment and receiving vocabulary items in context via their mobile phones helped them gain knowledge after the six-week treatment. However, additional investigations should be carried out in order to reach definitive conclusions with learners coming from different backgrounds and proficiency levels, as this could have influenced the results of the current study.

Although this study achieved its aims, there were some unavoidable limitations. First, because of the small size of the sample, the results might not be generalizable to other types of populations. Second, the post-tests were administered immediately after finishing the treatment. A further study can be carried out with delayed post-tests to check learners' vocabulary retention. Third, the focus of the present study is vocabulary depth and breadth; therefore, more research studies should be carried out on the interaction of breadth and depth of lexical knowledge and reading performance. Fourth, only pre-intermediate level learners took part in this study, so another study could be carried out with language learners of other proficiency levels in order to corroborate the current results. Fifth, the focus of the study was limited to sending SMS text messages to improve learners' lexical knowledge; so additional goals could be added in order to have a more in-depth view of the learners' tendencies when they are in contact with this type of educational tool. Sixth, in this study, text messaging via m-learning was the medium of instruction, so other studies could be carried out with different m-learning applications. Additionally, more qualitative analyses are required in these types of studies in order to grasp not only the learners' performance but also their response to the implementation of text messaging as an educational medium in the EFL classrooms.

In general, the use of text messaging through mobile phones has been used successfully in a variety of ways in the learning language process, as stated in the results of the current paper. As a result, policymakers and school administrators should consider text messaging via m-learning as another educational instrument that has many latent benefits for foreign language learning.

Conclusion

Considering the rapid improvement of technology, mobile devices can be considered motivational learning tools. Teachers and learners are tired of the old-fashioned methods of vocabulary learning, like memorization and repetition. Using various kinds of applications facilitates learning and it also generates variation and excitement. The current study was undertaken to measure the usefullness of mobile phone text messaging when introducing vocabulary items to EFL university learners in Iran. The basic assumptions were that text messaging through m-learning improves learners' breadth and depth of lexical knowledge. The findings of the present study indicated that using text messaging via m-learning was effective for learners' vocabulary breadth, and there was a meaningful difference between the post-test scores of the study group in terms of vocabulary breadth. The data concerning vocabulary depth showed a slight but not statistically remarkable discrepancy at the end of the study. The findings of this study showed the treatment process used in this study affected learners' breadth of lexical knowledge rather than their depth. The findings also showed that vocabulary learning through SMS text messaging has a positive effect on learners' lexical knowledge in general and the size of their vocabulary in particular.

The results of this study can have instructional implications for teachers and learners and help them use mobile learning more appropriately for effective vocabulary learning. Designing and planning these type ofvocabulary activities should be considered by educators and teachers in order to foster learners' lexical knowledge.Learners' awareness of the depth of lexical knowledge can be raised by teachers in a variety of ways. Activities and tasks proposed by Schmitt and Schmitt's (1995), such asvocabulary notebooks could be useful in this case. Learners can improve their lexical knowledge using mobile learning at any point in time. In conclusion, the use of mobile phones as a pedagogical instrument will surely improve the process of learning and teaching.

Despite the encouraging findings of the current study that text messaging positively affects L2 lexical learning, some limitations were found. With a small sample of pre-intermediate English students at one university, the results of this study may not be completely generalized. The treatment process lasted only six weeks. A longer time allocated for the treatment might have resulted in different findings. Observing individual learners would be meaningful for finding how and when they checked the text messages for vocabulary learning on their mobile phones.

Conflicts of interest

The authors declare that they have no conflicts of interest.

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Collaborative Climate and Knowledge Sharing among ESP Teachers: A Mixed Method Study

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Research on teacher collaboration emphasizes the key role of collaborative culture for teachers' functioning; however, there is little empirical evidence to investigate its relationship with knowledge sharing among university ESP teachers. In the present study, the relationship between EFL teachers' collaborative climate and knowledge sharing was sought. The data were collected through two surveys of 328 Iranian ESP teachers. A Pearson correlation was carried out to investigate the relationship between the two variables of the study. A multiple regression analysis was also run to examine if ESP teachers' collaborative climate predicts their knowledge sharing. A follow-up interview with 13 ESP teachers was conducted to consolidate the findings and explore the contribution of teachers' collaborative climate to their knowledge sharing. The Pearson correlation coefficient test demonstrated a significant positive correlation for four measures (organizational culture, the head of department, teachers' attitude, workgroup support), and the collaborative climate. The results of the multiple regression also indicated that four subscales of collaborative climate were the predictors of ESP teachers' attitude towards knowledge sharing. Analysis of the interview data, on the other hand, indicated how teachers' collaborative climate contributes to their knowledge sharing through one of the four main sources, namely helpful atmosphere, encouragement received from the heads of departments, the expectation of reward, and work group support. In line with these findings, several practical recommendations were offered.

Keywords: collaborative climate, knowledge sharing, ESP teachers

Introduction

Learning a foreign language, especially English, has become increasingly important in all fields of study. This feature is more evident in ESP, where there is a growing demand in ESP courses for mastering English language skills (Rajprasit, Pratoomrat, & Wang, 2015). In this regard, students should learn English because of their future careers and the need to identify, access, select, and use a wide range of information in English that must be regularly updated. However, unfortunately, many of these students have not been able to acquire sufficient mastery in English.

In Iran, all students with different majors should pass a three-credit course called General English, after which a two-or-more-credit ESP course is required. The three-credit course places a great emphasis on comprehension skills and general vocabulary development. Likewise, it is very important for ESP courses to enable students to read and understand English for special purposes. The goal of ESP courses is to prepare students to read common texts and words related to the topic. In general, this course is based on two assumptions: a) matching the content of the course with the field of the students and b) limited improvement of comprehension and reading skills as well as grammar and vocabulary (Ghonsooly & Pishgadam, 2011). However, apart from the importance and necessity of these courses, the role of ESP teachers' characteristics and their ability to teach ESP play a pivotal role.

One topic that has received less attention in education is knowledge management. Knowledge management is defined as «the process of collecting, managing and sharing employees' knowledge capital throughout the organization» (Bhojaraju, 2005, p. 37). Knowledge management helps members of an organization «collectively, systematically create, share, and apply knowledge to achieve their strategic and operational goals» (North & Babakhanlou, 2016, p. 211). Knowledge management is often considered from two perspectives: the

technological aspect that contributes to knowledge dissemination and the social context in which knowledge sharing takes place. As an important subset of knowledge management, «knowledge sharing is the acquisition, organization, reuse and transfer of experience-based knowledge and making that knowledge available to others» (Lin, 2006, p. 27). Teachers «must share knowledge among themselves so that they can pass it on to students, society and the world at large» (Adamseged & Hong, 2018, p.27). Through knowledge sharing, experience-based knowledge is transmitted and made available to others (Lane, 2006). As such, in the present study, knowledge sharing refers to ESP teachers' collaborations to make the knowledge they have gained available to other teachers. It is in such a context that an organization's chances of survival increases (Argote et al., 2000). To do so, various platforms are available for knowledge sharing, including blogs, emails, online discussion groups, and forums. It does not matter which of these contexts is chosen, teacher-to-teacher interactions seem to be of particular importance.

Although English language teachers may participate in various teacher training courses in schools and language schools, teacher-teacher interactions have received less attention (Mawhinney, 2010). Teacher-teacher interactions can contribute to effective communication with other teachers and may lead to teachers developing new perspectives about their practice (Glazer et al. 2004; Ng & Tan 2009). They can even contribute to «changes in cognition or behavior at the individual or group level» (Doppenberg, Bakx, & Brok, 2012, pp. 548-549). Knowledge sharing through teachers' interactions may influence the development of teachers' reflective thinking (Kelchtermans, 2006; Vangrieken et al., 2015; Van Gyn, 1996) and change their classroom performance (Newmann, King, & Youngs, 2000). Richards and Farrell (2005) explained that when teachers work together, they have a better chance of building knowledge, shaping it, and subsequently evolving their teaching methods. Teachers who meet regularly reflect on their teaching methods and those of their colleagues, and exchange ideas with each other (Hargreaves, 2013). Research has shown that teachers who participate in these groups develop more self-confidence, a stronger belief that they can make a difference in students' learning, a greater willingness to work collaboratively, and a greater commitment to changing their approach (Earley & Porritt, 2010; Stoll et al., 2006). Knowledge sharing is an important factor for the success of organizations, and in scientific and academic environments it is an important element of the knowledge-based community (Trehan & Kushwaha, 2012) and a factor for improving the professional performance of university teachers (Ramazanzade et al., 2019).

For over a century, the idea of organizational effectiveness has had a key role in organizational research. Scholars have suggested that an organization's social context has an influential effect on its effectiveness (Glisson, 2016), and as an important dimension of social context the term 'organizational climate' was introduced by Lewin (1939). According to Glisson (2016), Lewin "introduced the concept to demonstrate the psychological impact of the work environment on employees' sense of well-being, motivation, behavior, and performance" (p. 246). The organizational climate represents the social atmosphere of the educational context (Erturk & Ziblim, 2020). In other words, it is the "mutually shared elements of an organization's culture that influence the behaviors and willingness to share knowledge" (Sveiby & Simons, 2002, p.421). Organizational climate plays a key role in shaping the behaviors of an organization's members and has a significant effect on their perception of knowledge sharing (Chen & Lin, 2004; Sveiby & Simons, 2002). Negative organizational climates result in ineffective knowledge management programs (Davis & Menzer, 2002). Different subscales of organizational climates like reward and support have a positive effect on knowledge management (Nazem, Mozaiini, & Seifi, 2014).

The concept of organizational climate in schools has been examined by Hoy, Tarter, and Kottkamp (1991) and four different types of climates have been identified. The first type is an open climate. In such a climate, a high level of commitment, cooperation, and transparency can be found among the staff and they often receive support from the school administrator. Trust, openness in communication, understanding and supportive leadership, employee autonomy, and high productivity are distinctive characteristics of this type of climate. An engaged climate is the second type of climate. Here, the principal is in command, restricts teachers' behavior, and does not take care of teachers' needs. However, cooperation and interaction can be found among the teachers. The third type of climate is a disengaged climate. Although the principal has a supportive attitude toward the teachers, they do not voluntarily take responsibility. Finally, a closed climate is a threatening climate in which teachers do not exhibit high levels of commitment. Support and cooperation among the staff are at a low level and there is no trust among the staff. On top of that, an authoritarian atmosphere prevails in the educational setting where teachers are expected to obey the rules.

A collaborative climate as one of the aspects of the general organizational climate may encourage individuals to share their knowledge. When there is a cooperative climate in an organization, members of a group are more willing to collaborate to share and develop knowledge. They also are inclined to coach other members' learning (Janz & Prasarnphanich, 2003). In such an environment, individuals get together to discuss, reflect on shared experiences, and share knowledge (Lieberman, 1995). It is likely that when there is a cooperative climate in one's working environment, an employee is more inclined to compare himself/herself with other coworkers and behave in the same way (Buunk et al., 2005; Kelley & Thibaut, 1978). Some common cultural activities carried out in a collaborative climate among faculty members are asking and answering questions, providing advice to colleagues, and requesting help (Tan, 2016). Accordingly, as Stoddart (2001) suggests, unless a culture that recognizes collaboration is implemented, knowledge sharing will not work.

Today, the use of knowledge sharing in the centralized educational institutions of developing countries like Iran is of paramount importance and it is necessary that universities institutionalize the culture of knowledge sharing in order to improve academics' performance (Jahani, Ramayah, & Effendi, 2011). However, the success of knowledge sharing in an organization is contingent upon the existence of collaboration in the organizational culture (Sveiby & Simons, 2002). On the other hand, there are challenges for instructors such as the high-stakes curriculum and students' low learning motivation in ESP courses (Nezakatgoo & Behzadpoor, 2017) coupled with ESP instructors' lack of expertise (Hayati, 2008), which can be dealt with when ESP instructors get involved in knowledge sharing. In this regard, some studies have been conducted on the relationship between organizational climate and knowledge sharing (e.g., Ghorbani Nia, & Sadri, 2012; Rammatinia & Maleki, 2013) in higher education; however, the power of knowledge sharing and interactions between teachers and university instructors has received less attention (Jong, Meirink, & Admiraal, 2019; Sveiby & Simons, 2002). Furthermore, to the best of our knowledge, no efforts have been made to examine the relationship between collaborative climate and knowledge sharing in higher education in Iranian universities in general and among ESP teachers in particular. To fill this gap, in the present study, with the aim of investigating the relationship between these two variables, the following research questions were formulated:

1. What is the attitude of ESP teachers toward knowledge sharing?
2. What is the status of an overall collaborative climate among ESP teachers?
3. Is there any relationship between collaborative climate and knowledge sharing among ESP teachers?
4. Does the collaborative climate predict ESP teachers' attitudes toward knowledge sharing?
5. If there is any relationship between collaborative climate and knowledge sharing, how does ESP teachers' collaborative climate contribute to their attitudes toward knowledge sharing?

Materials and Methods

Procedure

In the present study, a mixed methods approach was utilized. Accordingly, there were two phases in the present study. As for the first phase, a quantitative study was conducted at some private and state universities in Iran. ESP teachers were given two survey questionnaires that were designed to explore the attitudes of teachers toward knowledge sharing and a collaborative climate. In the second phase of the study, a semi-structured interview was conducted in order to the probe the contribution of teachers ' collaborative climate to their knowledge sharing.

In the quantitative phase, a questionnaire was employed to investigate if there is a collaborative climate in English departments among ESP teachers. Moreover, the relationship between collaborative climate and knowledge sharing was sought. Informed by the quantitative results, in the qualitative phase, one-to-one interviews were carried out with 13 ESP teachers to better understand the contributions of teachers ' collaborative climate to EFL teachers' knowledge sharing.

Participants

Three hundred and twenty-eight ESP teachers (258 males and females 70) from different universities across Iran were recruited. The teachers were either ESP teachers at the time the research was carried out or had

taught ESP at least two terms in the last five years in universities. The respondents' experience ranged from 7 to 19 years. One of the researchers who is a faculty member of a university collected data personally from the local campuses. As for far off campuses, the questionnaires were sent to the ESP teachers via Google Forms. Data were collected from July to August 2020. All participants gave informed consent to participate in the present study and they were reassured their information would remain confidential. As for the semi-structured interviews, 13 volunteer ESP teachers were recruited. Nine teachers were interviewed over the phone and four face-to-face interviews were conducted in either teacher lounges or in teachers' offices.

Instruments

As stated, there were two questionnaires in the present study. The first questionnaire investigated university instructors' attitudes towards knowledge sharing. The variables were measured using some of the items from the instruments developed by Kim and Ju (2008), Jolaee et al (2014), and Wangpipatwong (2009). In order to determine the construct validity of the knowledge sharing questionnaire, an exploratory factor analysis of the variables was performed with a number of 328 people. Before finalizing the factor analysis, it was examined and the result showed that out of 22 initially designed items, three items did not load into multiple clusters or had a weak bond with a cluster or belonged to a low-quality factor. In addition, the number of items of one component was lower than the standard. Therefore, the analysis was performed for a second time. The final instrument consisted of 19 items and included six subscales namely, awareness (3 items), trust (5 items), willingness to share (3 items), self-efficacy (3 items), organization culture (3 items), and reward system (2 items). Cronbach's alpha coefficient for all 19 items on the scale was 0.738, which indicates that the items highly correlate with each other. In other words, from the obtained values, it can be concluded that the questionnaire had the necessary research construct validity.

The second questionnaire explored the collaborative climate among university teachers. The original scale was developed by Sveiby and Simons (2002). Some changes were made in the items to make them suitable for educational contexts. The scale consists of 20 items with four subscales: organizational context (5 items), the head of department (5 items), teachers' attitudes (5 items), and workgroup support (5 items). The results of Cronbach's alpha coefficient obtained after factor analysis was equal to .868.

To explore the contribution of teachers' collaborative climate to their knowledge sharing, 13 interviews were conducted with volunteer ESP teachers. It should be noted that among all of the participants, 25 agreed or had the chance to take part in the interview, but only 13 were present on the day of the interview.For validity purposes, two experts in TEFL were invited to review the interview questions and the guidelines for the interview. To give the interviewees the opportunity to express their ideas freely, the interviews were carried out in Farsi. Each interview was translated to English by the first researcher, then the transcripts were transcribed and coded.

Data collection and data analysis procedure

The statistical population of the study included Iranian ESP teachers. To determine the sample size, we used Krejcie and Morgan's table (1970). Then, 384 questionnaires were distributed in hard copy or by e-mail. Because of Covid- 19 lockdown, only 16 teachers received the hardcopies at their universities. They were then reduced to 328 copies after incomplete or carelessly completed surveys were discarded. To compute the collected data, SPSS 23 was used.

Before conducting the Pearson correlation, descriptive statistics were run in order to identify the attitude of ESP teachers toward knowledge sharing and find out if there was a collaborative climate in English departments among ESP teachers. In addition, a multiple regression analysis was used to determine if a collaborative climate could predict ESP teachers' attitudes toward knowledge sharing. Once the relationship between teachers' collaborative climate and knowledge sharing was established through Pearson correlation, a semi-structured interview was conducted in Farsi, which was later translated into English, and subjected to thematic analysis. These analyses aimed at identifying themes (Braun & Clarke, 2006; Dornyei, 2007). To do so, the common patterns emanating from the data were coded. Then, the emerging themes were subjected to frequency analysis and finally tabulated.

Results

The demographic characteristics of the study showed that out of 328 faculty members, 121 were females and 207 were males. In terms of academic rank, 90 were M.A. holder instructors, 207 were assistant professors, and 31 were associate professors.

To answer the first and second research questions, we inquired about the attitudes of the teachers towards knowledge sharing and the overall status of the collaborative climate. The overall scores and the subscales of the two instruments are summarized in Table 1.

Table 1

Descriptive statistics of subscales of knowledge sharing and collaborative climate

Variables	Subscale	Mean	Std. Deviation
Knowledge sharing	Awareness	3.13	.791
	Trust	3.05	.597
	Willingness to share	3.10	1.113
	Self- efficacy	2.96	.836
	Organization culture	3.02	.834
	Reward system	3.08	.802
	Knowledge sharing (Total)	3.06	.431
Collaborative climate	Organizational culture	3.13	.730
	Head of department	3.06	.637
	Teachers' attitude	2.91	.641
	Workgroup support	3.11	.620
	Collaborative climate (Total)	3.05	.375

According to Table 1, the average knowledge sharing in the sample group was 3.06 with a standard deviation of .431, which was at the theoretical average (3). Considering the participants' assessment of knowledge sharing variables, their overall mean scores on awareness, trust, willingness to share, self- efficacy, organization culture, and reward system were, respectively, 3.13 (SD= .791), 3.05 (SD= .597), 3.10 (SD= 1.113), 2.96 (SD= .836), and 3.08 (SD= .802).

The average collaborative climate in the sample group was 3.05 with a standard deviation of .375, which was at the theoretical average (3). Considering the participants' assessment of collaborative climate variables, their overall mean scores on organizational culture, the head of department, teachers' attitudes, and workgroup support were, respectively, 3.13 (SD= .730), 3.06 (SD= .637), 2.91 (SD= .641), and 3.11 (SD= .620).

Figures 1 and 2 illustrate the views of each subscale on the collaborative climate and knowledge sharing questionnaires.

The third research question examined if there is any relationship between collaborative climate and knowledge sharing among ESP teachers. A Pearson correlation coefficient test was used to answer the question. The results of this test are shown in Table 2.

Figure 1

Collaborative climate subscales

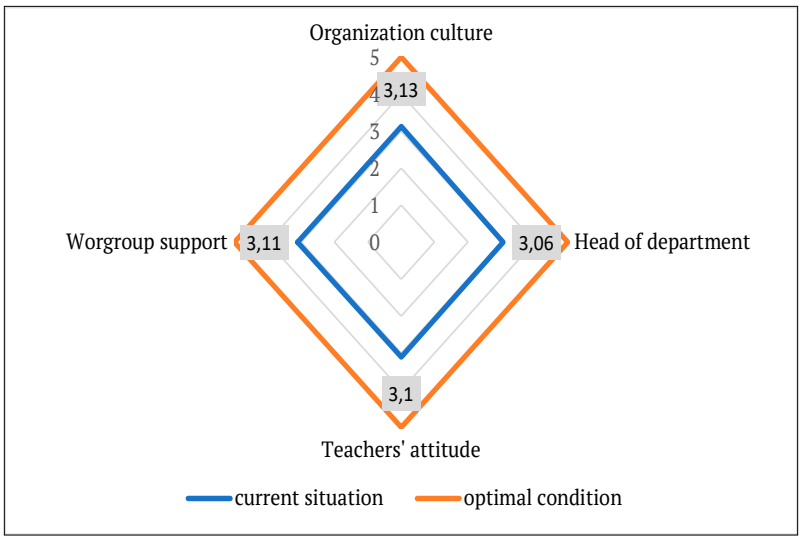

Figure 2

Knowledge sharing subscales

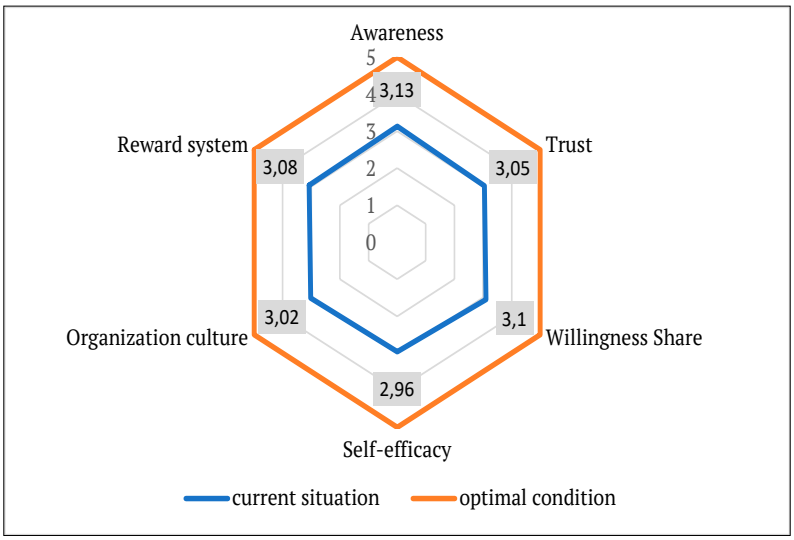

Table 2, which illustrates the Pearson correlations, indicated a strong positive correlation between the variables of organizational culture (r= .449, p < .000), the head of department (r= .470, p < .000), teachers' attitudes (r= .485, p< .000), workgroup support (r= .460, p< .000), and generally a collaborative climate score (r = 0.734, p < 0.000) with knowledge sharing.

The fourth research question explored whether collaborative climate predicts ESP teachers' attitudes towards knowledge sharing. In order to answer this research question, a multiple regression test was used. Test results based on the collaborative climate subscales are displayed in Table 3.

Table 2

Pearson correlations of collaborative climate (organizational culture, the head of department, teachers' attitude, workgroup support) and knowledge sharing

		Knowledge sharing	Organizational culture	Head of department	Teachers' attitudes	Workgroup support	Collaborative climate
Knowledge sharing	Pearson Correlation	1	.449**	.470**	.485**	.460**	.734**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
Organizational culture	Pearson Correlation	.449**	1	.496**	.174**	.143**	.733**
	Sig. (2-tailed)	.000		.000	.002	.010	.000
Head of department	Pearson Correlation	.470**	.496**	1	.051	.180**	.635**
	Sig. (2-tailed)	.000	.000		.354	.001	.000
Teachers' attitudes	Pearson Correlation	.485**	.174**	.051	1	.164**	.571**
	Sig. (2-tailed)	.000	.002	.354		.003	.000
Workgroup support	Pearson Correlation	.460**	.143**	.180**	.164**	1	.588**
	Sig. (2-tailed)	.000	.010	.001	.003		.000
Collaborative climate (Total)	Pearson Correlation	.734**	.733**	.635**	.571**	.588**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	

**. Correlation is significant at the 0.01 level (2-tailed).

Table 3

Coefficients (Predictor variable: knowledge sharing)

Model B		Unstandardized Coefficients		Standardized Coefficients	t	Sig. Zero-order	Correlations		
		Std. Error	Beta				Partial	Part	
1	(Constant)	1.261	.098		12.821	.000			
	Organizational culture	.087	.020	.189	4.362	.000	.449	.236	.162
	Head of department	.192	.028	.300	6.959	.000	.470	.361	.258
	Teachers' attitudes	.192	.019	.385	10.106	.000	.485	.490	.374
	Workgroup support	.163	.020	.316	8.276	.000	.460	.418	.306
R= .746		= .557		Adj.= .552					
F= 101.582		Sig.= .000		df= 4					

According to Table 3, the results of the multiple regression analysis show that R is equal to 0.746. That is, the Pearson correlation between the predicted values and the actual value of the dependent variable is .746. The coefficient R2 represents the value of the explained variance of the independent predictor variable, which here is equal to .557. In other words, the variance of the intervening variable as determined by the model showed that the variable stands for 55 percent of the variance of the criterion variable (knowledge sharing). The results of ANOVA revealed that the observed F is equal to 101.582 (df= 4) (P= .000<.05), which the level of F at the .05 level of significance. There is a 95% probability that there is a significant relationship between a collaborative climate and knowledge sharing. Table 3 also shows the knowledge sharing prediction coefficients using these predictor variables. There are four predicting independent variables due to a collaborative climate including: organizational culture, the head of department, teachers' attitudes, and workgroup support containing p<.05; therefore, the Alpha level that statistically explains the variance of knowledge sharing is .05. The β standard correlation shows that the effective correlation of organizational culture is (β= .189; t= 4.362) and the

correlation of the head of department is (β= .300; t=6.959), the affective correlation of teachers' attitudes is (β= .385; t=10.106), and the effective correlation of workgroup support is (β= .316; t= 8.276), which explain knowledge sharing.

The results of the correlation partially showed that the variables of organizational culture (5.56%), the head of department (13.03%), teachers' attitudes (24.01%), and workgroup support (17.47) explain knowledge sharing.

Table 4 shows the results of the multiple regression test. It should be noted that the main variable of this research question is a collaborative climate.

Table 4

Coefficients Predictor variable: knowledge sharing

Model B		Unstandardized Coefficients		Standardized Coefficients	t	Sig. Zero-order	Correlations		
		Std. Error	Beta				Partial	Part	
1	(Constant)	1.342	.096		14.031	.000			
	collaborative climate	.605	.031	.734	19.510	.000	.734	.734	.734
R= .734		= .539		Adj.= .537					
F= 26.107		Sig.= .000		df= 1					

Table 2, which illustrates the results of the multiple regression analysis, indicates that R is equal to .734. That is, the Pearson correlation between the predicted values and the actual value of the dependent variable is .73. The coefficient R2 represents the value of the explained variance of the independent predictor variable, which here is equal to .539. In other words, the variance of the intervening variable as determined by the model showed that the variable stands for 53 percent of the variance of the criterion variable (knowledge sharing). The results of ANOVA revealed that the observed F is equal to 26.107 (df= 1) (P= .000<.05), which the level of F at the .05 level of significance. There is a 95% probability that there is a significant relationship between a collaborative climate and knowledge sharing. Table 4 also shows the knowledge sharing prediction coefficients using the predictor variables. There are four predicting independent variables due to a collaborative climate including: organizational culture, the head of department, teachers' attitudes, and workgroup support containing p<.05; Therefore, the Alpha level that statistically explains the variance of knowledge sharing is .05. The β standard correlation shows that the effective correlation of collaborative climate is (β= .734; t= 19.510). The results of the correlation showed that the variable of a collaborative climate (53.87%), as a predictor variable, explains the knowledge sharing.

The fifth research question inquired about the contribution of teachers' collaborative climate to their knowledge sharing. Since the interviews were carried out after the results of the quantitative phase were clear, we mainly concentrated on discovering the reasons behind the collaborative climate among university ESP teachers. The following section presents the findings.

The most recurrent theme extracted from the data was a helpful atmosphere and positive organizational culture among the ESP teachers. As reported, the interviewees had a positive attitude toward a collaborative climate. More specifically, they expressed their positive feelings about the culture in their department. This is vividly echoed in the following statement by a teacher.

> *"Where I'm working, nobody keeps to himself. I think everybody is seeking opportunities to have interactions with colleagues."*

The contribution of culture to teachers' knowledge sharing is illustrated in another interviewee's report.

> *"They are eager to share information with others. I also see a lot of motivation to communicate with other ESP teachers. I always think about a university in which the academics are willing to meet each other and share necessary information in workshops or informal gatherings".*

Another young interviewee acknowledged his positive view towards information sharing among colleagues; however, as he claimed, young inexperienced teachers are more willing to be actively involved in knowledge sharing than more experienced ones. This lack of communication between experienced as less experienced colleagues, among other reasons, maybe due to the more experienced academics fearing knowledge loss, and maintaining power and a competitive advantage. This is manifested in the following statement:

> *"…They [the more experienced ESP teachers] think that what they know or the papers they have published is their intellectual property and they are reluctant to share them with others, as if they are keeping a secret from other people".*

Another reason behind the collaborative climate expressed by all of the interviewees was that the universities and heads of departments expected or encouraged knowledge sharing among academics. The ESP teachers considered the heads of department to be empowering and supportive. For them, their head of department never adopted a laissez-faire approach that is a form of passive leadership (Yukl, 2013). In addition, as reported, there was a commitment on the part of the head of department and an emphasis on the fulfillment of duties. As one ESP teacher commented:

> *«We meet the head of department at regular intervals, about once a month in her office . Not only do we often receive instruction on the curriculum through social networks such as WhatsApp, but we often have informal chats on a variety of issues we encounter in our daily practice in the social network. The chats are often led by her [the head of the department] «.*

Another interviewee stated that:

> *"The group manager has created a WhatsApp channel for professors. It is used for sharing ideas and to send necessary news about rules and regulations».*

The expectation of reward as an individual factor was also considered by the interviewees as a factor that contributes to knowledge sharing among ESP teachers. Two interviewees highlighted the fact that they received verbal rewards whenever they engaged in knowledge sharing.

> *"We may often share knowledge through informal contacts we have in the teacher lounge or WhatsApp. Such an interaction has often been encouraged by the university or the head of the department".*

Such a statement shows the importance of motivational issues in creating a positive culture and hence building successful knowledge activities in universities.

Another form of reward, as one interviewer stated, was the reputation she received as the result of knowledge sharing. She felt that after taking part in a discussion, her colleagues respected her more.

Workgroup support among ESP teachers was another contributing factor to knowledge sharing behavior based on the report of ESP teachers.An interviewee commented:

> *« You can expect support from your colleagues. There is often communication between the colleagues and we meet each other during the tea break in the teachers' lounge. When you cannot discuss the problem there, social media gives you the opportunity to be in contact with your colleagues after work to receive help.*

Another interviewee commented:

> *"The exchange of knowledge can take place among colleagues through face-to-face communication; however, the time at the university is short, so, the head of department has only enough time to inform us about current events and trends. However, there are times we join in the group and discuss the problems while the head of department is away".*

Discussion

The present study investigated the attitude of ESP teachers toward knowledge sharing and the status of the overall collaborative climate among ESP teachers. It also sought to understand the relationship between ESP teachers' collaborative climate and their attitudes toward knowledge sharing.

With respect to the first and second research questions, the descriptive data showed the status of a collaborative climate and knowledge sharing among ESP teachers. The results indicated that the attitudes towards knowledge sharing and the status of a collaborative climate were desirable among the ESP teachers since they made efforts to build cohesion and teamwork in a collaborative climate. The finding is in line with that of Fullwood, Rowley, and Elbridge (2013) who reported that academics had a positive attitude towards knowledge sharing. Esmaell Panah and Khayat Mogadam (2013), who investigated knowledge sharing among university teachers of a public university in Iran, also reported that the teachers engaged in an acceptable level knowledge sharing. In the same vein, Alizadeh (2009) explored agricultural faculty members' attitudes toward knowledge sharing and found a positive attitude among them.

The result was also in tandem with the findings of Jahanbani et al. (2018) conducted in a medical university in Iran. However, the findings are in contrast to those of Nemati-Anaraki and Nooshinfard (2014) and Nejadhussein and Azadbakht (2011). Nemati-Anaraki and Nooshinfard found that only 13 percent of faculty members reported that their organizational culture was appropriate and only six percent regarded the condition of knowledge sharing favorable. Nejadhussein and Azadbakht (2011), who studied knowledge sharing among the faculty members of a state university, also found the university to be weak regarding knowledge sharing among faculty members. Perhaps, among various possible reasons, the contradictory results can be attributed to the fact that these studies were conducted in different universities where each department may have its own specific culture.

The third research question investigated if there was any relationship between a collaborative climate and knowledge sharing among ESP teachers and the fourth research question explored if a collaborative climate predicts ESP teachers' attitudes toward knowledge sharing. Significant positive correlations were found for four measures (organizational culture, the head of department, teachers' attitude, workgroup support) and in general the collaborative climate. In addition, it was revealed that collaborative climate predicts ESP teachers' attitudes toward knowledge sharing. Various studies have demonstrated that certain types of cultures support knowledge sharing initiatives whereas others do not (Ahmed, et. al., 2016). Our finding can be corroborated by Ghorbani Nia and Sadri's (2012) and Rammatinia and Maleki's (2013) in that they found a significant relationship between knowledge management and organizational climate in Iranian higher education. Similar results were reported in fields other than higher education (Connelly & Kelloway, 2003; Han, 2018; Hooff & Huysman, 2009; Joseph & Jacob, 2011). The result can be justified by the consideration that both organizational culture and knowledge sharing are cultural values that influence the patterns of individuals' cognitive frameworks and knowledge sharing behaviors (Cheng, Yeh, & Tu, 2008). This implies that a cooperative working environment can be cultivated among university faculty members and they can be encouraged to cooperate with others in research teams in their departments. By so doing, high levels of knowledge sharing may be fostered among teachers. A feasible justification for this is that a collaborative climate may result in favorable social interactions and, in turn, lead to a higher degree of knowledge sharing among teachers. Therefore, social interactions play a key role in the relationship between a collaborative climate and knowledge sharing.

To answer the fifth research question, the qualitative phase supported the findings of the quantitative phase in that a positive organizational culture was found to exist among the ESP teachers. More specifically, values and beliefs held by the teachers may have a great influence on their decision-making processes (Bartell, 2003; Tierney, 1988) and shaped their organizational behaviors. Based on the content analysis, the key themes extracted from the data included helpful atmosphere, support received from the heads of departments, the expectation of reward, and workgroup support.

One of the themes extracted from the data was a helpful atmosphere and positive organizational culture. It is noteworthy that culture can be considered as the most significant organizational factor affecting knowledge sharing (Lee, Shiue, & Chen, 2016). Also, in order to benefit from its knowledge-based resources, an organization should cultivate a culture that develops a positive organizational culture (Davenport & Prusak, 1998; Greiner, Böhmann, & Krcmar, 2007). The studies carried out in the Iranian context have revealed that good social relationships among members of an organization support their knowledge sharing (Dokhtesmati, 2012; Khatamianfar & Ghorbani Bousari, 2013; Pezeshkirad, Alizadeh, & Zamani Miandashti, 2010). It was not surprising to find that some of more experienced teachers were not willing to get involved in knowledge sharing with less experienced teachers. In this regard, von Krogh (1998) explained that mentoring programs under the supervision of the organization enable seniors to help juniors. Accordingly, senior members should be

encouraged to share their knowledge and experience with other colleagues. In addition, as suggested by Al-Kurdi et al. (2018), university officials can enhance positive attitudes toward knowledge sharing by addressing experienced and more knowledgeable professors' "fear of losing knowledge power and by reassuring their position and value in the institution" (p.239).

Based on the results gleaned from the interview, heads of departments contributed to the teachers' sharing of knowledge. As suggested in several studies, knowledge management practices could be developed if the top management shows degrees of commitment (Hislop, 2003; Rowley, 2002; Xue, Bradley, & Liang, 2011). In addition, without the support provided by the leadership, an organization will not achieve effective knowledge management (Al-Kurdi et al., 2018; Fullwood et al., 2013). It has also been demonstrated that there is a relationship between leadership and knowledge sharing behavior (Connelly & Kelloway, 2003; Jahani et al., 2011) and that in cases of conflict between managers and academics, knowledge sharing may be inhibited (Dee & Leisyte, 2017). Despite the common constraints in knowledge management, it is believed that the hurdles to knowledge sharing among teachers can be eradicated by effective leadership (Collinson, 2004; Fullan, 2002). Such a role may result in beneficial consequences for knowledge sharing in Iranian education (Zeinabadi, 2020), especially in higher education.

Another theme that emerged in the present study was the expectation of reward. Reward plays an effective role in knowledge sharing (O'Dell & Hubert, 2011) in general and at the university level, in particular (Kim & Ju, 2008). In other words, unless there are strong personal motivations to share knowledge, people are more likely to hoard it (Ford & Staples, 2010; Loebbecke, Van Fenema, & Powell, 2016). As such, top management needs to motive university professors to share knowledge by giving them required training, resources, and substantial rewards, especially at the early stages. This may contribute to teachers' being aware of the possible benefits and make more effort to get involved in knowledge sharing (Ahmed et al., 2016).

Finally, based on the content analysis, workgroup support had a positive effect on teachers' knowledge sharing, and the ESP teachers in this study reported that they are usually encouraged to form informal gatherings, research groups, and discussion forums to share knowledge. Workgroup support has a significant impact on the intention of sharing knowledge (Mooghali, 2012). Such support may be manifested in different forms. As Denhardt (1984) suggests, in a collaborative culture, employees make collective efforts for creating teamwork and try to be helpful, sensitive, open, and fair.

Conclusion

This study concluded that ESP teachers' collaborative climate was a predictor of their attitudes toward knowledge sharing. This means that the academics who are actively involved in a collaborative climate are more likely to take part in knowledge sharing with their colleagues. Thus, due to the importance of knowledge and in order to cultivate the dissemination of knowledge among university teachers, university policies and practices providing conditions for teachers' interactions in and outside the university should encourage team working, informal gatherings, workshops, and interactive teacher training courses.As such, based on our research findings, the present study offers several practical recommendations and implications for ESP teachers:

1. It is obvious that much energy and time are required to change the status quo and encourage teachers to adopt positive attitudes towards cooperative work; however, in-service teacher training may raise teachers' awareness as to the necessity of teachers working together. To do so, it seems necessary to draw teachers' attention to both 'knowing that', and 'knowing how'.
2. Teacher learning communities are highly affected by the culture of the learning environment. As such, university teachers should be aware of opportunities and conflicts that arise as the result of interactions with the environment since the conflicts may mediate or hinder learning.
3. Cultivating either formal or informal teacher learning communities in university departments may contribute to a positive attitude towards the organizational climate and ultimately act as a motivating factor towards sharing knowledge.

The present study explored the relationship between a collaborative climate and knowledge sharing among ESP teachers; however, it did not consider the differences between faculty members and adjunct instructors. Adjunct instructors make up a portion of university faculties in Iranian universities and it is likely that there are differences in motivation, institutional support, job satisfaction, effectiveness in teaching, objectives, and teaching practices between tenure-track instructors and part-time adjunct ones (Bolitzer, 2019). Further study can recruit a sample representative of both populations and compare the effect of a collaborative climate on them. Another limitation of the study was that even the teachers who had at least two terms of experience teaching ESP were included as participants. This limited the validity of the findings since there is the possibility that some of the participants were not experienced enough to present a valid description of their opinions.

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Conflict of Interest

The authors declare that they have no conflicts of interest.

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Karimi, F., Fakhri Alamdari, E., & Ahmadian, M. (2021). Giving Voice to the Voiceless: Probing Current Issues for Student Teachers in EFL Teacher Education Program in Iran. *Journal of Language and Education, 7*(2), 140-154. https://doi.org/10.17323/jle.2021.11113

Giving Voice to the Voiceless: Probing Current Issues for Student Teachers in EFL Teacher Education Program in Iran

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The present study attempted to give insight into the features of an effective English as a foreign language (EFL) teacher education program by exploring student teachers' beliefs, ideas, and the challenges they encounter during their teacher education program. The data were collected through several semi-structured focus group interview sessions with a total number of forty-one BA, MA, and PhD students studying teaching English as a foreign language (TEFL) at university. The qualitative grounded theory design was used to analyze the data, and the findings of the study were corroborated with interpretations obtained from the informal observation of several university classes in a TEFL teacher education program in Iran. The inductive analysis of the data resulted in developing the following categories: the challenge of developing the ability to move back and forth from theory to practice,the struggle to establish a professional identity, the quest for the 'self', less-practiced reflective practice, and the missing connection between teacher education programs and schools. The discussion concerning the challenges and issues culminated in implications for EFL teacher education programs through which they can take the issues that student teachers normally experience into account and help them pave the way for an effective EFL teacher education program.

Keywords: teacher education, student teachers, English language teaching, beliefs, identity, theory and practice

Introduction

Language teacher education programs are designed worldwide to comply with criteria and benchmarks for language pedagogy assigned by education decision-makers and the administrations of the respective contexts. Hence, a variety of location-specific language teacher education (TE hereafter) programs have been designed worldwide. Recently, the underlying assumptions of language TE have been critically examined by some scholars and researchers in order to analyze the components, investigate the outcomes of current TE practices (e.g., Ganji et al., 2018, Johnson, 2015),and propose the features of effective teacher preparation programs (e.g., Brooks & Darhower, 2014; Huhn, 2012; Johnson, 2006). Globalization and its impact on education regarding the system, policies, programs, curricula, and students in TE programs (Paine, 2019) have arisen the need for the emergence of shifts in the traditions of foreign language learning and teaching, and this basically requires restructuring and rethinking of TE assumptions (Kumaravadivelu, 2012).

In their attempt to investigate the features of an effective TE program, scholars discussed the unhelpfulness of top-down models to TE. They suggested a shift from the process-product approach (Freeman & Johnson, 1998) and TE's transmission-based models (Kumaravadivelu, 2008). Recently, the cognitive processes of student teachers (STs hereafter) on their way of becoming teachers are being acknowledged, and the effectiveness of approaches that encourage STs to reflect on their own teaching is being recognized (Geyer, 2008). With interest in the inquiry-oriented approach to TE, teacher development is now being considered concerning cognitive, social, and contextual views (Darling-Hammond, 2006; Huhn, 2012; Johnson, 2006). Additionally, models of TE that pay attention to the importance of teachers' cognition, reflection, and personal visions and versions of teaching are being acknowledged (Kumaravadivelu, 2008).

Teacher cognition is concerned with "what teachers know, believe, and think" (Borg, 2003, p. 81), and research on teacher cognition aims to reveal the invisible dimensions of teaching (Borg, 2009) by understanding teachers and their act of teaching. Reflection is a crucial means of understanding teacher cognition. Reflecting on teaching contributes to teachers' understanding and recognizing their identity and 'self' as teachers. Beauchamp and Thomas (2009) believe that one of the ways of defining identity is to understand "the responsibility of TE programs to create opportunities for the exploration of new and developing teacher identities" (p.176). Scholars have asserted TE's role in forming identity; nevertheless, to the present researchers' knowledge, only a few empirical studies have been conducted to support this hypothesis (e.g. Schepens et al., 2009).

Recent research in TE recognizes the importance of exploring teachers' cognition and beliefs to better understand the act of teaching and the way teacher identity is shaped or developed during TE programs (Fairley, 2020; Korthagen, 2004; Walkington, 2005;). However, the existing literature, to the present researchers' knowledge, has not paid enough attention to STs' beliefs regarding the TE programs they participate in. The process of designing a TE program that suits foreign language teachers' needs begins by knowing and analyzing the current issues and shortcomings. Teacher educators are able to meaningfully and effectively guide STs if they understand the challenges STs are faced with during teaching practice and the strategies they adopt to deal with those challenges (Foncha et al., 2015). Additionally, examining the existing issues in TE programs results in rising awareness among both teacher educators and EFL teachers about misleading language learning and teaching assumptions (Hedgcock, 2002). In fact, teacher development and student achievement are directly connected to TE programs (Darling-Hammond & Youngs, 2002). Recently, with the increasing demand for English language learning and teaching at individual and national levels in Iran (Sadeghi & Richards, 2016), Iranian state and private universities hold EFL TE programs at undergraduate, graduate, and post-graduate levels. However, despite the inclination toward a reflective inquiry-oriented approach to TE in other countries, teacher preparation program offered by Iranian universities, mostly, design their curriculum according to transmission-based models (Safari & Rashidi, 2015). Therefore, based on the beliefs of some STs, the present study aimed to explore the issues and challenges that they commonly encounter during TEFL teacher education programs in Iran. In this vein, this study first describes the context of current TEFL teacher education programs (see the Context section) in Iran; then by probing into STs' perceptions, it examines the existing issues for STs during their TE program. Raising this awareness seems to be of importance to curriculum designers who make decisions about the courses and the program, teacher educators who are required to develop autonomous teachers, and finally to STs who are being prepared for classroom instruction.

Background

For a long time, English language TE programs have been inclined to orient the programs based on a rationalistic model (Day, 1993), or applied science mode (Wallace, 1991). Grounded in a positivistic paradigm (Geyer, 2008), in this top-down model, teacher development revolved around learning the prescribed knowledge and content and the prerequisite methodology needed to teach the content (Richards, 2002). The process of teaching was believed to result in the product of student learning and any failure in the product questioned teachers' competence in the teaching process (Freeman, 2002). Following a predetermined curriculum and incorporating a static view of teaching (Richards, 1990), transmission-based TE programs are oriented toward the transfer of specific contents and knowledge as well as prescribed methodologies to STs, neglecting the context and STs' involvement and autonomy (Kumaravadivelu, 2012). This technicist approach, through which theories produced by scholars are presented through a number of isolated courses without illuminating their connection to practice, results in the gap between theory and practice (Korthagen, 2010). Within the context of EFL teacher education in Iran, where TE programs generally design their curriculum based on transmission models of TE (Safari & Rashidi, 2015), STs and teacher educators are asking for more practical courses such as practicums and classroom observations to be included in the program and help empower STs as they attempt to overcome the realities of classrooms (Gholami & Qurbanzada, 2016).

The long-established behavioral conceptions of teaching have recently given way to the views adhering to sociocultural theory (Johnson, 2006). Socio-cognitive views of teaching consider teachers to be social beings who bring with them the life experiences of their own teachers and teaching acts to TE programs and admit that teachers' beliefs shaped by their past experiences influence their present act of teaching (Borg, 2006; Korthagen, 2004; Richards, 2002). Additionally, as learning to teach requires assistance, it is through dialoguing

and collaborating with others that STs learn to teach (Johnson, 2009). Therefore, the socio-cognitive perspective gave ground to an inquiry-based approach to TE by highlighting teachers' cognitive processes of learning, teacher beliefs, and teacher reflections, all of which show both the current and developing abilities of STs (Borg, 2003; Burns & Richards, 2009; Johnson, 2009; Richards, 2002).

Through an inquiry-based approach, major research areas have been significantly and comprehensively developed, promoting the importance of teachers' mental lives and their impacts on teachers' teaching and decision-making processes. Existing research has addressed the leading role teachers' cognition and beliefs play on different aspects of their teaching (e.g. Borg & Al-Busaidi, 2012; Phipps & Borg, 2009), and it has highlighted the role of TE in raising awareness among STs regarding the importance of knowing and recognizing personal experiences, beliefs, and reflections as well as their potential effects on their teaching (e.g. Deberli, 2012; Mattheoudakis, 2007). By helping teachers to know who they are as teachers and by examining different aspects of teachers' teaching, research on teacher identity "as an analytic lens" (Beauchamp & Thomas, 2009, p.175) has been considerably highlighted in TE (e.g. Bukor, 2015; Schepens et al., 2009; Søreide, 2006). However, only a few studies have investigated the role of TE in developing teacher identity in Iran. Zare-ee and Ghasedi (2014) explored EFL prospective teachers' issues in constructing professional identity at the undergraduate level. A lack of support from administration, class sizes, and instructional methods were reported to be major blocks for professional identity development. As reported, STs require TE to equip them with up-to-date teaching techniques and materials to become able to design and use modern English language teaching (ELT) materials. While examining the identity conflicts that EFL teachers encounter, Eslamdoost et al. (2019) found that, considering the highly centralized ELT programs in Iran, conflicts mostly arise from contrasts between EFL teachers' personal ideologies and the regulations assigned by the authorities both at the language institutes and at the national level. Thus, TE is recommended to prepare STs to confront these conflicts.

Recognizing teachers' cognition, beliefs, and eventually the way they establish their professional identity is the concern of TE's exploratory models that aim to develop autonomous teachers, reflective practitioners, and theorists who can create context-specific procedures for their classrooms (Kumaravadivelu, 2012). Such programs involve reflective practices by which teacher educators ensure that STs gain the necessary knowledge base, and evaluate and reflect on their own practice (Day, 1993). Generally, now, TE is recommended in order to take a cyclical holistic approach that neglects top-down exercises and focuses on developing strategic thinkers and explorers who construct their own insights and versions of teaching (Kumaravadivelu, 2001). Adopting this constructivist orientation, Abednia (2012) documented the contributions of a critical EFL teacher education program to the professional identity reconstruction of Iranian teachers who, through the program, shifted from compliance with dominant ideologies to critical autonomy, from an instrumentalist orientation to a transformative orientation of teaching, and from a linguistic and technical view to an educational view of foreign language education. Tajik and Pakzad (2016) put the assumptions of reflective teaching in practice by designing a reflective TE course and documented the positive contributions of this course on STs' reflectivity. However, TE that is required to be the origin of reflective practice may act as a barrier for implementing the exploratory models of TE due to the strong roots of long-lived traditional practices (Safari & Rashidi, 2015).

Despite the emerging inclination of Iranian researchers to evaluate various TE programs, mostly the ones held as teacher training courses at private language institutes (e.g. Ganji et al., 2016; Tajik et al., 2019), EFL student teachers' beliefs, concerns, and issues encountered during and after the TEFL program that they participate in at a degree level at university have not received much attention. The present study aimed to address this gap in the literature. By observing and understanding the way STs perceive their program and by highlighting the issues that Iranian EFL teachers deal with when studying TEFL and after graduation, the present study attempts to enlighten the way toward an effective TE program, one that includes the components that STs acknowledge a need for and helps eliminate the problematic issues that act as obstacles to the development of autonomous EFL teachers.

The Context

English language TE programs are held in various contexts in Iran. The institutions holding these programs include language institutes, universities directed by the Ministry of Science, Research, and Technology, universities regulated by the Ministry of Education, and private university systems such as Islamic Azad University certified by Supreme Council of the Cultural Revolution in Iran. Universities offer English language

TE programs at three levels of Bachelor's, Master's, and Doctoral degrees. The program for each level of university degree is briefly described below.

Generally, TE programs for BA students take nearly eight semesters to be completed. The first four semesters are focused on developing general English skills and knowledge of language components. During the next two years, STs take part in various courses, including teaching methodology, research methodology, materials development, practical teaching, testing language and assessment, linguistics, and translation. Of course, every university curriculum offers its own arrangement of courses, but all universities include the abovementioned courses in their EFL teacher education programs. The English language teaching (ELT) graduates are expected to be prepared to teach the English language at schools or language institutes.

The curriculum for an MA degree in TEFL is a full-time two-year graduate level program. The curriculum includes required courses on language teaching methodology and principles, language skills teaching methodology, materials development, research methodology, language testing and assessment, and a seminar course. Additionally, there are a variety of elective courses that each university offers during TE program; such as courses on linguistics in teaching language, academic writing, discourse analysis, English for specific purposes, and technology-enhanced language teaching/learning. The fourth semester onward is devoted to research. The MA graduates in TEFL are expected to have developed the necessary skills to function effectively as classroom teachers and be prepared to teach language at schools and language institutes.

The Doctoral of TEFL is a full-time minimum four-year graduate level TE program. During the first four semesters, STs participate in required courses such as research in language education, language assessment, second language acquisition studies, language curriculum development, and critiques of issues in language teaching. Elective courses include courses on sociolinguistics, psycholinguistics, first language acquisition studies, English for specific purposes, language teacher education, and some other courses that are specific to the curriculum of each university. The next two years or more are devoted to academic research. The PhD graduates in TEFL have the opportunity to work as instructors at universities, schools, and language institutes. In addition, they are expected to be qualified enough to work as teacher educators at schools, universities, and language institutes. They could work in both academic and research positions. However, it should be noted that the job opportunities available at public schools and state and private universities for language teachers and teacher educators are to be filled by the most qualified candidates after a selection process.

Materials and Methods

Research Design

Due to its exploratory nature, grounded theory was used in the present qualitative research (Corbin & Strauss, 2014). The questions that led to us conducting this study were the problems found according to prior research (e.g., Gholami & Qurbanzada, 2016; Safari & Rashidi, 2015) and the personal experiences of the researchers. Discovering teachers' ideas, concerns, and beliefs in TE programs required an inductive approach to data collection and analysis, and grounded theory helpfully contributed to generating categories and themes (Corbin & Strauss, 2014) of ideas and beliefs. Within this framework, the researchers selected semi-structured focus group interviews and informal observation –including visits to some ELT-related courses– as the data collection techniques, all of which provided a more profound understanding of the present issue. The data collected through interviews and informal observations were inductively analyzed since no predefined themes according to the objectives of this research had been previously provided. Thematic analysis and coding were the two procedures that contributed to the extraction of the themes, categories, and thoughts.

Participants

Purposive sampling was employed in order to collect data from the individuals who suit the problem under study and provide rich information regarding the topic of the research. The participants of the present study were 41 STs studying at either public or private universities in order to achieve BA, MA, or PhD degrees. The BA participants were 17 senior STs studying either English Language and Literature or English Language Translation. It is worth noting that both majors have nearly similar curriculums regarding the courses related

to English language teaching. Since not all BA students had teaching experience, the researchers conducted separate interview sessions with experienced and non-experienced students. The rationale for this division was that the researchers assumed that the factor of teaching experience might influence STs' ideas and beliefs about the TE program.The MA participants were 14 students, and the PhD participants were 10 STs studying TEFL at university. All MA and PhD participants had prior English language teaching experience and they were in the third semester of the respective degree levels, after which they will finish studying their educational courses and begin writing their theses and dissertations. The researchers intentionally selected senior students of each degree level since they believed senior students had passed enough time and courses at university to (re)shape and (re)form ideas and beliefs about their TE program. As a matter of confidentiality in using and analyzing the data, the researchers assigned a number to each of the 41 participants. Then, the participants of each degree program were distinguished by adding the name of the degree level to the assigned number, for example BA1, MA18, PHD35. Numbers were assigned from 1 to 41 i.e. the total number of participants. The details of the participants are indicated in the Appendix.

Data Collection

The data collection of this study began by selecting two universities as the context of the research in which the observations and focus group interviews were conducted. Both selected state and private universities held similar required courses for BA, MA, and PhD students in TEFL. With prior coordination with the respective department, the two authors of this study, who are also faculty members, arranged focus group interview sessions with senior students. By providing a natural and real-life environment, focus group interviews encourage the participants to discuss the issue of interest, although it is possible that participants' ideas and beliefs may have an effect on the others' ideas and beliefs during the discussion(Casey and Krueger, 2000). Focus group interviews suited the purpose of this study as related to the planning, improvement, and evaluation of TE programs. In addition to conducting focus group interview sessions, the two faculty members provided the opportunity for the other author –who is a PhD candidate in TEFL, to attend and observe a session of an ELT-related course for each group of participants in order to gain a better understanding of the present situation and to learn about the activities of the people under study in their regular context (DeWalt & DeWalt, 2010). After observing a class for each degree level at both universities, the researchers conducted group interview sessions with senior students. At the beginning of the session, the researcher explained the aims of the study to the participants, asked their permission for audio recording the session, and assured them that all data would be used anonymously for writing an academic research paper. Each group interview lasted for 60 to 90 minutes. STs were free to state their ideas in English or their native language. i.e., Farsi. Totally, eight sessions of group interviews with each session devoted to a specific degree level were held in the selected universities. Four interview sessions were allocated to students at one university, and the other four sessions were devoted to the second university's students. As a facilitator, the researcher initiated the focus group interviews and explained the aim of the discussions. Next, she asked questions designed to elicit the participants' ideas, insights, beliefs, and issues that they normally struggle with during their TE program. Every individual had enough time to share ideas and beliefs. At the end of the sessions, the researcher reviewed the key points discussed during the session in order to summarize the main ideas that were mentioned and ask the participants to add any additional points they may have.

Data Analysis

Following the grounded theory framework, the data analysis was done through the inductive analysis of the contents and, accordingly, a sequential coding system (Dörnyei, 2007). The data included the precise transcription of semi-structured focus group interviews, done by one of the researchers and checked by the other two researchers. Furthermore, the notes and journals that one of the researchers collected while observing several BA, MA, and PhD ELT-related courses that the participant STs attended were shared and discussed with the other two researchers during some debriefing sessions, and the ideas and reflections were later used as memos while interpreting the data. The process of inductive data analysis requires deep and precise (re)reading of the interview transcriptions. Next, having taken the first steps of the data analysis, the researchers segmented the contents into instances of issues and challenges that STs encountered during their TE program. The chunks' length varied between phrases, sentences, or short paragraphs, which represented the problematic areas STs faced. Then, the segments were labeled and, later, the ones with similar concerns were colored the same and classified under their relevant category label. In the next step, the researchers scrutinized

the textual data to find connections between the categories with a similar focus in order to integrate and group them under a relevant category. Being actively engaged with the data during the process of data analysis, the researchers used memoing to note the ideas and thoughts that were related to the data. The journals and notes collected during informal observation sessions were also used as memos for facilitating the process of coding and interpreting the data. In this way, the categories that emerged from the interview transcriptions were integrated and corroborated with the data collected through the observation sessions. In the last step, the relationships and connections between the perceived categories were explored and this resulted in developing some core categories on which the researchers concentrated in writing the study. The core categories are discussed in the findings section. The process of data analysis is illustrated by the following example. The researchers found various instances related to *many theoretical courses held during the program, the lack of practical courses, and being unable to put theory to practice in a real classroom*, and other similar instances that were categorized under the label *being unable to relate theory to practice*. Then, there were instances such as *no opportunity to share personal teaching experiences, a few opportunities to discuss and receive feedback regarding the methods that STs find effective*, and other similar points that were categorized under the label *failure to develop the ability to theorize practice*. These points asserted by participant STs were corroborated with the journals written during the observation sessions, as the researcher perceived that the university courses are mostly theoretical, including monologue lectures by the instructors. Then, these two categories were condensed into one major category labeled as *the challenge of developing the ability to move back and forth from theory to practice,* which is discussed in the Findings sections. Accordingly, open coding, axial coding, and selective coding were used in this grounded theory method of data analysis (Dörnyei, 2007). The analysis performed by one of the researchers was reassessed by the second and the third researchers of this study in order to enhance the reliability of the findings. Additionally, (re)reading and reviewing the transcriptions and reports, recording the interviews for audit, and using focus group interviews and observations for collecting accurate data contributed to the dependability of the findings. The credibility of the findings, or triangulation (Shenton, 2004) was assured by gaining various insights from different STs regarding the issues of the research and corroborating the findings with reflections from the observation sessions. The researchers attempted to assure the transferability and confirmability of the findings by providing detailed descriptions of the context, and the steps taken in data collection and analysis.

Results

The data analysis process resulted in developing five categories that will be discussed throughout this section and extracts from the data are presented to illustrate the categories. Please note that although the categories that emerged from the data were obtained from the participants of the three degree levels, the researchers have not discussed them in separate sections for each degree level since the ultimate goal of the present study was to explore the features of a comprehensive TE program in the view of STs and those essential features could not be devoted to one specific degree level.

The Challenge of Developing the Ability to Move Back and Forth from Theory to Practice

All participant teachers of this study acknowledged the number as well as the availability of courses and resources allocated to presenting theories of language pedagogy. The theoretical courses arranged to cover the essentials of the field were reported to be adequate to meet the STs' needs for learning the required theoretical knowledge. Relating the presented theories to practice, however, was what participant teachers considered to be a very challenging task. One of the BA students with no teaching experience said:

> *All we have learned is through our ears. I mean we do not see any practical teaching, we just hear about how to teach (BA7).*

Without seeing and engaging in practical teaching, learning to teach, as another BA student with teaching experience said, is:

> *…similar to learning to repair cars just by reading the related books and not by practicing actual repairing (BA 13).*

All BA students felt the need for including practical courses on language teaching in the curriculum. In fact, as the abovementioned excerpts indicate, this need was greatly highlighted by BA students who are at the

beginning of the road to becoming teachers. They demanded either including practical teaching courses in the TE curriculum, or asked for opportunities that the program could arrange for them to visit experienced teachers' classrooms. Gholami and Qurbanzada (2016) addressed the same issue in their research as they found that STs wish to have more practical aspects included in the program. Accordingly, the STs of the present study highly demanded a situation through which they could *see* the link between theory and practice and the way those could be connected. While BA students searched for teaching role models and the actual practice of the theories they were learning, the MA and PhD STs, in a more professional discussion, asserted that practical teaching courses reveal the applicability of language teaching methods and language pedagogy theories in their specific context. The following extract depicts this point:

> *To my experience, methods have been prescribed for ideal situations. As a teacher of a public school, sometimes, the number of students exceeds 40 in my classes. Students are all different in terms of motivation and attitude towards language learning and many other personal factors. In such situation, how can I manage to apply prescribed theories? (PhD34)*

Most graduate students believed that for methods and theories to be employed, many factors need to be considered, factors such as the size of the class, the age range of the students, their level of language proficiency according to their prior language learning experience, and the facilities and technologies that are at hand in that specific context. Participant teachers of this study noticed the challenge of relating learned theories to real practice and, as one of the MA participants asserted, they believe that:

> *If teachers fail to find the link between the instructed theories and the real situation, they may avoid considering and using them (MA29).*

Although scholars believe that effective qualified teaching needs to be rooted in sound and established theoretical foundation (Higgs, 2013), the findings illuminate that TE programs may not act effectively in preparing teachers for realities of the classroom. This gap between the theories and practice has been asserted by various scholars (e.g. Hennissen et al., 2017; Korthagen, 2010).

Furthermore, the STs asked to be given 'voices' during the TE program. As a one of the BA students with teaching experience asserted:

> *Most of our classes involve monologue lectures of instructors. We like to add the flavor of personal experiences to the courses and ask for ideas (BA11).*

The 'voice' that STs asked for, in their view, is a sign of how they value the personal experiences of their teacher educators. In fact, teachers' experiences, either as language learners or teachers, influence their beliefs about learning and teaching and, accordingly, beliefs strongly influence teachers' methodologies of teaching and direct teachers' acts in the classroom (Korthagen, 2004). The STs asserted that having a voice empowers them with the independence and authority to acknowledge their effective teaching experiences and to theorize their practice. It gradually assists them to develop professional agency in order to become active agents of their profession (Yangın Ekşi et al., 2019)

The Struggle to Establish a Professional Identity

The STs' beliefs about themselves can lead them to construct their identities, especially professional identities (Korthagen, 2004). Individuals as agents construct identity within a specific social, cultural, historical, and political context (Aneja, 2016). Hence, identities are multiple and dynamic and they change and develop through time and space. Participant teachers believed that TE programs are greatly concerned with covering course syllabi and that the reality of teaching in classrooms is not vividly discussed. Professional identity, according to Beijaard et al. (2004) consists of sub-identities that may conflict with each other during TE programs and real classroom practice. For instance, the ideal teaching situation pictured in theories may be different from the reality of workplaces. This conflict of workplace issues as an aspect of professional identity was felt by participant teachers. One of the MA students depicted this issue:

> *We have to work within the limitations of a customer-oriented system which is far from what is learned from theories (MA19).*

Referring to giving priority to customers' demands in private working environments, a PhD student asserted:

> *The scores that are obtained from exam papers of language learners are the measure of teachers' competence. The higher the scores, the better the teachers are assumed to be. Such product-based view ties teacher's hands (PhD39).*

Furthermore, graduate STs believed that being full-time students, having low incomes during their education, costs of university enrollment, and considerably high workloads were among other impediments to professional identity development. Apparently, TE programs have failed to develop autonomous teachers who are empowered with the tools to overcome the constraints of administrations, institutes, and textbooks (Kumaravadivelu, 2001). Domains of professional identity such as student needs, workplace issues, and personal development need to be considered by TE programs. The impact of TE programs on the professional identity development of teachers has been the concern of several researchers (e.g. Bukor, 2015; Nickel & Zimmer, 2019). With regard to the role of context in forming identity (Beijaard et al., 2004), they recommend that teacher educators offer teachers the opportunity to negotiate their personalities in order to discover multiple identity possibilities, each to be used in its own proper right (Aneja, 2016).

The Quest for the 'Self'

The participants of this study believed that being exposed to a bulk of information through merely monologue-based instruction from teacher educators as well as the lack of opportunities for the involvement of STs in expressing their related experiences and beliefs caused the STs to find it difficult to answer the questions about *who they are* and *what kind of teacher they are going to become*. While professional identity refers to a set of characteristics attributed to an individual by society in a way that they are recognized for that identity, the 'self' refers to an individuals' sense of asking *who am I and what am I*. Being aware of the importance of knowing their 'self', participant teachers recommended 'experience sharing' (BA9, MA25) as an advantageous act that enables them to:

> *…compare out teaching act to what is shared by our classmates (BA2)*

> *…understand the positive and negative points of our teaching and receive helpful feedbacks from our teachers and classmates (BA14)*

> *…learn ways of getting to know ourselves as teachers of our own class (MA22)*

It seems that the courses arranged for the BA level in TE programs are merely concerned with the knowledge of language and some introductory courses to generalities of English language pedagogy. The issues of self-knowledge, identity formation, critical thinking, and reflection appear to be highlighted in the graduate-level curriculum. This gap was revealed clearly when the present researchers inquired about recommendations for better TE programs and the BA students merely asked for more courses on developing the speaking skills. Although the BA students defined knowledge of the 'self' in terms of their language proficiency, the MA and PhD students had a deeper understanding. In some cases, they blamed TE for not paying enough attention to this issue, and in some other instances they believed that teachers were responsible for promoting their own knowledge of the 'self'. The following example extracted from a PhD participant depicts this issue:

> *Sometimes, teachers themselves do not feel the necessity of gaining self-knowledge and they do not observe their attitude as teachers, their achievements, and received feedbacks (PhD32).*

As pointed out by participant teachers of this study, there are several factors that hinder teachers in the journey of learning to know their 'self'. Highlighting the importance of the issue, sharing experience, receiving feedback, and feeling the inherent need for gaining self-knowledge are among the factors that pave the way for teachers to know their 'self'. Korthagen (2004) asserts that deep in teachers' minds, there are questions related to the meaning of existence within a larger community and such questions may have a religious nature of commitment to environments and ideals. This level of self-knowledge is something not all STs are equally aware of (Korthagen, 2004). However, as Crooks (2015) claims, rationalizing teachers' practice requires an understanding of their philosophy of teaching, which is rooted in their personal experiences, values, views, and reflections of the world.

Less-Practiced Reflective Practice

Today, in the era of technology and information, teachers need to be equipped with the knowledge and skills necessary to overcome the needs of students in a globalized society. In such a system, teachers should be

reflective thinkers, strategic teachers, and researchers. The participant teachers of the present study felt the necessity to develop as reflective teachers and researchers who actively seek up-to-date knowledge. The following example from an MA student shows this concern:

> *In the era of information and communication, teachers should take less pride in what they already know and should constantly search for knowledge and look for improvements (MA31).*

In their own situation, as STs participating in TE programs, STs required an inquiry-based curriculum. TE programs need to develop a curriculum that is focused on reflective practice and highlights the importance of self-observation and self-evaluation. The following examples given by PhD participants depict this issue:

> *Teacher education programs should develop teachers who have critical insight and deep analysis of themselves, students' feedbacks, materials, teaching environment, and what happens around (PhD36).*

Such reflective program makes the teacher 'feel the necessity' for a change in her teaching. Without this feeling, a teacher may follow the same route for years despite being questioned by supervisors and observers (PhD32).

As illuminated, STs require opportunities to participate in a system that encourages teachers to think and analyze. It seems that TE programs occupied with transmitting information and theories to STs have not been successful in designing reflective curriculums and developing reflective teachers. According to Akbari (2008), there are several barriers to employing reflective practice as the outcome of postmethod pedagogy in the Iranian EFL context: a) the top-down and administrative system that does not leave room for teachers' autonomy to develop, b) the lack of time, resources, and willingness to implement postmethod pedagogy on the part of teachers, and c) requirements for postmethod pedagogy need daring teachers to implement such pedagogy that, as a result, could lead to their isolation from their discourse community.

The Missing Connection between Teacher Education Programs and Schools

School teachers already graduated from university work under the supervision of Ministry of Education and need to comply with the rules of national documents that set educational policies. Since the intensive curriculum of TE program under the current circumstances may not leave room for including more practical courses, the participants of this study recommended making a connection between TE programs and schools as a solution. Experiencing the difficulties of being novitiate, STs:

> *…are willing to spend apprenticeship periods at schools, preferably the schools that are linked to the TE program we participate in (BA15).*

In this way, not only do STs become experienced in teaching real classes, but they also become acquainted with the regulations of the schools. By providing this opportunity, STs believed that the school and the program would take the same path toward teacher development; otherwise, teachers could find it hard to counterbalance what they have learned during the program and what schools require them to do. Participant STs expressed some of the challenges they confront while teaching at schools. As one of the BA participants said:

> *The ideal situation of teaching pictured during teacher education program is very different from the reality of teaching in the class. At workplace, we face issues related to students, families, school principal, observers, supervisors, rules, and regulations. We have not been prepared for this. (BA5)*

Considering the adequate theoretical courses held in teacher education program, STs asked to be provided with ways to adopt theories in various contexts. One of the PhD STs asserted:

> *Teacher educators need to consider the differences among various ELT contexts and prescribe solutions accordingly. (PhD40)*

Teachers appear to find it challenging to put what they have learned during TE programs into practice. There are several factors that cause this discrepancy. Mirhosseini and Khodakarami (2016) investigated the covert and overt ELT policies in the Iranian context and found the missing links in ELT policies to be "constructing coherent ELT policies; creating awareness regarding the ideological nature of ELT; and communicating the logic of official policies to frontline practice contexts" (p. 295-6). Therefore, it is recommended that TE programs raise awareness in STs regarding the national educational policies in order to hinder the conflicts that STs confront during real teaching practice.

Discussion

TE programs can play a pivotal role in preparing teachers and developing their skills. Due to the limitations when fostering teachers' requirements and preparing teachers to meet learners' needs in some long-established models of TE, the present study, although limited in its scope, attempted to illustrate the components of an effective TE program by understanding the beliefs and ideas of forty-one participant STs attending TEFL programs at BA, MA, or PhD levels at two universities through semi-structured focus group interviews supported with interpretations gained from visiting several ELT-related courses in the same universities. Using a grounded theory research design, the inductive analysis of the data resulted in the development of the following categories: the challenge of developing the ability to move back and forth from theory to practice,the struggle to establish a professional identity, the quest for the 'self', less-practiced reflective practice, and the missing connection between teacher education programs and schools.

Relating theories to practice was viewed as a challenging task by the STs. Mostly, the STs viewed TE as a theoretical curriculum that fails to simulate the classroom's spontaneity or the reality of the workplace (Walkington, 2005). This issue results in the gap between theory and practice (Korthagen, 2010). Therefore, the STs expressed a desire to attend more practical courses during their TE program in order to become prepared for the realities of the classroom and learn how to put the theories into practice. In line with this finding, Gholami and Qurbanzada (2016) asserted that STs and teacher educators acknowledge the need to include more practical courses such as practicums and classroom observations into their programs. The participant STs recognized the value and importance of knowing theories; however, they wanted more involvement in the way theories are presented in order to explore the ways theories could be implemented in real practice. Sjølie (2014) asserted that the way STs conceptualize theory can affect the way they engage with the theories in their TE courses. According to the participant STs, illuminating the role of theories in practice requires the guidance of teacher educators in order to help the STs learn from both the theories and practice. As Gholami and Qurbanzada (2016) explained, the courses in which their practicality is not clear to student teachers are considered to be unhelpful in preparing them for real teaching.Teacher educators are recommended to have open ears regarding STs views and ideas in order to understand how to present theories (Sjølie, 2014). On the other hand, teacher educators need to be equipped with more theoretical knowledge and ability to connect theories to their students' future practices, as well as their own (Swennen et al., 2008).

Teachers greatly acknowledge their personalized beliefs about learning and teaching. The established beliefs work as filters that direct the way future teachers perceive and interpret the information presented to them through TE programs (Borg, 2006). Therefore, as mentioned by the participant STs, teacher educators need to value the personal experiences and beliefs of STs and help them become more involved in their education programs (Wilks et al., 2019). They also give STs the 'voice' to share their pedagogical concepts and teaching principles arisen from their personal experiences in order to help them overcome teaching difficulties. Similarly, Tajik and Pakzad (2016) asserted that giving STs a voice to express their thoughts in the class contributes to teachers' reflectivity. Guided by teacher educators, STs may benefit from observing and analyzing their teaching and become empowered to theorize their own practice. Furthermore, as Pajares (1992) suggested, pre-service teachers tend to preserve their pre-existing beliefs unless those beliefs are proved to be unsatisfactory and inadequate by being challenged. A reflective approach provides a thought-provoking situation through which STs could verify their assumptions and knowledge of language teaching and learning (Farrell, 2018).

Notwithstanding the main focus on covering the theoretical syllabi and reduced emphasis on practical teaching and personal experiences in the current TE programs, STs, struggling to establish a professional identity, are actively seeking professional development in order to reach their goals. As Zare-ee and Ghasedi (2014) asserted, TE could greatly support STs in developing a professional identity; however, the lack of support from the administration acts as a major block in ST's professional identity construction. TE programs should be required to empower STs with the tools to overcome the constraints imposed on them by workplace, materials, and administration. In agreement with this finding, Abednia (2012) found that critical TE helps STs develop critical autonomy since critical TE enables STs to reconsider their uncritical habits and attitudes and become aware of the constraints imposed on them by authorities and institutions. In helping STs to construct professional identities, TE is recommended as a way to provide the opportunity for teachers to negotiate their personalities in order to discover multiple identity possibilities, each aimed to be used in its own proper right (Aneja, 2016). Teachers consider the identity construction built upon negotiation and positioning as a relevant and meaningful

experience (Søreide, 2006) which helps them deal with aspects of professional identity such as learner needs, workplace issues, and personal development.

TE programs are advised to highlight the importance of helping STs gain self-knowledge since the beliefs that are shaped in the familial environment of teachers can influence their experiences at school, as well as their career choices, teaching practices, teaching philosophies, and teacher identities (Bukor, 2015). As discussed by the participant STs, their program may contribute to self-knowledge development by creating a situation in which the STs could share related personal experiences, receive feedback, and inherently feel the need to gain knowledge of the self. Through reflective activities, teacher educators can assist STs by challenging their personal experiences and beliefs (Walkington, 2005). On that account, with the competence and confidence obtained from reflective practices during their program, STs autonomously become the decision-makers in their own classes and develop into the professional agents of their careers (Yangın Ekşi et al., 2019).

The interviews with the participant STs documented their inclination to participate in a reflective curriculum which, despite the limitations imposed on them by their administrations and materials, develops in them the ability to think, analyze, reflect, make decisions, and inherently feel the necessity to make a change. In line with this finding, Abednia (2012) found that critical TE helps STs to shift their views from thinking of teaching as an instrument, which deprives teachers' freedom of action and thoughts, to the view that they could transform the present situation by raising awareness and making a change. Although there are barriers to the implementation of reflective practice in the Iranian EFL context (Akbari, 2008), Tajik and Pakzad (2016) encouraged reflective practice in TE by familiarizing STs with types of reflection, giving them opportunities to internalize reflection types through action, encouraging STs to share ideas with colleagues, and practicing self-inquiry.

The present study found some inconsistencies among national ELT educational policies, the theories taught in TE programs, and the real-life practices of English language teaching. Therefore, it is recommended that TE programs invest more time in raising STs' awareness regarding the logic of national educational policies (Mirhosseini & Khodakarami, 2016) in order to limit the conflicts that STs encounter during real teaching practice due to the contrasts between teachers' personal ideologies and regulations assigned by authorities (Eslamdoost, et al., 2019). Furthermore, as mentioned by the participant STs, considering the location-specific requirements of each ELT context (for example, language institutes or private and public schools in rural and urban areas), teacher educators should prescribe proportionate guides that fit the situation. Mentors and teacher educators are required to have an accurate understanding of the specific ELT situation for which they are preparing teachers. Additionally, by maintaining the link between TE programs and schools, STs may obtain the needed assistance, exchange experiences, and explore the link between theory and practice (Kimmelmann & Lang, 2019).

Conclusion

Based on the beliefs of a number of STs, the present study aimed to explore the issues and challenges that they commonly encounter during TEFL teacher education program in Iran in an EFL context. The findings of this study were obtained from a qualitative research design that inspected the particular characteristics of a specific context. However, the results of the present study may have implications for both local and foreign contexts. As mentioned in the context section, the curriculum of every degree level at university prepares STs to teach English. Since not every BA student teacher may enter a graduate program, TE programs need to raise BA students' awareness concerning self-knowledge, identity formation, critical thinking, and reflection. As STs' beliefs regarding TE programs for each degree level at university seem to be neglected in the literature, the results of the present study may be thought-provoking for scholars and teacher educators as they discover what STs think of their TE programs due to the fact that teachers' beliefs and cognition greatly influence their teaching act. Additionally, the ST's desired components for TE discussed in this study may be of use to curriculum designers and material developers so that they can design programs that pay more attention to STs' needs.

Overall, taking the first steps toward proposing the components of an efficient university TE program in light of STs' perceptions in the Iranian EFL context, the researchers found that by involving STs in the curriculum

and fostering their autonomy, TE programs can develop language teachers who are empowered with the essential competence, confidence, and tools to teach and make decisions in their classrooms. Teacher educators may develop STs' identities by guiding them to reflect on personal beliefs and experiences in the context of TE programs and workplaces, and the roles they play within each context. By engaging in reflective activities and receiving feedback, they can find the connection between theory and practice, and consequently, find the 'voice' to theorize their practice. TE programs need to help STs discover insights about their beliefs, perceptions, and interpretations rooted in their personal, educational, and professional experiences, all of which can greatly influence teacher identity. Fostering STs' autonomy can prevent teachers from simply adapting to the existing contexts and help them become constructive decision-makers.

Conflicts of interest

The authors declare that they have no conflicts of interest.

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Appendix

Participants of the study: the details

No.	Degree level	Code	University	Gender	Age	Teaching Experience	Enrollment Status
1	BA	BA1	Private	Female	23	3 years	Full-time
2		BA2	Private	Female	22	1 year	Full-time
3		BA3	Private	Male	24	2 years	Full-time
4		BA4	Private	Female	24	1 year and a half	Full-time
5		BA5	Private	Female	23	1 year	Full-time
6		BA6	Private	Male	22	None	Full-time
7		BA7	Private	Female	22	None	Full-time
8		BA8	Private	Male	23	None	Full-time
9		BA9	Private	Male	21	None	Full-time
10		BA10	Public	Male	24	1 year and a half	Full-time
11		BA11	Public	Female	23	4 years	Full-time
12		BA12	Public	Female	23	1 year	Full-time
13		BA13	Public	Male	24	2 years	Full-time
14		BA14	Public	Male	23	3 years	Full-time
15		BA15	Public	Female	22	None	Full-time
16		BA16	Public	Female	21	None	Full-time
17		BA17	Public	Female	22	None	Full-time
18	MA	MA18	Private	Male	26	5 years	Full-time
19		MA19	Private	Female	28	6 years	Full-time
20		MA20	Private	Female	26	4 years	Full-time
21		MA21	Private	Female	27	3 years	Full-time
22		MA22	Private	Female	27	4 years	Full-time
23		MA23	Private	Female	29	7 years	Full-time
24		MA24	Private	Male	31	9 years	Full-time
25		MA25	Public	Male	29	5 years	Full-time
26		MA26	Public	Female	27	3 years	Full-time
27		MA27	Public	Female	30	9 years	Full-time
28		MA28	Public	Female	26	2 years	Full-time
29		MA29	Public	Male	29	5 years	Full-time
30		MA30	Public	Female	26	3 years	Full-time
31		MA31	Public	Male	28	7 years	Full-time
32	PhD	PhD32	Private	Female	34	11 years	Full-time
33		PhD33	Private	Male	32	10 years	Full-time
34		PhD34	Private	Female	38	14 years	Full-time
35		PhD35	Private	Female	29	6 years	Full-time
36		PhD36	Private	Female	36	12 years	Full-time
37		PhD37	Public	Female	33	7 years	Full-time
38		PhD38	Public	Female	37	13 years	Full-time
39		PhD39	Public	Male	32	10 years	Full-time
40		PhD40	Public	Male	35	12 years	Full-time
41		PhD41	Public	Female	34	9 years	Full-time

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On Using Languages other Than the Target One in L2 Adult Language Education: Teachers' Views and Practices in Modern Greek Classrooms

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Current developments in language education call for a reassessment of the role that students' already-established linguistic repertoires can play in language teaching. This study probed into adult second language education in Modern Greek offered in Greece, where classes are culturally and linguistically diverse. We investigated teachers' views and perceived practices regarding the use of other languages in their classes. A mixed-method design was followed. Data on teachers' opinions was collected via a questionnaire completed by 30 teachers. Complementary data on teachers' practices collected through observations of two classes was also studied. The results indicated that English was mainly used by the teachers as a mediation language, although a wide variation was reported in the amount of other-language use. Large variations were also reported in the students' behaviour. Teachers stressed several benefits from using other languages in class, but also expressed concerns about excessive reliance on other languages and on how using a support language would impact students with limited proficiency in this language. These findings were discussed in light of recent developments in language education and implications for teacher training were considered.

***Keywords*:** language education, other-language use, Modern Greek, multilingual classes, adults

Introduction

The use of languages other than the target one in the process of teaching and learning a second language (L2) has been viewed as a practice to be avoided since the time of the 'Great Reform' and especially under the influence of the Direct Method (V. Cook, 2001; Hall & Cook, 2012; Howatt, 1984). The tradition of monolingual teaching survived the overhaul of second language teaching methods during the 20th century. During this period, as Hall and Cook observed (2013: 278), limited reference was made to the role of other languages, and the issue had been marginalised in the relevant discourse. However, in recent years, monolingual teaching has been challenged by both shifting theoretical perspectives and research on classroom practice. Students' and teachers' first languages (L1) have emerged as a valuable resource in teaching and learning (Butzkamm & Caldwell, 2009; V. Cook, 2001; Cummins 2007; M. Turnbull & Dailey-O'Cain, 2009).

Nevertheless, language classrooms in many contexts are culturally and linguistically diverse and the student population is quite heterogeneous in terms of their L1. The utilisation of students' and teachers' full linguistic repertoires, including languages other than their L1, in the process of teaching and learning an additional language have been scantily investigated (B. Turnbull, 2018). A few relevant studies have focused on English as a lingua franca in language classes (B. Turnbull, 2018; Ife, 2008; Wang, 2013), showing that English in these contexts served functions similar to the L1 in linguistically homogeneous classes.

Against this background, the present study probed into adult second language education and Modern Greek teachers' views and practices regarding the use of languages other than the target one in their classes, where the composition of the learners' population was a multicultural and multilingual mix (Psaltou-Joycey, 2008). The institutions approached for data collection do not pose any requirements for student enrolment in terms

of other-language knowledge (e.g., English); therefore, the existence of common languages among the students and the teacher cannot been taken for granted.

Investigating what teachers know, think, and believe, allows us to gain an understanding of their instructional decisions. Teacher cognition, shaped by a variety of factors ranging from teachers' professional education to their own experiences as students, has been found to influence their classroom practice (Borg, 2003). In parallel, complementary data on teachers' practices collected through observations were studied. The results of this study are expected to have important implications for teacher training and life-long professional development.

Literature Review

A Place for Students' Already-Established Linguistic Repertoires in the Classroom

While the direct method promoted the exclusive use of the target language in classes (Hall & Cook, 2012; Richards & Rodgers, 2014), subsequent approaches to language teaching rarely abolished the use of students' own first language altogether. However, great emphasis was placed on maximising L2 use, as language input (Krashen, 1985) and negotiation of meaning (Long, 1996) were considered critical for language acquisition. Therefore, "[t]he L1 is not something to be utilised in teaching but to be set aside" (V. Cook, 2001, p. 404), as it reduces students' exposure to the L2 or, in the case of the students, is considered an indication of off-task behaviour (Macaro, 2005).

Despite these recommendations, there have been voices acknowledging that the use of students' own first languages is an inescapable fact in language classes. An abundance of studies has shown that classroom interaction includes the use of students' first languages by both the teachers and the students (for a review of the literature, see Hall & Cook, 2012). In fact, as Levine (2011) observed from his own teaching experience, the more control students have over the content and direction of classroom communication, the more likely they are to employ their L1. The allowance for L1 use has been shown to have psychological benefits for the students as it can play a "reassuring" role in the L2 classroom, helping to reduce students' anxiety and increase security (Butzkamm & Caldwell, 2009; Levine, 2003; Littlewood & Yu, 2011). The L1 can also be used as a metacommunication tool by the students (Storch & Aldosari 2010; Storch & Wigglesworth, 2003); Swain and Lapkin (2000) showed that it is the code employed for structuring and organising tasks in classes. As Macaro (2005) pointed out, students often lack the language necessary to manage a task and therefore they deploy their full linguistic repertoire as a compensatory communication strategy.

As far as the teachers are concerned, they resort to the students' first language for a variety of functions. M. Turnbull (2000, as cited in M. Turnbull & Arnett, 2002) distinguished between academic, managerial, and social purposes, while Littlewood and Yu (2011), along the same lines, made a distinction between "core goals", i.e., teaching the target language, and "framework goals", i.e., the use of language for affective and interpersonal support, and as an aid to classroom management. Each of these "macro-categories" (Turnbull, 2000, as cited in M. Turnbull & Arnett, 2002) included a repertoire of functions. For instance, core goals include explaining a complex grammar point and providing a translation for an unknown word, while classroom management covers functions such as providing instructions for classroom activities and setting the homework.

Teachers have reported considering the use of students' L1 as "unfortunate and regrettable but necessary" (Macaro, 2005, p. 68), while their attitudes towards its use have been found to be subject to change with time and experience, as they gradually recognise that the L1 can be a valuable resource in teaching (Hall & Cook, 2013). However, they seem to experience feelings of guilt when classroom time is devoted to the students' L1 (Butzkamm, 2003; Copland & Neokleous, 2011; Macaro, 2005). Moreover, a wide variation has been observed among teachers and among lessons delivered by the same teacher in terms of the amount of other-language use (Levine, 2011; Macaro, 2001; Polio & Duff, 1994). Another factor determining the amount of L1 use by the teachers is their learners' language capacities, as teachers tend to use it more with lower proficiency students (e.g., Kharma & Hajjaj, 2009; Macaro, 1997; Mitchell, 1988).

Several scholars have shared what they consider to be good practices of L1 use to boost the development of multilingualism in a classroom context, building on what research has revealed as natural circumstances of L1

occurrence. V. Cook's (2001) good practices include, among others, translations by the teacher to explain grammar and vocabulary, L1 use for testing purposes, both in instructions and in activities involving both languages, and L1 use by the students for scaffolding purposes during tasks. Butzkamm and Caldwell (2009), while stressing the fact that the language class provides a unique opportunity for meaning-focused interactions and message negotiation in the language under study, propose that challenging points in classroom communication could be dealt with through use of the sandwich technique. According to this technique, the teacher provides a translation of an unknown expression that has just been used and then repeats it in the target language. Finally, Levine (2011) suggests that simply allowing the L1 in the class is not always effective. He proposes that both teachers and students should become aware of their language choices and proceed to make principled use of their full linguistic repertoires according to commonly decided norms.

Language classes where students do not share the same L1 are an underinvestigated educational setting as far as the use of languages other than the L1 is concerned. Some studies have focused on the role of English as a lingua franca in educational settings at the tertiary level where knowledge of English was either a condition for course enrolment (B. Turnbull, 2018) or anticipated as it involved international university students (Ife, 2008; Wang, 2013). These studies have shown that English was used for both core and framework goals, according to Miles Turnbull's (2000) terminology, by both the teachers and the students.

Even though scholars recognise the need to value students' language backgrounds and acknowledge their constant presence in language classes, few studies have been conducted on whether switching to other languages constitutes a technique more efficient than monolingual teaching. Empirical evidence from vocabulary teaching (Tian & Macaro 2012; Zhao & Macaro, 2016) showed some benefit from using L1 code-switching, as the students offered with an L1 translation equivalent performed better in immediate and delayed recall tests that those offered an L2-only explanation. Furthermore, B. Turnbull and Sweetnam Evans (2017) found that strategic use of the L1 in discussion groups could enhance reading comprehension in the L2.

Sifting Perspectives on Multilingualism and Language Education

The reassessment of the role already-established languages play in the teaching and learning of an additional language has been fuelled by recent developments in our perception of multilingualism as a dynamic phenomenon. As the study of second language learning has been attracting the interest of researchers from a wide range of fields, such as anthropology, sociology, cognitive science, and education, our understanding of multilingualism and second language learning has been broadened. According to the Douglas Fir Group, a group of celebrated scholars,

> *Multilinguals are well documented as handling this rich semiotic repertoire flexibly, sometimes keeping the languages separate, at other times alternating them, mixing them, or meshing them. The competence of multilingual speakers is the holistic sum of their multiple-language capacities*
>
> (Douglas Fir Group, 2016, p. 26).

In this context, the notion of translanguaging (García, 2009) has been put forward, according to which multilinguals possess a unitary language system, from which they select the features that would best serve the communicative situation at hand (Vogel & García, 2017). Translanguaging has been proposed as an educational practice (Cenoz, 2017; Cenoz & Gortner, 2020), mainly in school classrooms with migrant and refugee children as well as in traditional classes where students learn an additional language. In this framework, language instruction is viewed as a process where the teacher nurtures the learners' efforts to integrate more features into their repertoires, which the learners then employ according to their needs (García, 2017).

Moreover, in the educational context, the use of students' L1 has been linked to the notion of investment. According to Darvin and Norton (2018, p. 2), the notion refers to "the commitment to the goals, practices, and identities that constitute the learning process and that are continually negotiated in different social relationships and structures of power". Classroom conditions need to allow for students to express their identities and activate prior knowledge in order to maximise investement; these processes can be effectively served by the students' already-established linguistic repertoires (Cummins, 2001).

The changing perspectives on the language practices of multilinguals and the realisation that keeping languages separate is neither plausible nor constructive in education has opened the way for new directions in

language classes. One such direction is the integration of 'mediation' in the Common European Framework of Reference for Languages (CEFR) (Council of Europe, 2001). The concept was introduced in the 2001 edition of the CEFR, but has recently been developed further (Council of Europe, 2018) and, as analysed by North and Piccardo (2017, p. 85), includes a linguistic type described as follows:

> *Linguistic mediation comprises both the interlinguistic and the intralinguistic dimension, which could be in the target language (e.g., summarise an L2 text in L2) or in the source language, including mother tongue. Another form of linguistic mediation is the flexible use of different languages, for example in multilingual classrooms or in everyday professional life.*

In another example, the long-neglected practice of pedagogical translation has regained popularity in the relevant literature, as the merits of constructively using this type of activity in language classes are being reassessed (V. Cook, 2010; Tsagari & Floros, 2013).

In this changing environment, where major advances have been made in scholarly thought regarding the understanding of multilingualism and its development, this study focuses on adult Modern Greek second language education in Greece, where the audience is multilingual and multicultural. Nevertheless, all the participants in the educational process have a linguistic repertoire at their disposal, which may include elements from various languages, some of them shared with others in the same context. To our knowledge, no previous study has focused on this aspect of adult language education in Greece. However, a number of studies focusing on multilingualism in primary and secondary education have concluded that while teachers generally recognise the value of maintaining students' heritage languages, they do not see a place for these languages in school and do not acknowledge their role in their students' academic development (Gkaintartzi et al., 2014; Gkaintartzi & Tsokalidou, 2011; Mattheoudakis et al., 2017; Mitits, 2018). Given these findings, it is worth investigating adult educators' stance on the issue, i.e., if and how they engage with multilingualism in their teaching practices. Our focus is on how teachers perceive that they deploy their linguistic repertoires and in particular with languages other than Modern Greek, as well as what their views are towards relevant practices. Aiming to shed some light on this issue, our study addresses the following research questions:

1. What are Greek as a second language teachers' views and practices on the use of other languages in the classroom?
2. What are the students' practices with regard to other-language use, as reported by their teachers?
3. Are there statistically significant relationships between teachers' reported practices and their students' use of other languages in class (as reported by the teachers)?

Materials and Methods

In this study, we pursued a mixed-method design, which allowed for an in-depth investigation of the research questions and the verification of findings from two perspectives. Data was collected through a questionnaire that was administered to teachers online. Additionally, observations of two classrooms were conducted in an Athens-based educational institution offering Modern Greek language classes to adults. According to Creswell and Clark (2017, Chapter 1, The Three Core Mixed Methods Designs section, par. 3) the purpose of the convergent mixed-method design "is to compare the two results with the intent of obtaining a more complete understanding of a problem, to validate one set of findings with the other". In this study the data collected through the questionnaire was analysed to answer all of the research questions. The qualitative data obtained through the observation was collected to support the quantitative data examining other-language use by teachers in L2 Greek classrooms.

Data Collection Tools and Procedures

The first version of the questionnaire was developed and piloted with two instructors, who filled it out and provided feedback through an interview. The questionnaire was revised and refined in response to their comments. The final questionnaire (Appendix) contained 21 items divided into four sections. Section 1 included items about the teachers' characteristics as well as their typical classes. Section 2 elicited teachers' views and reported practices. Section 3 focused on students' perceptions and practices, while Section 4 investigated the benefits and drawbacks of using other languages in class. All of the sections contained both

open- and closed-ended questions. The closed-ended questions in Sections 2 to 4 took the form of a 5-point Likert scale. We used open-ended questions whenever we could not predict the full range of possible answers that teachers could offer (Dörnyei, 2003). The questionnaire's final version was administered via the internet using the Google Forms application. Invitations to participate in the study were sent via email to institutions offering courses to adult language learners. In particular, we addressed four institutions in the Athens area, one in Thessaloniki, one in Crete, and one in Ioannina. None of these institutions set any other-language requirements (e.g., English) for class enrolment. In four cases, these institutions were language centres established at universities, offering courses to anyone interested in the language. They are also open to individuals beyond the university's academic community for a fee. The rest were private institutions based in the Athens area, with a curriculum aligned to the CEFR, according to their website ads.

Moreover, observations of two language classes for adult learners of Modern Greek as an L2 were conducted. The classes were part of the programmes offered by the institutions we approached for the questionnaire administration. Given that students' level of proficiency in their L2 determines the amount of L1 use, we opted for classes at lower proficiency levels, where teachers make more extensive use of students' L1 according to the literature (Kharma & Hajjaj, 2009; Macaro, 1997; Mitchell, 1988). This was expected to increase our chances of recording other-language use for an array of purposes. Moreover, taking into consideration the wide variation among teachers in the amount of other-language use (Levine, 2011; Macaro, 2001; Polio & Duff, 1994) we decided to observe classes at the same level taught by different teachers, in an effort to capture this variation. Undoubtedly, a comprehensive documentation of teachers' practices would require expanding the research design to include more proficiency levels. Thus, restricting our observation sample to one proficiency level could be considered a limitation of the study.

The observed classes were of A2 level (Council of Europe, 2001) at the time of the observation and were held five days a week. Each class was observed for one lesson, which lasted 2 hours and 15 minutes. Before the observation, both the teachers and the students were informed of the researchers' interest in aspects of the teaching/learning procedure, but no details were given about our specific interest, in an effort to affect normal classroom procedures to the least possible degree. Classroom recordings were not obtainable. The observer sat at the back of each classroom and wrote down instances of instructional practices in the form of field notes. She focused on instances of other-language use by the instructor and towards the instructor, along with information about the general context of use. Moreover, she took notes on the type of activities conducted in class, and the role the teacher and students played in them. The use of observation field notes could be considered a limitation of the present study. Although the researcher tried to make note of all the utterances produced by the teacher and students as accurately as possible, short-term memory limitations may have occasionally undermined the task.

Participants

The questionnaire was filled out by 30 language teachers, 25 working for language centres established at universities and five employed in private institutions. Of them, 80% were female and 20% male, 40% were in the 31- to 40-year-old age range, while 43% were in the 41- to 50-year-old age range. Regarding their education, 60% held a masters' degree and about 40% a PhD. The questionnaire did not include a question about their area of specialisation, but the institutions contacted are known to hire teachers with a specialisation in applied linguistics, teaching Modern Greek as a second language, and intercultural education. Approximately 77% of them had more than ten years of experience in language teaching, while the rest had four to nine years of experience. All teachers spoke Greek as their first language and reported English as an additional language. In a four-point proficiency scale, 90% of the teachers reported that they had a command of the English language that allowed them to use it for professional, academic, and social purposes. A number of other languages were reportedly spoken by the teachers, among which were French (73%), German (30%), and Spanish (30%) at various proficiency levels.

The teachers observed were women, named Katerina and Maria for the purposes of this study, and both had a masters' degree in teaching Greek as a second language. They both reported a knowledge of English at C2 level, while Maria also reported knowledge of the French language at A2 level. Their teaching experience was 19 and 11 years respectively. Katerina's and Maria's classes hosted 18 and 22 students respectively with a variety of L1s: Chinese, Russian, Bulgarian, German, Albanian, Arabic, Farsi, and Spanish, among others. As a result, both

classes were linguistically diverse with more than seven first languages spoken in each of them. All of the students held at least a secondary school level certificate, while some held a university degree. No other language knowledge, e.g., English, was a condition for course participation.

Data Analysis

The closed survey data was analysed via SPSS 19 software. We calculated descriptive statistics and examined relationships between variables. The data from the open-ended questions was analysed through the content analysis method (Dörnyei, 2003). More specifically, each teacher's response was initially marked for key points, and, on the basis of this initial marking, broader thematic categories were formed.

The observation data from the two lessons was carefully inspected and instances of other-language use by the teacher, both productively and receptively, were identified. As a next step, the identified instances of productive other-language use were categorised in terms of the functions they served in the following categories: teaching the target language, classroom management, and affective and interpersonal support. We defined receptive language use by the teacher as instances of other-language use by the students addressing the teacher, in response to which the teacher reacted either verbally in Greek, physically, or by modifying her behaviour. We did not expand our investigation to instances of students addressing other students, although this would potentially reveal more aspects of the role other languages play in the learning process. However, both classes hosted a rather large number of students, who spoke to each other in several languages, as the observation process revealed. Focusing on the languages used by the students would require researchers fluent in a variety of languages. Moreover, monitoring all the interactions occurring simultaneously in class, especially during pair or group work, would require several researchers present in the classroom or multiple recording systems, an endeavour worth pursuing but beyond our means.

Results

In this section, we first present the findings from the questionnaire, which illustrate the teachers' views and reported practices, as well as the students' practices as viewed by the teachers. A reliability analysis was carried out on the closed-ended Likert scale items of the questionnaire. Cronbach's alpha showed that the questionnaire reached high reliability ($\alpha = 0.970$). Subsequently, the observation results are reported, aiming to substantiate the questionnaire's findings.

The Questionnaire

The teachers were asked to share information about their typical language classes and their students (Figures 1 and 2). The results indicated that the vast majority of classes were large, consisting of more than 16 students. In these classes, the students spoke a variety of first languages/dialects; 50% of the teachers reported that four to six different first languages were spoken in their classes, while another 40% reported more than six languages.

Teachers' Views and Reported Practices

Regarding the frequency of using other languages at different proficiency levels (Figure 3), it was found that at level A, all of the teachers employed elements of other languages, but a large variation was observed in frequency, as 26% reported that they used other languages only occasionally, while 20% used them very frequently. The use of other languages decreased as the student's language level increased.

In an open-ended question, 90% of the teachers stated that the most commonly used other language was English, while some teachers took advantage of more language resources at their disposal, like Spanish and French, and a few words of the students' other L1s. It is worth noting that 7% of the teachers reported that no language other than Greek was used. Given the results of the previous question, we assume they taught classes at B and C levels.

Figure 1

Number of students in a typical class

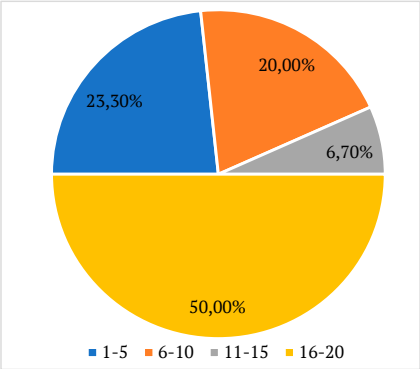


Figure 2

Number of languages/dialects in class

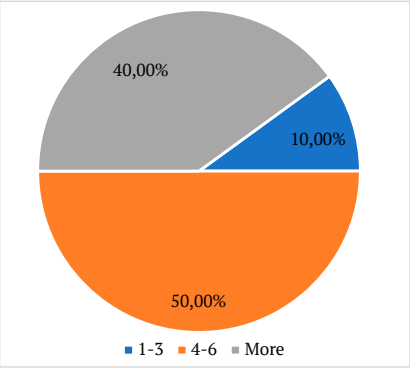
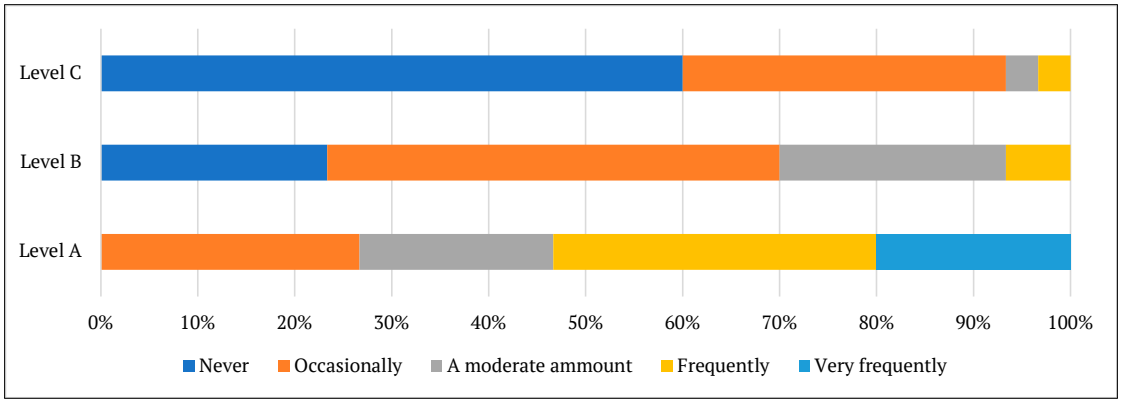


Figure 3

Teachers' reported frequency of using other languages at different proficiency levels



Teachers were also queried about their frequency of use of other languages for specific purposes. Figure 4 visualises the results. Regarding core goals, teachers reported using other languages to explain unknown words and grammar more frequently than to provide feedback and assess students. In fact, the majority of teachers, more than 70%, reported that they almost never used it for the latter two purposes. A substantial variation was observed in the framework goals, either for class management issues or for building rapport with the students. In relation to the first, 10% of teachers noted that they never use other languages to provide instructions for activities, while 20% frequently do so. Along the same lines, a large variation among the participant teachers was found regarding the use of other languages to foster personal relationships, as only 10% of teachers reported that they never use languages other than Greek, while 37% stated that they use them frequently or very frequently (27% and 10% respectively).

An open-ended question was used to elicit additional purposes for which teachers use languages other than Greek. Only 11 teachers filled in this question, and out of the 13 purposes mentioned, seven had to do with classroom management (ex. 1), while four of them were cases of affective and interpersonal support (i.e., help with medical exams and doctor's prescriptions). Only two cases of core goals were mentioned, and in both the teachers clarified that the other language was used in one-to-one interactions or after class (ex. 2).

1. *"To provide information for procedural issues (e.g., course enrolment issues, absences), but yet again as little as possible".*
2. *"[…] during the break or after class, to answer their questions (in case they request it)".*

All of the teachers stated that they have learned some expressions in the students' L1, although 40% follow this practice occasionally (Figure 5). Finally, with regard to encouraging the use of other languages by the students,

13% of the teachers were completely negative towards this idea, while 50% do not frequently do so. The rest of the participant teachers took a more positive stance towards this strategy.

Figure 4

Teachers' reported frequency of use of other languages for various functions

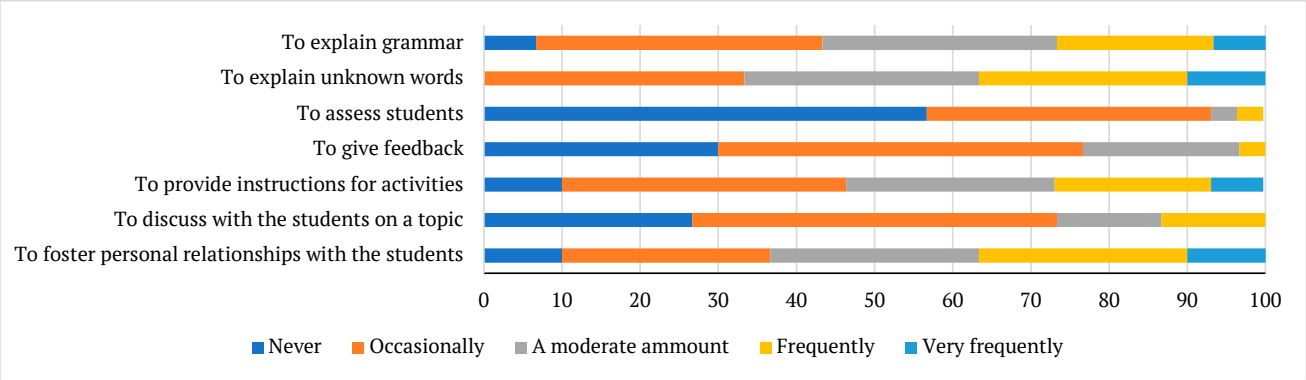
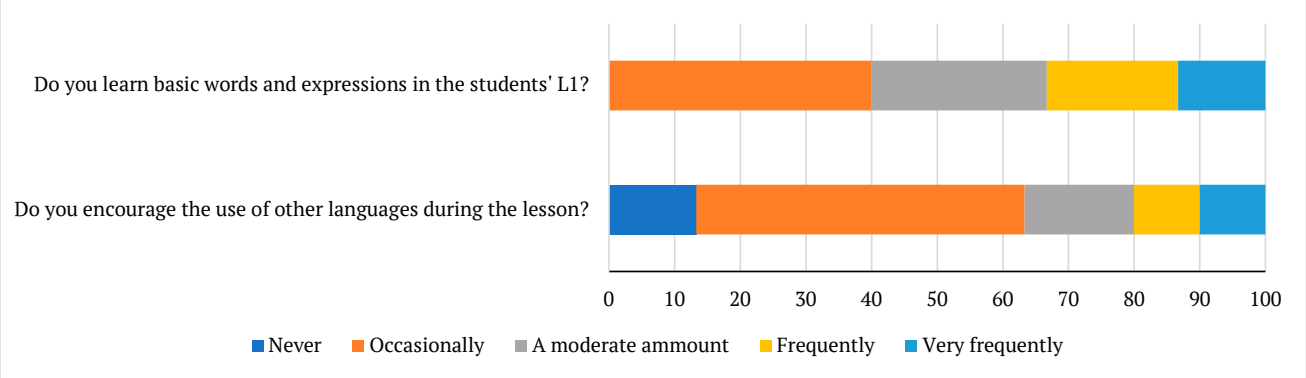


Figure 5

Teachers' reported practices with regard to other languages use encouragement



In another open-ended question, teachers were asked about the benefits of using languages other than Modern Greek in class. Twenty of the participant teachers offered their answers, with one of them admitting that (s)he was not in a place to express a scientifically justified opinion on the issue. Some of the answers repeated several of the purposes for using other languages included in previous closed-ended questions. In these cases, the teachers frequently stressed that the use of other languages for these purposes could be considered useful when all other means had failed (ex. 3), thus echoing views claiming that other languages should be avoided.

3. *"It can be used as a vocabulary teaching strategy, when the teacher has exhausted all other teaching strategies (definition, imitation, example, image)".*

From the qualitative analysis of the rest of the answers, the following themes emerged. The increase of class efficiency and the saving of time was noted by four teachers (ex. 4), while the encouragement of comparison/ contrast among languages was also reported by four teachers (ex. 5). The rest of the answers focused on the affective functions of using languages other than Modern Greek. Four teachers highlighted the other languages' use contribution to relieving students' anxiety, especially at lower proficiency levels. Lastly, three teachers pointed out the establishment of rapport with the teacher and among students (ex. 6).

4. *"The use of a mediation language will save time in practical issues, when communication cannot be conducted in the target language".*

5. *"Through comparison, similarities and differences between languages are identified".*
6. *"Mutual understanding among students, establishment of communities and friendships, encouragement, and increased participation in group activities".*

The open-ended question about the drawbacks of using other languages was answered by 19 teachers, with two of them stating that there are no drawbacks if the teacher knows how to handle the situation. The content analysis of the rest of the answers yielded the following themes. Firstly, the use of other language(s) was believed to obstruct the learning process, a common view from older approaches to language teaching. In particular, 12 teachers noted that students excessively rely on languages other than Greek to communicate. This slows down the learning process, as they do not take risks in expressing themselves, they do not think in Greek, and they keep needing the mediation of another language (ex. 7). Another dimension emerging from the answers was the students' proficiency level in the language used for mediation. Students who do not speak the language used (e.g., English) are excluded from the educational process and they feel discouraged and frustrated, as five teachers noted. Moreover, students' low proficiency in the mediation language may lead to misunderstandings and confusion (four teachers). A third theme that emerged was interference problems. Four teachers noted that the use of other languages can lead to word-by-word translations and code-mixing, a view reflecting more traditional views on multilingualism. Finally, one teacher noted that the existence of many first languages in class leads to confusion.

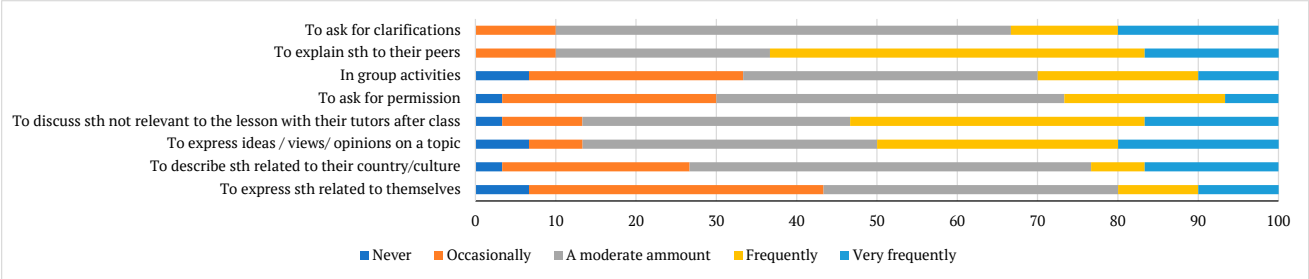
7. *"The use of other languages usually slows down the development of the target language, because the students resort to the other language, via which it is easier for them to communicate, losing thus the opportunity to utilise everything they have learned and enhance their skills".*

Use of Other Languages by the Students

Teachers reported that students employ their full linguistic repertoire in class and use languages other than Greek for a variety of goals (Figure 6). Relatively high degrees of other-language use were reported for students' explanations to their peers and for clarification requests. In these circumstances, the linguistic repertoire of students is used as a scaffold to assist their language learning. Moreover, students reportedly relied on other languages in message-oriented activities (Butzkamm, 2003), namely when they were eager to express meaning that was important to them, such as to express ideas or opinions on a topic.

Figure 6

Students' frequency of use of other languages for specific purposes as reported by the teachers



The teachers were also asked to assess how important it was for students to use other languages for a variety of purposes. Spearman correlation coefficients were then calculated between the reported frequency of use and the importance as viewed by the teachers. The results are presented in Table 1. Moderate and strong positive correlations were obtained for almost all purposes, indicating that their assessment of the importance went hand in hand with the frequency they reported. However, the correlation was weak in the case of students providing explanations to their peers. Careful examination of the data revealed that a group of teachers reported the frequent use of other languages by the students to help their peers but considered this function of low importance for them.

In a relevant open-ended question, 11 teachers offered additional purposes for which students use other languages. Five teachers associated the use of other languages with after-class activities and three with

psychological stress and emotional pressure ("when they are frustrated, sad, or unhappy"). One noted its use for humour, and another one for comments on the topics discussed in class. Finally, one teacher noted that it is used when the teacher provides feedback.

Table 1

Spearman Correlations between the frequency of other-language use by the students and its importance as viewed by the teachers

	How important is it for students to use other languages?							
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
How often do the students use languages other than Greek?								
1. To ask for clarification	0.688**							
2. To explain something to their peers		0.391*						
3. In group activities			0.644**					
4. To ask for permission				0.619**				
5. To discuss something not relevant to the lesson with their tutors					0.503*			
6. To express ideas / views/ opinions on a topic						0.717**		
7. To describe something related to their country/culture							0.739**	
8. To express something related to themselves								0.849**

*p < .05. **p < .01.

Associations Between Teachers' Views and Students' Reported Behaviour

Given the wide variation in teachers' reports of student behaviour for the same purposes, we set out to investigate whether it might reflect the teacher's stance towards other-language use in the classroom. Spearman rank correlations were conducted to investigate relationships between the encouragement of other languages' use by the teachers and the students' reported frequency of use for various purposes. The results are presented in Table 2. A significant, strong correlation was detected with use in group activities, a moderate correlation with other-language use while discussing issues not relevant to the lesson, and a weak correlation with other-language use while describing something related to a student's country or culture. In other words, the teacher's attitude towards other-language use proved to be primarily connected to the students' other-language use to structure and organise the assigned tasks. Furthermore, it was related to providing students with opportunities to share information and participate more fully. Additional correlations were calculated between the teachers' willingness to learn words in the students' L1s and the frequency that students used other languages. However, no significant correlations were detected.

Table 2

Spearman correlations between the encouragement of other-language use by the teachers and the students' frequency of use for various purposes

	Do you encourage the use of other languages in Greek L2 classrooms?
How often do the students use languages other than Greek for the following purposes?	
To ask for clarification	0.311
To explain something to their peers	0.186
In group activities	0.664**
To ask for permission	0.115
To discuss something not relevant to the lesson with their tutors	0.428*
To express ideas / views/ opinions on a topic	0.205
To describe something related to their country/culture	0.391*
To express something related to themselves	0.281

*p < .05. **p < .01.

The Observations

In this section, the results from the observations are presented. The two observed lessons differed in important ways in terms of the amount and purposes of other languages' use. In order for the reader to form a comprehensive picture of the lessons, each of the classes is described separately.

Maria's Class

On the day of the observation, Maria's class was exclusively teacher-directed. The class worked together as a group on teacher-led activities. The students also worked individually, performing reading activities and solving a series of grammar drills. No group or pair work tasks were assigned. Maria used the Greek language almost exclusively in the utterances she produced. She used the English language once, to translate a question after an explicit request from a student who could not figure out its meaning through the other means she used to explain it, i.e., a synonym expression and examples of use in context. We categorised this use as an instance of teaching the target language.

Receptively, 14 instances of students' questions and remarks addressed to the teacher were identified. The students used English in all of the cases, while intrasentential code-switching occurred in a few of them. In particular, in five cases, the students asked for the translation equivalent of an English word, forming the question in Greek and inserting the unknown word in English (ex. 8). In all these cases, the teacher responded by providing the word in Greek. In several other cases, Maria addressed a student in Greek and the student responded in English, resulting in bilingual dialogues (ex. 9). Finally, in two instances, Maria asked about the meaning of certain vocabulary items. The students replied in English and then Maria provided a definition in Greek (ex. 10).

8	*Ti*	*simeni*	*'passenger'*	*sta*	*ellinika*[1]*?*
	What	*means*	*'passenger'*	*in the*	*Greek*
	"What is 'passenger' in Greek?"				
9	*Teacher:*	*Diavase*	*afto*	*to*	*kimeno.*

[1] The question formation is infelicitous in Modern Greek, as it literally means "*What does it mean?"*.

		Read	*this*	*the*	*text*
		"Read this text."			
	Student:	*We had read it.*			
	Teacher:	*To*	*ksero.*		
		It	*I know*		
		"I know it."			
10	*Teacher:*	*Pjos*	*ine*	*o*	*jiatros?*
		Who	*is*	*the*	*doctor*
		"Who is a 'jiatros'?"			
	Student:	*A doctor.*			
	Teacher:	Ne, aftospoupameotandhenimastekala.			
		Yes, hethatwe gowhennotarewell			
		(Yes, the person we visit when we are not feeling well."			

Katerina's Class

Katerina's class contained both teacher-led and student-centred activities. The student-centred activities involved pair work and a 15-minute presentation given by a student. During this lesson, Katerina made more extensive use of English compared to Maria, but no other language was used. In particular, regarding teaching the target language, 27 instances of productive English use involved translations of vocabulary items. It is worth noting that the use of an English translation was only one of the ways used by the teacher to get the message across. To introduce new vocabulary, Katerina utilised a variety of techniques, i.e., showing pictures, dramatising (e.g., for the word *zalizome* "to get dizzy"), and giving example sentences to demonstrate the meaning. In three instances, the teacher translated more extended passages of a dialogue the class worked on; in two cases, English was employed for grammar instruction; while in four instances, the teacher gave information about the pragmatics of language use. As for classroom management, five such instances were identified, all involving instructions for classroom activities. An interesting pattern of use when addressing the whole class was that Katerina delivered the instructions in Greek and repeated part of it, words or phrases, translated into English, in an effort, we assume, to clarify the instructions' parts that may have exceeded the students' current language capacities. The technique was reminiscent of the sandwich technique described by Butzkamm and Caldwell (2009). In two of the classroom management instances, Katerina did not address the whole class, but approached a group of students during pair work and explained the task in English, as the instructions in Greek she had previously provided had not been understood by these particular students. Finally, two instances of affective and interpersonal support were found in the data, one when Katerina used English to praise the language production of a lower-level student, and the second one while she was making a joke.

With regard to receptively using other languages, 31 instances were identified, all of which involved the English language. The following contexts of use were observed. Firstly, Katerina treated students' English translations as an indication of word meaning knowledge and text comprehension. The following pattern of interaction was repeated at various points during the lesson: she would ask the students if they knew the meaning of words, phrases, or passages they encountered during reading and listening activities, the students would reply using the English translation equivalent, and Katerina would provide positive feedback to their answers. Secondly, and as was observed in Maria's class too, the students asked for the translation equivalents in Greek of certain words or phrases. This context was particularly frequent during pair work. Moreover, during the presentation, the student resorted to the use of English when she lacked the language resources to express her thoughts. Katerina provided the word or phrase needed in several such cases. Finally, there were cases where the students requested in English more information about something (e.g., *is 'na sou po' the same as 'dhe mou les'?*). Katerina responded by providing clarifications and examples of use in Greek.

Discussion

The present study investigated Modern Greek as a second language teachers' views and perceived practices regarding the use of languages other than the target one when teaching adult learners. It was found that English was the language mainly used in teacher-student(s) interactions, as was expected given that English is the most widely used language in the world today (Eberhard et al., 2019), and has been established as a global language (Crystal, 2003). The students' L1s were not reported or observed to be used in these interactions.

Findings obtained through the analysis of the questionnaire indicated a large variation among teachers in terms of the amount of other-language use in their teaching practices, a conclusion that concurs with earlier studies (Hall & Cook, 2013; Levine, 2011; Macaro, 2001; Polio & Duff, 1994). The observation data also documented this variation, as one of the teachers preferred monolingual teaching, keeping the languages apart, while the other made more frequent use of other languages. With regard to monolingual teaching preferences, teachers' views on the disadvantages of using languages other than Greek revealed traditional reservations towards L1 use and especially the assumption that such practices hinder target language development and deprive students of opportunities for language practice (V. Cook, 2001; Macaro, 2005). Moreover, the opinions expressed uncovered views on bilingualism challenged by current academic thought.

Another frequent reservation concerning the use of a language for mediation reflects the multilingual/ multicultural realities of classes and the fact that not all students share a language, and even those who do possess different proficiency levels. Although these are legitimate concerns that need to be addressed, one needs to be careful not to abolish the use of a mediation language altogether, given the benefits of using existing knowledge upon which new knowledge can be built (Cummins, 2007). The observation data offered insights into how teachers who embrace other-language use deal with multilingualism in their class. In particular, one of the teachers used translation as a complementary strategy, employing a variety of other techniques to get the message across, a practice that allowed students with limited knowledge of English to participate in the educational process. Additional strategies could facilitate the learning process, especially during the initial stages of language learning, such as encouraging the creation of student groups on the basis of their mother tongue.

With regard to the main functions of other-language use by teachers, the questionnaire findings and classroom observations converge to determine the frequent other-language use for core classroom goals, and in particular vocabulary teaching, a practice that research has suggested to be effective (Tian & Macaro 2012; Zhao & Macaro, 2016). Additionally, the classroom observations revealed another function that was quite frequent in classroom practice; both teachers utilised their students' knowledge of English to monitor their understanding of the target language. This function was not reported in the questionnaire despite being popular among teachers (V. Cook, 2001), perhaps because teachers utilised their knowledge of English receptively and not productively.

Our results regarding the functions of other-language use reflect its utilisation as a scaffold facilitating target language acquisition especially in the initial stages (Kharma & Hajjaj, 2009; Macaro, 1997; Mitchell, 1988); this scaffold was reported to be gradually removed as students reached higher proficiency levels. Although this function cannot by any means be underestimated, instruction was not reported or observed to focus on the development of interlinguistic mediation skills at all proficiency levels, whose importance is being increasingly recognised in L2 education (Dendrinos, 2006; North & Piccardo, 2017; Stathopoulou, 2015), given that students need to be prepared to operate in multilingual environments[2].

These findings lead us to infer that professional guidance in the strategic use of teachers' and students' full linguistic repertoires has been limited, at least for some of the teachers in our sample, with one explicitly stating so. Focused teacher training interventions could help teachers reassess their views on the issue. For instance, Miri, Alibakhshi, and Mostafaei-Alaei, (2017) studied the impact of interventions that are grounded in critical teacher pedagogy and allow participants to problematise the use of students' L1. They concluded that such interventions could lead to critical awareness and changes in teachers' practice. Additionally,

[2] Council of Europe. (2018). Common European framework of reference for languages: Learning, teaching, assessment companion volume with new descriptors. https://rm.coe.int/cefr-companion-volume-with-new-descriptors-2018/1680787989

professional development interventions should focus on disseminating current understandings of the dynamic nature of multilingualism (Douglas Fir Group, 2016) and translanguaging (Vogel & García, 2017) as an educational practice (Cenoz, 2017; Cenoz & Gortner, 2020).

With regard to other-language use by their students, teachers' reports indicated that students often employ their full linguistic repertoires to communicate in class with the teacher and their peers, verifying that this is an inescapable fact in language classes (Hall & Cook, 2012; V. Cook, 2001). However, there was a wide variation in the reported frequency of other-language use. This finding needs to be studied further, as it may stem from a variety of factors ranging from the teachers' desire to appear in compliance to the old doctrine of monolingual teaching to differences in students' proficiency levels. In this study, we investigated the relationship between the teachers' attitudes towards other-language use and the reported student behaviour. We found a positive correlation with functions that are particularly important for learners and especially adult learners, i.e., the need to control and organise their learning and the need to express their identity. This finding is in line with relevant literature emphasising the cognitive and affective benefits for students when using their L1s (Macaro, 2005; Swain & Lapkin, 2000).

Finally, the observations revealed a possible source of variation identified in this context that needs to be considered. Teacher-centred activities may elicit less use of other languages, as language input and output are highly controlled and predictable. In student-centred activities where meaning making is central, interactions can be unpredictable and students' target language skills can be challenged. To cope with this challenge, students need to employ their full linguistic repertoires (Alley, 2005; Levine, 2011). Likewise, explaining complex tasks that students are to perform, especially at the initial stages of language acquisition, might be a challenge for teachers, who may also need to deploy elements of their full linguistic repertoires to manage their classes effectively.

A connection between teacher-centredness and students' use of other-languages in class was also hinted at by certain questionnaire data. A group of teachers reported the higher use of other languages in situations where peers support each other in language learning but considered this function of low importance for the students. These views are an indication that those particular teachers were reluctant to cede part of their traditional role to the students, particularly if this was done through the medium of another language. Therefore, teacher education programmes need to address this aspect of classroom practice as well.

Conclusion

Despite that fact that scholarly thought and empirical evidence offer new perceptions of multilingualism and language teaching, they do not seem to have reached the majority of the teachers in our sample. Our findings have significant implications for teacher training courses, as they highlight the need to educate prospective and in-service teachers on the strategic and principled use of their students' full linguistic repertoires.

Another implication of the present study involves the place of the students' L1s in the educational practice. Given that Modern Greek is learned in a 'majority language' context, including their L1 in the educational process, shows students that their culture and identity is valued in class and, by extension, in the host society. The conditions for the students to invest in classroom practices and language learning could thus be created. However, the teachers participating in this study rarely used the students' language as an organic part of the educational process, although they did seem to be willing to learn elements of these languages in the margins of the educational process. Educational research and practice need to focus on ways to integrate these languages into the curriculum with an emphasis on the mediation aspects of multilingualism.

Conflicts of interest

The authors declare that they have no conflicts of interest.

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Appendix

The questionnaire

Gender:

Female _____ Male _____ Other _____

Age:

18-30 _____ 30-40 _____ 40-50 _____ above 50 ____

Years of teaching experience:

0-3 _____ 4-6 _____ 7-9 _____ over 9 ____

Education:

Bachelor's ___ Master's __ PhD ___ Postdoc ___ Other ___

First language(s):

Modern Greek _____ Other (specify) _____

What second/foreign language(s) do you speak? _____

Proficiency level in each of these languages (in the order mentioned in 6):

	Lang. 1	Lang. 2	Lang. 3
I know key words and expressions. I can communicate in common, everyday communicative situations that require a simple exchange of information.	○	○	○
I can understand the main points of clear standard input on familiar matters. I can produce simple connected text on topics which are familiar or of personal interest.	○	○	○
I can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers possible without strain for either party.	○	○	○
I can use language flexibly and effectively for social, academic, and professional purposes.	○	○	○

What institution/school do you work for? _____

How many students attend your current class(es)?

1-5 ___ 6-10 __ 11-15 ___ 16-20 ___ Over 20 ___

How many first languages do the students in your class speak?

1-3 _____ 4-6 _____ More than 6 _____

Section 2

Do you use any support/mediation language(s) while teaching Modern Greek to students of these proficiency levels?

	Never	Occasionally	A moderate amount	Frequently	Very frequently
Level A	○	○	○	○	○
Level B	○	○	○	○	○
Level C	○	○	○	○	○

When you use support/mediation language(s), which is/are it/they? _____

How often do you use support/mediation language(s), including the students' L1s, for one of the following purposes?

	Never	Occasionally	A moderate amount	Frequently	Very frequently
To explain grammar	○	○	○	○	○
To explain unknown words	○	○	○	○	○
To assess students	○	○	○	○	○
To give feedback	○	○	○	○	○
To provide instructions for activities	○	○	○	○	○
To discuss with the students on a topic	○	○	○	○	○
To foster personal relationships with the students	○	○	○	○	○

For what other purposes do you use languages other than Modern Greek? _____

Do you learn basic words and expressions from the students' L1s?

Never	Occasionally	A moderate amount	Frequently	Very frequently
○	○	○	○	○

Do you encourage the use of languages other than Modern Greek during the lesson?

Never	Occasionally	A moderate amount	Frequently	Very frequently
○	○	○	○	○

Section 3

How often do the students use languages other than Modern Greek for the following purposes?

	Never	Occasionally	A moderate amount	Frequently	Very frequently
To ask for clarification	○	○	○	○	○
To explain something to their peers	○	○	○	○	○
In group activities	○	○	○	○	○
To ask for permission	○	○	○	○	○
To discuss something not relevant to the lesson with their tutors	○	○	○	○	○
To express ideas/views/opinions on a topic	○	○	○	○	○
To describe something related to their country/culture	○	○	○	○	○
To express something related to themselves	○	○	○	○	○

For what other purposes, do the students use languages other than Modern Greek in class? _____
_____

How important is it for students to use other languages, their first language included, for each of the following purposes?

	Not at all	Slightly important	Important	Fairly important	Very important
To ask for clarification	○	○	○	○	○
To explain something to their peers	○	○	○	○	○
In group activities	○	○	○	○	○
To ask for permission	○	○	○	○	○
To discuss something not relevant to the lesson with their tutors	○	○	○	○	○
To express ideas/views/opinions on a topic	○	○	○	○	○
To describe something related to their country/culture	○	○	○	○	○
To express something related to themselves	○	○	○	○	○

Section 4

What are the benefits of using languages other than Modern Greek in the language classroom?

_____

What are the drawbacks of using languages other than Modern Greek in the language classroom?

_____

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Short Teacher Responses in the EFL Classroom: A Corpus-Approach Assessment

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Teacher's positive feedback in the form of immediate succinct response is an indispensable motivational factor crucial to students' oral production and classroom participation. The present study was intended to assess the range and authenticity of teacher responses used by a number of Russian teachers of English in everyday classroom interactions. The study adopted theCorpus Approachas a reference tool to verify the research data against a Corpus-driven evidence that isto examine and assess the authenticity of the most frequent responses given by the study participants (21 practising EFL teachers working in Orel, Russia, most of whom are graduates of Orel State University, andwhose teaching experience ranges from 11 to 25 years). The results indicated that the phrases the teachers used in the classroom differed from those native speakers use in similar authentic environment. The analysis revealed that the teachers did not resort to clear and concise positive reinforcement often enough to stimulate the students' engagement. In addition, a finite list of highly authentic TRs was recommended for more frequent use in ordinary EFL classrooms and among would-be English teachers. Overall, both teachers in the field and trainee teachers need to be more informed on how and in what particular way to encourage their students' classroom participation.

Keywords: foreign language teaching, feedback, authenticity, corpus approach, classroom English

Introduction

Positive Feedback in EFL Classroom

Feedback is one of the essential elements of both learning and teaching. Ur (2009) defines feedback as "information that is given to the learner about his or her performance of a learning task, usually with the objective of improving this performance" (p.242).

The topic of feedback provision has gained considerable attention recently. Scholars all agree that teacher's feedback influences teaching and learning. It has been empirically identified as being among the most important instructional practices for improving student learning (Gentrup, Lorenz, Kristen, & Kogan, 2020). The classroom feedback discourse is seen an important part of classroom interactive discourse (Liu, Liu, & Zhang, 2021), and the analysis of its pragmatic functions can help provide guidance for EFL teachers on how to increase classroom interactivity.

Feedback can be corrective and focus a learner's attention on errors, or non-corrective, in the form of praise or encouragement (Kerr, 2017). According to Ellis and Shintani (as cited in Kerr, 2017), praising students for good performance is believed to increase motivation and to foster positive attitudes to learning. Unfortunately, teachers rarely, if at all, draw attention to students getting things right while, as Ur (2012) points out, "a student who produces an accurate bit of language (particularly if he or she is avoiding a very common mistake) deserves to be noticed and praised" (p. 91). For the purposes of this study, explicit positive feedback provides the focal interest as an effective way in which the teacher could motivate students, foster their self-confidence and promote participation in the EFL classroom. We restrict our consideration to a specific type of such feedback, namely, to instances of the teacher's short utterances made in response to a student's classroom verbal activity, henceforth TR. Such utterances differ from other teachers' positive responses in that they only express the

teacher's encouraging attitude without distracting the student's, and the other participants', attention from the issue at hand. They usually consist of one word, sometimes, more, but their role in the classroom processes is significant.

Giving feedback is part of "teacher-learner interaction/communication", which occurs in every EFL classroom and is believed to be central to all classroom activity (Hughes, 1989; Walsh, 2011). As many researchers maintain, classroom interaction is consequential to learners' language learning and development and may directly affect foreign language acquisition. It has been reported that "teacher communication behaviour as one of the situational (environmental) factors may influence learners' willingness to communicate" (Heidari,Moradian, &Arani, 2017, p.84). Thus, in order to teach well, teachers need to acquire what Walsh calls Classroom Interactional Competence (CIC) and defines as "teachers' and learners' ability to use interaction as a tool for mediating and assisting learning" (Walsh, 2011, p.31). Levels of interactional competence vary hugely from teacher to teacher, with some teachers being very adept at managing interaction and thus maximising learning opportunities, and others falling short of it.

This difference is especially evident among Non-Native English Speaking Teachers (NNESTs). In the light of widely adopted communicative language teaching (CLT) authentic communication in the target language is seen as one of the main ways to implement authenticity in a foreign language classroom (Thompson, 1996).

English Corpora and Teacher Education

Most teacher education programmes in the Russian Federation, either pre- or in-service, pay little or no attention to classroom communication and interaction, thus leaving Russian NNESTs to their own devices in this respect. While it may take years of teaching experience to realize its centrality to foreign language teaching and learning, there is a number of teaching aids available that describe literally any classroom situation and help verbalize any classroom procedure (Gardner & Gardner, 2000[1]; Hughes, 1989[2]; Hughes, Moate, &Raatikainen, 2011[3]; Slattery & Willis, 2014[4]). Besides, fairly recently corpus linguistics has been making "outstanding contributions to the fields of second language research and teaching" (Bennett,2010, p.2). One of the major characteristics of the Corpus Approach, as Bennett stated nearly a decade ago, is that it is "empirical, analysing the actual patterns of language use in natural texts" (2010, p.7). Since corpora are composed of various communication acts extracted from textbooks, newspapers, academic papers, lectures, phone conversations, transcripts of classroom interaction, radio and TV shows, they are to be understood as composed of authentic language. The Corpus Approach can help us answer some questions related to Classroom English and equip NNESTs with a valuable tool to enhance their CIC. In general, the issue of pedagogical applications of corpus linguistics and developing teachers' corpus literacy in language education has been repeatedly addressed (Abdel Latif, 2021).

Against this backdrop, the present study aims to assess the authenticity of immediate positive feedback provided by Russian NNESTs in EFL classroom implementing corpus-based approach. The corpus-assisted studies of short positive teacher responses in classroom interaction are under-documented.

Literature Review

Positive Feedback in Language Learning

"Encouraging students to speak is an important part of classroom work, and it's important to find ways to encourage all students to take part" (Scrivener, 2012, p. 179).

"The classroom situation is a genuine social environment which allows the meaningful situational use of the language" (Hughes, 1989, p.6). In normal face-to-face communication such responses as 'uh-huh' or head

[1] Gardner, B., & Gardner, F. (2000). Classroom English. Oxford University Press.
[2] Hughes, G.S. (1989). A handbook of classroom English. Oxford University Press.
[3] Hughes, G., Moate, J., & Raatikainen, T. (2011). Practical classroom English. Oxford University Press.
[4] Slattery, M., & Willis, J. (2014). English for primary teachers: A handbook of activities and classroom English. Oxford University Press.

nodding convey agreement, show that the message has been received and understood, and can be seen as forms of feedback. “People speak most when they feel really listened to” (Scrivener, 2012, p. 180). So, it only seems natural that teachers in the EFL classroom “should always try to model good listening skills, including appropriate body language, nods, gestures and confirming expressions (e.g. ‘Right’, ‘Uh-huh’)” (Kerr, 2017, p.9). By doing so teachers show interest in, and can respond to, the ideas that their students express.

Genuine comments can act as positive reinforcement of the student’s speaking production. As Lewis & Hill recommend, “show your reaction to what students say” (Lewis & Hill, 1992, p. 13). As they maintain further, if the teacher is surprised, shocked, curious or doubtful, he should show it in his general reaction, in what he says, and in how he says it. Other students are encouraged to show their reactions too. “Such reacting develops an important language skill — the active role of the listener in a conversation — and makes both the language and your lessons more alive for students” (ibid).

Richards and Lockhart (2007) point out that in language classrooms, feedback on a student’s spoken language may be a response either to the content of what a student has produced or to the form of an utterance. Among a variety of strategies available in giving feedback on content they mention acknowledging a student’s correct answer by saying, for example, “Good”, “Yes, that’s right”, or “Fine”, and praising when the teacher compliments a student for an answer by saying “Yes, an excellent answer” (p. 189).

Along with the above-mentioned, supportive feedback has a potential to reduce anxiety. It holds true even for students with lower anxiety levels. It has been well-established that we all learn best when we are mentally relaxed, and teachers should “always try to generate a relaxed atmosphere, inviting rather than demanding, a response” (Lewis & Hill, 1992, p. 20). Said and Weda (2018) reported that “students’ anxiety can be reduced in all levels of language learning by implementing good atmosphere and relaxed situation to attract students’ involvement in the language learning process” (p.28). It should be noted that feedback may serve not only to let learners know how well they have performed but also to “increase their motivation and build a supportive classroom climate” (Richards & Lockhart, 2007, p.189). The results of the multilevel analysis showed that a positive atmosphere is related to fostering willingness to communicate as well as enjoyment. It also has potential for reducing anxiety among students (Khajavy,MacIntyre, &Barabidi, 2018).

Positive reinforcement from the teacher is an important motivational factor. The study that explored demotivational teaching practices in EFL classroom setting ranked the teacher who does not encourage students to participate in the classroom activity number one among other factors that could cause students’ demotivation (Weda, 2018). According to Christenbury and Kelly “behaviours such as maintaining eye contact, nodding, making affirming verbal comments or sounds, or asking a student to continue with additional clarifying remarks are all ways to encourage more participation” (as cited in Tofade, Elsner, &Haines, 2013).

The results of Liu, Liu, & Zhang (2021) show that though general supportive feedback discourse in the classroom accounts for a small proportion of all positive feedback, it promotes the interaction between teachers and students to a large extent. General supportive feedback usually uses interjections, such as “Yeah”, “Um”, “Uh-huh”, which have no exact meanings but implicit pragmatic meanings, demonstrating teachers’ approval, satisfaction, or doubt.

The findings of another study that explored the similarities and differences between native and non-native English language teachers suggest that though both groups provided immediate feedback, NNELTs, unlike NELTs, provided implicit feedback mostly on production. It could be characterised as restated, delayed, and specific to the point. NELTs resorted mainly to “pronunciation correction through teacher-modeling” (Alfehaid, 2019, p.376).

Linguistic Corpora and Language Teaching

This study focuses on one type of teacher responses (TRs), namely short, explicit, positive assessments. In terms of their structure, they are single utterances of one-word or a short-phrase or a-single-sentence strings. They are short so that their occurrence may not change the vector of the classroom activity at the moment. They are positive so that the student feels confident and encouraged. The studies mentioned above highlight

the importance of TRs that express confirmation and encouragement for classroom communication and participation. The scope of authentic usage of TRs is determined with the help of English Language corpora.

Considerable attention has been given to an important notion of discourse markers (DM). Our particular attention has been attracted by studies of DMs used by teachers of English in the classroom (Ding, & Wang, 2015; Zorluel Özer, & Okan, 2018). The subject of this study, TR, may be considered to be a kind of DM, but only in a very broad sense. They are much more restricted in discourse function and much more specific pragmatically. They serve different discursive functions. They act as attention-getters (e.g. 'okay', 'oh', 'so', 'now'), signal imminent turn-taking (e.g. 'okay', 'so', 'now'), mark the agreement or response to the students (e.g. 'yes', 'right', 'yeah', 'okay'). They are indicative of attitudes, evaluations, and other dimensions of the classroom environment. In essence, DMs indicate the active construction of discourse as well as responsive and engaged listenership by the teachers (Ding, & Wang, 2015). The main role of DMs is to give students encouragement and show positive assessment of their speech. Another difference between the DMs discussed in the mentioned studies and the TRs treated here is that the body of studied DMs was predetermined, borrowedfrom works on discourse analysis. The list of TRs studied in the present paper was derived from teachers' verbal behavior in the classroom and noted by the instructed trainee teachers, on the basis of the notions of positive assessment and encouragement.

Special mention should be made about the use of corpora notions and techniques in the two DMs studies. They follow a rather popular strategy of compiling a DIY small corpus based on the texts under consideration and analyzing properties of a number of words (usually their frequency and collocability). Traditionally, this is done by viewing concordancing lines. The concordancing is done with the help of a special tool, AntConc. The typical drawback of such small corpora is that the results gained from using them can show little more than properties of those texts; the frequency of words, for instance, cannot be evaluated as high or low without comparison with other, more comprehensive, data. Whatever a researcher may call a collection of 20 or 90 thousand words (tokens), it would not make it a "real" corpus. Conversely, comparison of frequencies, raw or relative, found in such collection with frequencies supplied by large annotated corpora might cause valuable ideas about the behavior of words in certain types of discourse.

Linguistic corpora have been in the field for nearly sixty years. At the present moment their uses in theoretical and applied linguistics are many and varied. Their use for pedagogical purposes, especially for foreign language teaching, has become a matter of common knowledge. A considerable body of literature is now available, from profound studies of teaching principles and corpora use (Campoy-Cubillo, Belles-Fortuno, &Gea-Valor, 2010; Flowerdew, 2014; Hunston, 2002; Leech, 1997; O'Keeffe & Farr, 2003) to corpora-aided assessment of teaching materials (Kiziltan&Baydal, 2018) to assessing learners' proficiency (Callies, Diez-Bedmar,&Zaytseva, 2014) to reports of finding solutions to classroom problems (Allen, 2011; Btoosh, 2019; DeSutter, Cappelle, DeClercq,Loock&Plevoets,2017;McEnery & Xiao, 2005) to descriptions of attempts to make students use corpora in the classroom (Read, 2016)[5]. It is natural that in dealing with classroom language the idea of implementing corpora advantages should have presented itself. In this study, we use English language corpora as a reference tool for assessing the authenticity of the NNESTs' TRs against native speakers' preferences for using similar phrases. We proceed from the widely accepted assumption that linguistic corpora are composed of real language as it is used by native speakers/writers. To the best of our knowledge, such kind of treating short TRs has not been described in professional literature.

Research Questions and Hypothesis

The major purpose of this study was to examine a number of NNESTs' use of oral encouragement in the classroom, to find out how many and what TRs are most frequent among EFL teachers in Orel, Russia, and whether their preferred forms of oral encouragement represent actual patterns of language use in natural texts typically produced by native English speakers. Specifically, the following research questions were posed:

1. Does the repertoire of TRs used by NNESTs meet the criteria of authenticity and linguistic variability?
2. What TRs are the most recurrent in English corpora and must be included into teacher education programmes to enhance pre-service EFL teachers' CIC?

[5] Read, D. (2016). I'm an EAP teacher and I hate Corpus Linguistics. http://learningtechnologiesineap.org/im-an-eap-teacher-and-i-hate-corpus-linguistics/

According to our assumption the following hypothesis was put forward:

There is significant difference in the range and choice of TRs used by the NNESTs involved in the study and those TRs that the English language corpora suggest.

Materials and Methods

Participants

Participants in the classroom communication are usually a teacher and students. In this research, a group of 19 would-be teachers, third-year students of the English Department, Institute of Foreign Languages, Orel State University (OSU), when undergoing practical pre-service training in the city schools and non-language OSU departments, were assigned a task to observe and write down the practising English teachers' assessing responds. There were 56 English lessons by 21 teachers visited and monitored. All the teachers had more than 10 years of experience of teaching English as a foreign language in high schools and universities in Russia.

Materials

The main body of analysed material consisted of the TRs collected by the trainee teachers in the way described above. Also significant were certain examples from a number of special handbooks of classroom English.

Classroom English Handbooks

All of the consulted books are written to assist teachers in improving their confidence in speaking English in the classroom to carry out practical day-to-day management of classes. The handbooks vary greatly in the number of phrases of relevance to the current study (see Table 1). However, it can be accounted for by the difference in their target audiences.

Table1

Number of classroom phrases expressing encouragement and confirmation in Handbooks for NNESTs

Handbook	Number of phrases
A Handbook of Classroom English (Hughes, 1989)	75
Classroom English (Gardner & Gardner, 2000)	16
Practical Classroom English (Hughes et al., 2011)	175
English for Primary Teachers (Slattery & Willis, 2014)	8

"English for Primary Teachers" is a handbook for those who teach English to children aged 4-12, whose language proficiency is understandably low. Its aim is to expand teachers' range of classroom language to manage each basic activity with short and simple instructions and give Young Learners valuable experience of English in use. "Classroom English" is addressed to NNESTs who have little or no training, and few resources to work with in the hope that when their confidence and proficiency increase, they will add to their repertoire of classroom language.

"A Handbook for Classroom English" is intended for trainee teachers and teachers in the field, who by working systematically through its materials will acquire a wide range of accurate and idiomatic phrases. "Practical Classroom English" is for NNESTs who work with teenagers and young adults at secondary and post-secondary levels. The book contains some phrases that are straightforward and easy, whereas others are more complex and are for use mainly with advanced learners.

Thus, as can be seen from the foregoing, the differences in the number of phrases expressing oral encouragement and confirmation in the handbooks are based on the three main criteria: the students' age, the level of students' language proficiency, the level of the teacher's language proficiency.

All four books contain fairly comprehensive lists of classroom phrases. However, their sources are different. The material for "A Handbook of Classroom English" was collected on the basis of about two hundred hours of English lessons in Finland, and twenty-five hours of teaching in an English comprehensive school. In the case of "Practical Classroom English", the book's foundations were laid by the authors' thirty years of experience, observation reports on trainee English teachers' lessons as well as transcribed classroom recordings from Austria, Belgium, Finland, Germany, Japan, Korea, Spain, and Taiwan. The rationale for the choice ofphrases in the book by Bryan and Felicity Gardner is not disclosed to its readers. The authors' prime intention was to choose the simplest ways of saying things that could be used with beginners. The basis of the book "English for Primary Teachers" is the recordings of both native and non-native primary teachers' lessons around the world sent to the authors from Japan, Turkey, Spain, Italy, etc. Thus, though presumably almost all of the books boast real language from real lessons, none of them meets the criterion of authenticity understood here as naturally occurring English in native speakers' communication.

English Language Corpora

A number of dependable corpora of English are free to be found on the Web. The most prominent and widely used is the collection of corpora created by Mark Davies at the Brigham Young University (https://www.english-corpora.org/).The most popular one is the Corpus of Contemporary American (COCA) that comprises at the present time 560 million words. Its SPOKEN register exceeds 100 million words, which is more than the whole contents of the celebrated BNC (the British National Corpus, the original variant; work is in progress to build a British corpus of everyday conversations as an extension of the BNC, The Spoken BNC2014(Love,Dembry, Hardie, Brezina, & McEnery, 2017). The chief shortcoming of COCA from this work's standpoint is that it mirrors only the American variant of the language. Fortunately, Davies (2019) published two more remarkable corpora, the TV Corpus and the Movie Corpus, that are multinational (US, Canada, Britain, Ireland, Australia, New Zealand, India et al.) and, obviously, spoken. The size of the two corpora is considerable (Movie – 200 mil, TV – 325 mil), which ensures statistically dependable results of the searches. For more detail, see Davis (2021).

In the case of strings, the corpora can find only those that are recurrent in a considerable degree, which is to be understood as evidence for their co-occurring stability. Even intuitively, it would be unfeasible to expect longish sentences like '*There is nothing wrong with your answer'* (Hughes, 1989) to be frequent enough in common conversation. There would not be enough instances of it in a corpus of 325 or 200 mil words. This limitation, however, should not present a real challenge to this study as the TRs under discussion are short recurrent utterances as defined earlier.

The corpora created by Mark Davies allow searches for words and word strings that have different language statuses. The search in COCA, a 560-million-words corpus of American English, yields 1075 instances of 'Good' as a separate sentence/utterance (=TR) while the overall frequency of 'good' in COCA is 510181. This means that, on the average, the word is used about 911times per million words being one of the most frequent words in English (it ranks 65 in the two-billion-words Oxford English Corpus as evidenced in Wikipedia (https://en.wikipedia.org/wiki/Most_common_words_in_English). As for the utterance '*Good'*, the frequencies for registers show its predominant use in conversations: SPOKEN - 588, FICTION - 434, MAGAZINE - 32, NEWSPAPER - 16, ACADEMIC - 5.

Procedure

The following steps were taken to accomplish the purpose of the study during the research process.

First, the researchers chose 19 advanced level prospective English teachers who were to undergo their compulsory pre-service training in schools and non-language university departments in Orel, Russia. In order to obtain the relevant data, they were asked to record all forms of oral encouragement used by practising teachers during English classes. The TRs as written down by the students were collected immediately after the attended lesson and the list of noted TRs was compiled.The teachers were not informed about what pre-service trainees were asked to record and there was no instruction to the teachers on using any specific types of positive feedback given by the researchers. All classroom activity is expected to be observed and recorded by prospective teachers as part of their professional training. The permission to do so is granted on the basis of the standard contractual agreement between OSU and other educational institutions in Orel. The teachers were later informed about the specific aims and interim results of the research. Then the recorded items were collected and summarised in tables. Next, the collected data were compared with the lists of classroom phrases

included in the teaching aids and preliminary observations concerning individual teachers' manner of giving positive feedback were made.The most frequent of the collected TRs were then looked up in the TV Corpus. Some instances of TRs were also checked in the Movie Corpus and the COCA. The final stage was analysing the data in order to find reasonable answers to the research questions.

Data Analysis

In answering the research questions, the researchers analysed the range and authenticity of the TRs. The analysis of the data was deployed in two stages. During the first stage, the collected TRs were compared against those that the handbooks for NNESTs suggest and preliminary observations concerning individual teachers' manner of giving positive feedback were made. To ensure the reliability of the research procedure, the explanatory instructions were given to the trainee teachers collecting the TRs, which were consecutively accepted as valid by each researcher and later the lists were sifted through collaboratively by both. At the second stage the most frequently used of the recorded TRs were looked up in the English corpora to confirm the hypothesis and draw the final conclusion.

Results

Collected TRs

The collected data of the current study show that the NNESTs used different numbers of TRs ranging between 4 and 33 (see Table 2). The recorded TRs revealed no recurrent inaccuracies since all the teachers in the study had received formal university training in the target foreign language. The teachers used English as a medium for classroom management purposes employing short positive assessments in the process.

Table 2

Range of TRs

Teacher	Number of TRs
Teacher 1	33
Teacher 2	5
Teacher 3	25
Teacher 4	8
Teacher 5	8
Teacher 6	8
Teacher 7	15
Teacher 8	15
Teacher 9	4
Teacher 10	20
Teacher 11	14
Teacher 12	18
Teacher 13	12
Teacher 14	14
Teacher 15	10
Teacher 16	15
Teacher 17	6
Teacher 18	9
Teacher 19	14
Teacher 20	23
Teacher 21	25

However, it should be noted that the overall variability of phrases used to acknowledge students' responses is limited, with some teachers (T2, T9, T17) having a scanty repertoire of classroom phrases. It was particularly noticeable in the secondary school classrooms. Though all the teachers in the study claimed commitment to CLT, some of them failed to create additional opportunities for genuine communication and interaction in their classroom. This may turn out to be an even more flawed strategy in the presence of prospective English teachers who attend lessons during pre-service training. Such behaviour may be detrimental to their own students' progress since "the classroom situation is a genuine social environment which allows 'the meaningful situational use of the language', and that its communicative potential is closer to real interaction than is often assumed" (Hughes, 1989, p.6). Classroom language "allows for almost unlimited repetition in a natural context: classroom instructions are part and parcel of every lesson, so there is no need to invent contexts of use. In this way the language gradually becomes absorbed unconsciously by the students" (Gardner & Gardner, 2000, p.1).

The teachers chose different forms of expressing positive feedback. The collected and analysed TRs reveal noticeable differences in the preferred ways of encouragement and confirmation. As Walsh (2006) maintains "teachers do employ their own particular 'classroom idiolect': an individual way of talking that is normally based on their personal conversational style" (as cited in Walsh, 2011, p.7).

Certain individual TRs promoted the following inductive reasoning. Most teachers in the study avoided giving affective feedback with only one teacher (T1) explicitly demonstrating emotional involvement in the process by such TRs as '*Great!', 'Bravo!', 'That's amazing!', 'How impressive!'*. Showing natural authentic reaction to a student's production arguably increases the speaker's and other students' interest and participation. Conversely, the observed avoidance of it may lead to increased formality and artificiality highly undesirable in the EFL classroom.

Another potentially counterproductive tendency was observed when the teachers used responses such as '*I've been thinking about the same*', '*I share your opinion'* (T3), '*That's exactly what I was looking for'* (T7). Though being communicatively justifiable under most classroom circumstances, they seem to suggest the singularity of the correct answer.

Among the recorded TRs there were cases when the teacher's reaction was expressed in a far less tactful and delicate way than the desired effect could suggest. Such TRs as '*I know you are initiative but let others think too*' (T9), '*It's much better this time but there are too many careless slips*', '*Shows some improvement'* (T7), '*Now you have figured it out'* (T3) imply criticism of the student's behaviour. Without being specific, they do not fully perform the function of corrective feedback and may only discourage students from speaking. As Kerr (2017) points out 'teachers need to handle feedback sensitively so as not to affect students' willingness to speak' (p.10).

All in all, the 21 NNESTs whose lessons were attended to collect data for the current study used about one hundred different TRs. To make valid conclusions, only the TRs which were found in the repertoire of three and more teachers were analysed in respect to their authenticity. Among the twenty TRs listed in Table 3 some ('*Absolutely', 'True*', '*That's a good job*') are not included in any of the consulted Classroom English handbooks.

Table 3

TRs most commonly used by the teachers

TR	Number of teachers
That's it	10
That's right	8
Well done	8
Good	8
Exactly	8
Exactly so	6
Right	6
Right you are	6

TR	Number of teachers
Yes	6
Absolutely	6
True	6
Good job	6
That's a good job	4
Have another try	4
Okay!	4
Nice	4
Yes, you are right	4
That's the way	4
Uh-huh	4
Correct	4

TRs and Linguistic Corpora

Table 4 presents the results of the TRs searches in the TV Corpus of spoken English. It has 325 million words that come from TV shows in North America (US/CA – 265.8 mil), in Britain and Ireland (UK/IE – 53.2 mil), in Australia and New Zealand (AU/NZ – 5.7 mil) and others (MISC – 0.3 mil). In addition to the TRs from Table 3, several items were included in the search from those recommended in Hughes (1989), Hughes et al.(2011), Gardner & Gardner (2000).

Table 4

The TV Corpus

TR	Frequency	Per mil	US/CA: FREQ/per ml	UK/IE: FREQ/per ml	AU/NZ: FREQ/per ml
That's it	10140	31.20	8200/30.85	1693/31.85	199/38.71
That'stheway	85	0.26	46/0.17	24/0.45	14/2.72
Right	42040	129.35	30154/113.45	10571/198.8	1096/213.21
Right you are	108	0.33	50/0.19	54/1.02	4/ 0.78
That's right	4217	12.98	35.59 /13.39	599 / 11.27	18 / 8.54
Good	33447	102.92	27511/103.50	4997/ 94.01	766/ 149.01
Goodjob	2038	6.27	1968/ 7.40	56/ 1.05	9 / 1.75
That's a goodjob	13	0.04	0 / 0.00	/ 0.00	0 / 0.00
Well done	2864	8.81	1677/ 6.31	1066/ 20.06	107 / 20.81
Very well done	47	0.14	30 / 0.11	17 / 0.32	00
Okay	129881	399.63	127120/478.25	1608 /30.25	516 / 100.38
OK	26833	82.56	14783/ 55.62	9831 / 184.96	2065 / 401.71
Okay fine	2	0.01	2 / 0.01	00	00
Fine	17808	54.79	16044/60.36	1454/ 27.36	209 / 40.66
Very fine	7	0.02	6 / 0.02	1 / 0.02	00
Exactly	8991	27.66	7126/ 26.81	1643/ 30.91	173 / 33.65
Exactly so	4	0.01	3 / 0.01	1 / 0.02	0 / 0.00
Nice	4621	14.22	4170/ 15.69	381 / 7.17	53 / 10.31

TR	Frequency	Per mil	US/CA: FREQ/per ml	UK/IE: FREQ/per ml	AU/NZ: FREQ/per ml
That's nice	1392	4.28	1168/4.39	201 / 3.78	19 / 3.70
That's very nice	161	0.50	149 / 0.56	10 / 0.19	2 / 0.39
Yes	47175	145.15	33620/126.49	12079/227.25	1084 / 210.87
Yes, youareright	149	0.46	85 / 0.32	59 / 1.11	3 / 0.58
Uh-huh	27	0.08	21 / 0.08	5 / 0.09	1 / 0.19
Correct	943	2.90	657/ 2.47	228/ 4.29	53 / 10.31
That's correct	227	0.70	189/ 0.71	35 / 0.66	1 / 0.19
That's perfectly correct	1	0.00	0 / 0.00	1 / 0.02	0 / 0.00
True	1560	4.80	1281/ 4.82	201 / 3.78	47 / 9.14
Verytrue	79	0.24	51 / 0.19	26 / 0.49	2 / 0.39
Absolutely	4005	12.32	3196/ 12,02	717/ 13.49	76 / 14.78
Haveanothertry	0	0.00	0	0	0
Very good	2785	8.57	1921/ 7.23	760 / 14.30	77 / 14.98
That's very good	108	0.33	77 / 0.29	29 / 0.55	2 / 0.39
Good for you!	1659	5.10	1477/ 5.56	150 / 2.82	26 / 5.06
Yes, that's right – good	0	0	0	0	0
Perfect	3594	11.06	3201/12.04	331 / 6.23	49 / 9.53
Magnificent	88	0.27	63 / 0.24	18 / 0.34	4 / 0.78
Fabulous	163	0.50	132 / 0.50	29 / 0.55	1 / 0.19
Sensational	17	0.05	15 / 0.06	1 / 0.02	1 / 0.19
Excellent	3596	11.06	2588/ 9.74	906 /17.05	74 / 14.40
That's excellent	28	0.09	12 / 0.05	16 / 0.30	0 / 0.00

As evident from Table 4, the short TRs are much more frequent than their lengthened variants. '*Right'* is about four times more frequent than '*That's right'* and nearly three times so than '*Yes, you are right'*. See also strings with *good, exactly, excellent, nice, yes, true, well, etc.*

'Right you are' is the least frequent of the processed strings with *right* which are commonly used in all dialects. The TVC shows that its use is rather limited, perhaps because of its sounding very emotional and being much more common in the British variant.

Some longer strings (*'Yes, that's right – good', 'Have another try'*) have been treated by the corpus as not recurrent enough to be considered, in their own right, as separate speech units.

In most cases the relative frequency (per mil), henceforth RF, of units in the UK/IE sections is higher than that in the US/CA section. This can be explained by the statistically unbalanced distribution of the corpus texts between the Sections/Dialects. North American TV texts in the corpus are nearly five times greater than those from Britain (265.8 and 53.2 mil words respectively). In most cases, American RF is close to the general RF of the item while that of the British section is somewhat greater, see e.g. '*That's it', 'Right', 'Exactly', 'Absolutely'*. In the cases where American RF is greater than British RF it is reasonable to believe that the response is considerably more common in North America than in Britain, see e.g. '*Good job', 'Fine', 'Nice', 'That's nice', 'True',' Good for you', 'Perfect'*.

The positively assessing responses '*Perfect'* and '*Excellent'* have nearly the same Raw frequency (3594 and 3596 respectively) and identical Relative frequency (11.06 per mil) in the TVC. However, the Sections/Dialect data show that '*Perfect'* is more common in AmE and '*Excellent'* in BrE and the less common '*That's excellent'* in BrE exceeds AmE even in Raw frequency.

Discussion

Oral classroom communication has long been and has continued to be the object of empirical and theoretical inquiry led by researchers and teachers. The studies have investigated the provision and effectiveness of positive feedback for foreign language acquisition, underpinning the thesis that short and simple phrases help to move a lesson forward fluently and create a motivating atmosphere central to successful language learning. The current study supports these shared conclusions, but examines another and more pragmatic aspect of Classroom English, to wit assessing short teacher's responses (TRs) from the point of view of authentic, real-life language use.

The lack of previous research focusing on corpus analysis of TRs prevents us from engaging in a traditional discussion. As suggested in Literature Review, TRs are considered to be an indispensable part of the EFL classroom procedure. Nevertheless, to the best of our knowledge, a consistent attempt has not been made to study the actual 'grass-root' facts of using, teaching and learning the TRs. Our modest study showed certain limitations in the actual state of the art, at least in the limited area of a middle-size Russian city. Yet, we consider the relevant literature and the preliminary data reported in the current study to be modest contribution to the field. The research findings may also lead to some considerations regarding the teaching process.

As Yang (2011) states, educational research on DMs in classroom discourse is mainly restricted to second / foreign language learners, and there is an obvious gap in literature examining DMs in teacher talk. A substantial body of research has been devoted to the study of DMs with an emphasis on the learner use in an English as A Foreign Language (EFL) with very few exceptions such as Zorluel Özer & Okan (2018), Ding & Wang (2015). The present study also investigates teachers' verbal behavior in the EFL classroom.

The described classroom observations of the teachers in the field indicated that they did not give enough positive feedback on the students' correct speech and thus limited potential learning outcomes for them. This conclusion is in consonance with that of Liu, Liu, and Zhang (2021), who found that general supportive feedback can greatly facilitate the interaction between teachers and students, since it is capable of not only expressing participation, acceptance, and recognition, but also implying that the conversational turn has yet to be finished, thus encouraging the student to continue speaking.

By following a process of recording and analysing their own classroom communication, foreign language teachers can study their own teaching behaviour – the authenticity, range and frequency of classroom phrases that they use to encourage learners and confirm their answers and its effect on learners' classroom participation. Special handbooks of classroom English are advisable to extend the area of operation of their classroom English and advance NNESTs' CIC. Since handbooks vary in the level of complexity and idiomaticity, the choice of a handbook has to be determined by the students' age and proficiency in English. Earlier researchers have made similar claims. Comparable to our study, Ding and Wang's study (2015) underpinned the necessity for non-native English teachers to reflect on and monitor their own use of discourse markersin classroom interaction through recording and transcribing some of their own lessons, further compiling their own corpus of English teaching, and using corpus tools to analyse their own use of discourse markers.

The English language corpora are an effective means to assess the authenticity of language use. However, we certainly cannot be rigidly denying usage of any of the considered TRs on the grounds of their infrequent occurrence in the corpus texts. Corpora do not 'decide' what correct usage is and what is not. We can only interpret the corpora data in terms of relative frequencies of occurrence. This interpretation may be relevant for our recommendations regarding the choice of materials to be learned. Looking at Table 4 we can see that some of the TRs used by practising teachers are not in common use by native English speakers ('*Exactly so'*, '*That's a good job', 'That's the way', 'Uh-huh', 'Right you are', 'Yes, you are right')*. Likewise, some of the recommendations in the consulted teaching aids on Classroom English proved to be far less recurrent among native speakers ('*Very well done', 'Very fine', 'That's perfectly correct', 'Magnificent', 'Sensational', 'Fabulous', 'That's excellent'*). Conversely, such TRs as '*Absolutely', 'True',* and *'Good job',* which were frequently used by the NNESTs and which were involved in the study, were not included in the handbooks, but the corpus study revealed their wide use by native speakers.

The results of our study appear to support the study hypothesis on the significant difference in the range and choice of TRs used by the NNESTs and TRs suggested by the corpora. Comparable to our study, Zorluel Özer and Okan's (2018) study results revealed that Turkish teachers of English significantly underused discourse markers in classroom interaction compared to native teachers. However, in the study investigating the use of DMs by native and Hong Kong teachers of English in primary and secondary schools, Ding & Wang (2015) found that local EFL teachers in general used more DMs than native EFL teachers, though marking a variation between the primary and secondary school settings. While native teachers tended to use more DMs in primary schools, Hong Kong teachers used more DMs in secondary schools. The differences may be attributed to the differences in the contexts of the three studies and more importantly, the nature of corpora assistance.

Finally, the results of the research may be important for raising the awareness of university instructors who are involved in professional training of pre-service EFL teachers since, as already stated in Hughes (1989), "foreign language teachers in particular require linguistic training aimed at the classroom situation" (p.5).

Implications for teacher education

The findings of this study have several implications for EFL educators and teachers in Russia. We strongly believe that teacher programmes in Russia should incorporate training in CIC to enhance future EFL teachers' professional competence and their learners' command of English.

During their undergraduate and graduate studies future EFL teachers need to be exposed to authentic language used in real-life situations including an English classroom situation. Degree, so to speak, of authenticity in which different classroom phrases, including TRs, may vary is substantial. Regular exposure of would-be teachers to more authentic Classroom English is deemed more imperative than in any other audience. Such TRs as '*That's it', 'Right', 'Okay', 'Fine', 'Exactly', 'Absolutely', 'Perfect'*, and *'Excellent'* are examples of highly authentic language use (see Table 4) and are expected to be more recurrent in EFL classrooms, whereas less typical, from a native's standpoint, TRs are recommended to be put to use with due caution. Educators, teacher trainers, practising and future EFL teachers are advised to get hold of English corpora as an indispensible practical tool to achieve the desired level of authenticity to service their classroom interaction. This recommendation is in line with Abdel Latif (2021) who reported growing interest in developing teachers' corpus literacy to popularize the use of corpora in language education.

Conclusion

The study focused on NNESTs' verbal ways of expressing positive feedback on a student's spoken language – the range and authenticity of TRs they used to confirm and encourage their students' oral production.

The teacher's immediate succinct response (TR) to the student's speech production may not be as informative as a detailed assessment thereof, but it has the same communicative value in that it shows the teacher's involvement and attitude. It is essential that the TRs characterize the teacher as a competent and fair-minded instructor. They are much more frequent in the classroom, though possibly less instructive and detailed, than longer, more developed assessment expressions. They may also show, to some extent, the teacher's linguistic competence if used appropriately. This fact is consistent with the study by Hughes et al. (2011), who referred to mastering classroom phrases as one of 'the core linguistic skills' that helped teachers to work effectively in the classroom.

From the students' perspective, the TRs may have various functions. By showing the teacher's attitude a TR supports the student's communicative bond with the teacher and their conversational activity. A TR may encourage the student to pursue speaking on the subject or, conversely, it may mark off the end of a classroom episode and the possibility for a change of the speaker.

Through recording, it was found out that the teachers used a limited repertoire of TRs. The Classroom English handbooks for NNESTs suggest varied, yet not exhaustive lists of similar phrases. Both the most frequent of the recorded TRs as well as those suggested by the books were looked up in a dependable English corpus to find the most recurrent and thus more authentic ways of reacting to students' oral activity in EFL classrooms.

The present study takes the first step in examining the range and authenticity of an aspect of classroom language used by NNESTs (short TRs expressing confirmation and encouragement). Employing the Corpus Approach enhances the assessment of the TRs authenticity. It seems reasonable to believe that further research using an identical or similar research design and implemented with regard to phrases typical of other EFL classroom situations may be practically and theoretically productive.

Due to the limitations concerning the number of participating teachers, variable levels of teachers' professional competence, and interminable process of enhancing the present corpora, the findings of the current study cannot be extrapolated to all the teaching contexts.However, the authors hope that the collected data can contribute to raising metalinguistic awareness ofboth practising and prospective EFL teachers regarding their Classroom English.

We believe that the findings have pedagogical implications that are relevant to EFL teacher education in the Russian Federation. If would-be EFL teachers are made aware of, and are exposed to, the most authentic ways of giving positive feedback, they will noticeably improve their professional skills and knowledge.

Conflicts of interest

The authors declare that they have no conflicts of interest.

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Content Subject Teachers' Views of Implementing the English Across the Curriculum (EAC) Approach: A Study of Some South African High Schools

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This article explores the views held by content subject teachers on the implementation of the English Across the Curriculum (EAC) approach in their high school classrooms. In South Africa, the EAC approach has been part of the school curriculum since 2014; however, to date, there is a paucity of studies that have focused on understanding how high school teachers implement this approach. In 2017, the South African Department of Basic Education reported that high school teachers were not using this approach without indicating why this was the case. To provide the views of the teachers, the present study drew theoretical insights from reflective teaching to explore the phenomenon. We conducted a qualitative intrinsic case study inquiry, during which we examined the views that 15 high school teachers held on implementing English language skills in content subjects. We collected data using a focus group interview form prepared based on Gibb's model. The findings indicate that content subject teachers have views on (i) the merits of EAC in general language development, (ii) EAC as a challenge to pedagogical-content knowledge, and (iii) strategies for improving the implementation of the EAC approach. This exploratory study has certain implications for the practice of implementing the EAC approach in content teaching, finding that there may be merit in the use of targeted continuing professional development for content teachers when implementing EAC. Secondly, there is a need for partnerships between teachers of English as a second language and content subject teachers, as this cross-curricular collaboration has the potential to enhance the implementation of the EAC approach in high school classrooms.

Keywords: CLIL, content subject teachers, English Across the Curriculum (EAC), high schools, South Africa

Introduction

In South Africa, content subjects in high school are learnt and taught using the English language. For most learners, English is used as a second language. Although multilingualism is the norm in this country, English is widely used as the language of instruction; that is, English is privileged by being the language of learning and teaching. In such educational environments, the Language Across the Curriculum (LAC) approach is used to develop learners' English proficiency. In some educational contexts, the LAC approach is referred to as Content Language Integrated Learning (CLIL). The aim of the LAC approach is to integrate the second language across the curriculum for content subject learning (Chu, 2019; Vollmer, 2007). In addition. Coyle et al. (2010) stated that this is an educational approach where the content of all subjects and second language learning is integrated to provide authentic experiences for English language learners (ELLs). CLIL is a broad term that has many variants depending on the context and where it is implemented (Urmeneta, 2019; Van Kampen et al., 2018). In defining CLIL, Coyle et al. (2010, p, 1) stated that it is "a dual-focused education approach in which an additional language is used for the learning and teaching of both content and language." While researchers such as Lin (2016) and Urmeneta, (2019) distinguish between CLIL and LAC, in the South African context, the term 'LAC' is used interchangeably with 'CLIL' (Department of Basic Education, DBE [1](2015, p. 3). In addition,

[1] Department of Basic Education (DBE). (2015). *The English Across the Curriculum (EAC) strategy: Every teacher is a language teacher.* https://www.education.gov.za/Portals/0/Documents/Manuals/English%20Across%20the%20Curriculum%20 approach %20Flyer.pdf?ver=2015-04-24-155458-563

the DBE (2015) explains that since English is the Language of Learning and Teaching (LoLT) in most schools, LAC in the South African context is referred to as English Across the Curriculum (EAC). The reference to CLIL as EAC is a South African concept that differs from other educational contexts (DBE, 2014[2]).

English Across the Curriculum is used to guide learners to develop strategic and critical thinking skills in English in order to enhance their general and content subject learning and is concerned with the English language skills required in the formal education system (DBE, 2015). This means that content subject teachers need to be well grounded in the language of instruction. Realising this need, Swart et al. (2018, p. 412) call for the integration of "both pedagogical content and language knowledge into teachers' professional development to promote effective interaction with students about subject content." Urmeneta (2019) and Dalton-Puffer and Smit (2013) argue that in order to facilitate meaningful learning for ELLs, all teachers require a conceptual and technical understanding of the language for use in their discipline.

The South African Department of Basic Education (DBE, 2014) explained that the EAC approach has as its core purpose the need to assist learners who face learning barriers as a result of having to learn content subjects in English, a language that is not their mother tongue. Importantly, the DBE (2014) explained that EAC is an approach that emphasises skills such as writing, reading, speaking, and listening being taught across the curriculum to enhance ELLs' proficiency. Although, the purpose of EAC is well established in ESL literature, there is a dearth of studies that examine high school teachers' views on implementing EAC in their classrooms. In response to a call by San Isidro and Lasagabaster (2019, p. 3) that "implementation-oriented research on teachers' views is direly needed so as to gain a deep insight into the methodological commonalities that make CLIL what it is", this study explored the views of selected South African high school teachers. Specifically, the study provides answers to the following research question: What views do content subject teachers hold about the implementation of the EAC approach at a classroom level? The term 'view' was used in the context of this study to refer to high school teachers' opinions about their teaching practices when implementing the EAC approach.

The Context of the Study: English Across the Curriculum in South Africa

There is a debate in the literature as to whether EAC is an approach or a methodology (San Isidro & Lasagabaster, 2019). In South African DBE documents (see DBE 2014, 2015, 2017[3]), EAC is referred to as a strategy despite it embodying the philosophical insights of an approach. That is, the EAC design as it is used in South Africa can be viewed as both an approach and a strategy. Following Richards and Rodgers' (1982) definitions of an approach, the EAC document deals with the theory of language and learning while detailing the specific instructional actions (strategies) that content teachers are required to follow in order to infuse content and language learning. In the context of this study, the term 'approach' is used to refer to both the philosophies and the practices of implementing EAC into the South African high school curriculum.

The aim of the EAC approach is to support the language development of every learner, in all domains of language use, in every learning activity in school (DBE, 2014). Vollmer (2007) stated that EAC is an approach that emphasises the language learning that takes place in each subject and the academic/mental activities across the curriculum whether implicit or explicit. Corson (1990, as cited in Vollmer, 2007) highlighted the five basic tenets of EAC as: (i) language develops mainly through its purposeful use (domains to be broadened); (ii) learning (often) involves talking, writing, shaping, and moving (normally in reaction to perceptions); (iii) learning often occurs through speaking or writing as much as through shaping and moving; (iv) language use contributes to/is a prerequisite for cognitive development; and (v) language is the medium for reflecting on learning, for improving it, and for becoming (more or less) autonomous as learners. This means that although the high school system incorporates different subjects, they comprise common and discipline-specific language skills whose emphasis can enhance learning across the curriculum.

[2] Department of Basic Education (DBE). (2014). *Manual for teaching English Across the Curriculum Book 2.* Pretoria: Department of Basic Education. Retrieved from https://www.education.gov.za/TeachingEnglish.aspx

[3] Department of Basic Education (DBE). (2017). *English Across the Curriculum (EAC) scripted lessons General Education and Training (GET).* https://www.education.gov.za/Portals/0/Documents/Manuals/English%20Across%20the%20Curriculum%20GET.pdf?ver=2017-11-29-155410-000

In the South African context, the EAC approach was founded on the understanding that every high school teacher across the curriculum is a language teacher (DBE, 2014, 2015, 2017). Thus, in every classroom the basic language skills of writing and presenting, reading and viewing, and listening and speaking are used to cement learners' language development. EAC is a relatively new approach in the South African school system and its implementation is documented in a number of documents (see DBE, 2014, 2015, 2017). According to the DBE (2015), the role of the English Language teacher is to introduce and teach all the language skills and to reinforce them consistently. Content subject teachers have the responsibility of applying the specific language skills in their discipline to promote learning by integrating language and content. The use of the slogan, "every teacher is a language teacher", underscores the importance of the EAC approach in high school teaching in South Africa. To date, very few studies in South Africa have explored the way in which content teachers implement EAC. Current studies in EAC in the South African context have focused mainly on science and mathematics teaching, such as Msimanga et al. (2017), Msimanga and Erduran (2018), and Setati (2001). There is, however, an expanse of research output that focuses on mother tongue instruction (Heugh, 2009; Mathole, 2016) and translanguaging practices (Makalela, 2015; Probyn, 2019), which although related to EAC do not emphasise this approach. Thus, the purpose of this study is to come up with suggestions for improving the implementation of EAC by exploring the views of content subject teachers.

Literature review

Language is a tool for conceptualising the world and our knowledge of it. Language is important for effective instructional experiences across the high school curriculum, as all subjects are conceptualised through it (Svensson et al., 2009; Turner, 2020). It is through language that high school teachers and learners engage, present, display, and assess the learning processes, skills, and knowledge (Vicente & Martinez-Manrique, 2013). This mutual process is one of meaning-making and helps learners internalise the concepts, ideas, and knowledge that are being learnt (Nomlomo & Desai, 2014). Learners in South African multilingual classrooms have access to a number of languages as part of their repertoire. Vicente and Martinez-Manrique (2013, p. 89) explain that such resources provide learners with "different languages to carve the world in different categories." That is, high school learners experience language as part of the school curriculum and as part of their socialisation in their communities. However, English and Afrikaans are the only LoLTs in the South African education system. Consequently, in situations where high school learners use an LoLT that differs from their mother tongue, there is a need to support them (König et al., 2016).

The key to ensuring the effectiveness of learners' language development in ESL is the teacher (Aalto & Tarnanen, 2017). Drawing from sociocultural and dialogic orientations, Swart et al. (2018) explain that, as an approach to ensure effective learning, there is a need to include within the teacher professional competence the knowledge to integrate linguistic skills and subject matter. Additionally, König et al. (2016) observed that in order for ELLs to develop competence in discipline-specific English needs, disciplinary teachers need to engage them in activities that are beyond the general English skills. Although language is a critical component of content subject teaching and learning, it is "very much taken for granted both in practice and in educational research" (Svensson et al., 2009, p. 207). However, several researchers have indicated that the major challenges in the implementation of EAC are content subject teachers' preparation in it, their limited knowledge of linguistic skills, and the availability of teaching and learning resources for integrating content and language learning (Aalto & Tarnanen, 2017; Chionis et al., 2017; Kao, 2020; Karabassova, 2019, 2020).

Globally, a number of studies have been conducted to understand teachers' views on integrating a second language into content learning. For example, San Isidro and Lasagabaster (2019) reported on how Spanish high school teachers viewed CLIL They found that the teachers viewed the approach as an important pedagogical approach for learners' language development. Their findings also indicated that the teachers observed positive effects from the use of CLIL with improved performance in the content subject. However, their participants lacked support from the department of education in light of their limited competences and skills to implement CLIL as a pedagogical tool. The results of this study showed that teachers had a positive outlook on students' attitudes when CLIL was implemented. Koopman et al. (2014), working with six CLIL teachers in the Netherlands, found that the teachers had limited knowledge of the language forms required for content subject learning. These researchers stated that there was a need for content subject teachers to be grounded in general knowledge of second language acquisition.

In the South African context, Uys et al. (2007) reported on 38 primary and high school content teachers from South Africa and Namibia and what they viewed as their responsibilities for language teaching activities in content subject classrooms. Their findings highlight that both the primary and high school teachers in their study incorporated oral and reading skills in content learning but viewed the teaching of writing as the responsibility of the English language teacher. Focusing on high school teachers, Msimanga and Erduran (2018) stated that EAC requires content subject teachers to have a deeper understand of language skills that most do not have. The implementation of the EAC approach in South Africa, whether in initial teacher education preparation or in classroom practice, is an approach that is unfamiliar to most teachers (Uys et al., 2007). In addition to this instructional demand, there is limited research to anchor the practice of teaching and learning content subjects in South Africa (Msimanga et al., 2017). A summary of the reviewed studies acknowledges that teachers support the EAC approach although they struggle with the pedagogical knowledge required for effectively infusing language skills into content learning. From 1990 to 2015, Msimanga et al. (2017) found only six studies that focused on language development and teaching in South Africa – an indication that there has not been much focus on how content and language are integrated in the classroom. To address this knowledge gap, this study reports on content teachers' views on implementing the EAC approach at the classroom level.

Materials and Methods

Theoretical Background

The theoretical principles that informed the way the methodology and the findings of the study are reported were drawn from reflective teaching. Reflective teaching has its roots in the works of Dewey (1933) and Schön (1983). Dewey (1933) explained that reflection is the active, persistent, and careful consideration of a belief or supposed form of knowledge embedded in the activities of practice. It is the kind of thinking that consists of turning a subject over in one's mind and giving it serious thought. For Schön (1983), reflective practice is the habit of inquiring into and investigating a problem situation in order to understand how to frame a solution. Drawn from both Dewey (1933) and Schön (1983), reflective teaching acknowledges the importance of teachers' intuitive, innovative, and creative practices when dealing with the uncertain situations that new instructional approaches such as EAC create.

There are two types of reflection, namely, reflection on and in action (Schön, 1983). On the one hand, reflection on action describes the process of reflection that takes place after the event where the practitioner evaluates the theories of action used to solve a problem. On the other hand, reflection in action describes interactions with a problem or interventions as they unfold. In the context of the study, we drew on the analytical toolkit provided by both types of reflection to orient the descriptions we required from the in-service high school teachers of their views on implementing the EAC approach in their classrooms. This stance allowed us to tease out the interplay between the description of the EAC process and how it is implemented in alignment with the sociocultural context of the discipline and the classroom. This theoretical stance acknowledges that through reflective practice teachers have agency, as they apply knowing in action (tacit knowledge), which they use to deal with and make meaning of the instruction tasks and actions.

In this study, Gibbs' (1988) six stages of the reflective cycle were applied, namely, description, feelings, evaluation, analysis, conclusion, and action plan. In the study context, Gibbs' (1988) reflective stages meant that the in-service teachers firstly described their EAC experiences. Secondly, they explained how they felt and what they thought about EAC. Thirdly, they evaluated and analysed their experiences to draw conclusions and draw up action plans for the future implementation of the EAC approach. Table 1 summarises the principles in each stage that the in-service teachers reflected on in order to describe the views they held about their experiences implementing EAC in their classrooms.

Table 1

Reflective teaching stages as applied in the study

Gibbs' stage	Guiding principles	Main research question
Description	The participants described their experiences implementing EAC in the classroom in detail. Their descriptions included a focus on memorable aspects of their practices.	What views do content subject teachers hold about the implementation of the EAC approach at the classroom level?
Feelings	The participants expressed the feelings and thoughts they had during the experience of implementing the EAC approach and how they may have influenced the experience.	
Evaluation	The participants evaluated what worked and what did not work in their classrooms. They focused on both positive and negative outcomes.	
Analysis	In this stage, the participants provided reasons for their perspective drawn from their personal beliefs about teaching and learning.	
Conclusion	The participants drew conclusions about what happened in their classrooms. They summarised what they had learnt in the process of implementing EAC and highlighted what changes they wanted to make to improve their practice.	
Action plan	The participants planned for what they would do differently in a similar or related situation in the future.	

Note. From Gibbs, G. (1988). *Learning by doing: A guide to teaching and learning methods*. Further Education Unit, Oxford Polytechnic. Copyright 1988 by the Further Education Unit at Oxford Polytechnic.

Research Design

To answer the research question, we conducted a qualitative intrinsic case study. Stake (2005) explained that the purpose of an intrinsic case study is not theory building but an exploration to better understand the phenomenon. The case study design was ideal for our exploration as we sought to understand the teachers' views on implementing EAC in content learning (Yin, 2009).

Participants

We selected participants using purposive sampling. This type of non-probability sampling is used when the selection of participants deliberately includes individuals with in-depth and contextual knowledge of the phenomenon (Creswell & Poth, 2018). The participants were selected using the following criteria: firstly, high school in-service teachers not teaching the following subjects: Afrikaans, English, isiXhosa, isiZulu, Sepedi, Sesotho, Setswana, siSwati, Tshivenda, Xitsonga, isiNdebele, and South African Sign Language. These subjects are other languages that are taught in South African high schools and we did not include these educators in the study. Secondly, we included teachers with less than six years' teaching experience. It was important to include these types of teachers as they had completed courses on how to use EAC in content teaching. Teachers who had completed their teacher training before 2014 did not receive this preparation, as the EAC approach was not included in the school curriculum.

The participants who were part of this study had a Bachelor of Education degree qualification in the different disciplines as captured in Table 2. They did not teach in the same school nor did they teach the same learners. All the teachers taught in the same South African province of KwaZulu-Natal in public high schools in towns. KwaZulu-Natal province covers an area of 94,361 km and is home to over 11 million people. In total, the province has over 1000 public schools. Due to the vastness of this province, only 15 participants who attended the same university as one of the researchers were included in the study. Each participant was drawn from one of the 15 districts of KwaZulu-Natal province. Table 2 summarises the descriptions of the participants in terms

of their disciplines, grades taught, and teaching experience following EAC. Pseudonyms have been used to identify the participants.

Table 2

Participants biographical data

Pseudonym	Subject taught	Grades taught	Years of teaching experience
Kwaito	Economics and Management Sciences	Grades 8-9	3
Mee	Natural Sciences and Technology	Grades 10-12	4
Tee	Mathematics	Grades 10-12	3
Kee	Geography and History	Grades 10-12	4
Cee	Economics and Management Sciences	Grades 10-12	5
Bee	Mathematics and Accounting	Grades 10-12	5
Ree	History and Life Orientation	Grades 8-9	3
Gee	Geography and History	Grades 10-12	4
Anita	Physical Sciences	Grades 8-9	5
Xee	Agriculture Sciences and Life Science	Grades 8-9	6
Yoli	Life Sciences and Mathematics	Grades 10-12	2
Sbu	Mathematics	Grades 10-12	4
Langa	Geography and History	Grades 8-9	3
John	Economics and Management Sciences	Grades 10-12	4
Faith	Mathematics and Physical Sciences	Grades 10-12	4

Data Collection and Analysis

We collected data using two focus group discussions (FGDs) (see the FGD Guide in Appendix A). This type of data generation method is an "interactive discussion of a topic by a collection of all participants and a team of facilitators as one group in one place" (Nyumba et al., 2018, p. 20). Three experts, one who is a qualitative methodologist and two who are English Language Teaching researchers content validated the questions for the FGD. We conducted a face-to-face FGD that allowed the participants to use their collective and cultural memory as members of the same community of practice (Krueger & Casey, 2009). The first FGD, which lasted for 65 minutes, focused on four of Gibbs' (1988) stages, namely, description, feelings, evaluation, and analysis. For the first FGD, the teachers expressed their knowledge of the approach and their instructional strengths and challenges in using it. The second FGD lasted for 62 minutes and focused on Gibbs' (1988) last stages comprising conclusion and action plans. During this FGD, the teachers described the plans they would draft in order to implement the EAC approach more effectively in their classrooms. By the end of the second FGD, the data saturation point was reached. The saturation point refers to the discontinuation of data collection because participants are not providing new information (Fusch & Ness, 2015).

All of the participants were invited to the discussion at the university where one of the researchers was working. English was used as the language of communication. The discussion included 15 participants, although an ideal FGD includes six to eight participants (Krueger & Casey, 2009). However, since the EAC approach is an area that teachers have tentatively practised (DBE, 2017) and thus may have little experience with, a group size of 15 was more productive. Although the FGD allowed the participants to cover the maximum depth on their views on EAC, we were aware of its disadvantage for giving vocal participants more talk time. We attended to this disadvantage by using the turn-taking talking strategy where we posed a question and gave each participant an opportunity to respond. We documented the FGD using audio recordings. These recordings were transcribed verbatim by a professional transcriber who signed a confidentiality agreement. To ensure that the transcriptions were accurate, we re-read them through while listening to the audio recording. Member checking was used, with eight participants reading through the transcript to confirm credibility.

Since the purpose of this study was to understand content subject teachers' EAC practices within their contextual situations, an inductive thematic approach was used for data analysis. According to Nowell et al. (2017), an inductive thematic analysis is an approach that is used when identified themes are linked to raw data. We followed Nowell et al.'s (2017) framework of analysis as we familiarised ourselves with the data that

we had transcribed. The second step was to generate initial codes, which was followed by the third step of searching for themes. In the fourth step, we reviewed the themes, followed by the fifth step where we defined and named the themes. Both researchers (coders) were involved in coding the data to ensure intercoder reliability (ICD). ICD is the extent to which independent coders evaluate a characteristic of a message or artefact and reach the same conclusion (O'Connor & Joffe, 2020). We measured the interrater agreement using three strategies that included coefficient of the generalizability theory, percent crude agreement, and Cohen's kappa (Miles & Huberman, 1994). The level of interrater code-specific agreement was 93% while the kappa values were above 0.80, and a coefficient of generalizability equal to 0.93 was obtained.

Ethical clearance to conduct the study was granted by the Faculty of Education Ethics Committee at the University of Zululand. To adhere to ethical principles, the following considerations were consciously respected in conducting the study: ensuring the anonymity and confidentiality of the participants, informed consent and voluntary participation, and protecting participants from harm. Granted, while FGDs provide a supportive atmosphere for participants, they may also create a sense of professional vulnerability. To limit this, we explained to the participants before the discussion the importance of reflective teaching as a developmental process rather than a punitive one. Furthermore, we made ourselves available to continue working with participants who needed assistance with their EAC practices following the FGD.

In addition, we used Guba and Lincoln's (2005) quality criteria to establish the trustworthiness of the study. To attend to credibility, we prolonged our engagement in the field, as we conducted one long FGD. For dependability, we documented the data using an audio recorder and a verbatim transcript for audit trail purposes. We used the participants' rich descriptions of their classroom experiences to answer the research question so as to establish transferability. Confirmability was ensured through member checking, where the participants read through the transcript to confirm its contents.

Results and Discussion

The content subject teachers in this study held views on the EAC approach and highlighted its merits, tensions, and complexities in terms of how it is implemented in the context of their classrooms. The teachers held three views, namely, (i) the merits of EAC in general language development; (ii) EAC as a challenge to pedagogical-content knowledge (PCK); and (iii) strategies for improving the implementation of the EAC approach as shown in Appendix B. We will now discuss the findings of the study aligned to both the theoretical frameworks and the following research question: What views do content subject teachers hold about the implementation of the EAC approach at a classroom level? The first section on the presentation of the findings highlights Gibbs' two stages of description and feelings, where they focused on describing the merits of the EAC approach. According to Gibbs (1988), feelings refer to thoughts that an individual holds after experiencing the phenomena. In the context of this study, the teachers described their thoughts on what they experienced as they implemented EAC. The second part discusses Gibbs' (1988) evaluation and analysis stages where the teachers highlighted the challenges they encountered when implementing the EAC approach. The last part of the discussion relates to Gibbs' (1988) stages of conclusions and action plans, where the participants made plans to enhance the implementation of the EAC approach in their classrooms. The findings were interpreted to highlight similarities with and differences from the current literature.

The Merits of EAC in General Language Development

Aligned to Gibbs' (1988) description and feelings stages, the participants described their views of EAC largely through the merits of English as a second language, as opposed to their actual practices in the classroom. Accordingly, they believed that the English language serves an important purpose and function in the South African high school education system. The content subject teachers in this study viewed the EAC approach as a resource for improving learners' language usage across the curriculum to meet this purpose. The teachers described the merits of the EAC approach on a macro level where English has become a global language of communication. Meanwhile, at the meso level, the DBE require that English be used as the language of instruction. At the micro level, the learners require proficiency in English language for interactions inside and outside the classroom. Cee, an economics and management sciences teacher with five years of teaching experience, explained that "*English is an international language. Our learners in South Africa need to be exposed*

to it to participate in this global world. So, I believe all should be done to support learners to learn English. Sbu, a mathematics teacher with four years of teaching experience, reflected on the meso merits of the EAC approach, saying, "*I think it is a no brainer that English is important to learning. You see, learning is through English as well as assessment. This EAC approach is important in assisting the learners to improve their use of the language of learning. This I think will help them perform well in all their subjects*." The advantages of the EAC approach also occur at a micro level, as described by John, an economics and management sciences teacher who has four years of teaching experience. He explained that "*South Africa is a multilingual country that also has a lot of foreigners. English makes it easy for learning and interaction for the learners to be possible …*" The content subject teachers highlighted the broad merits of English as a second language that is part of the learners' repertoires. Their understanding differs from the DBE's (2014) emphasis on EAC as the way in which language learning is given a context that supports linguistic and content development.

Although these content subject teachers highlighted the general merits of EAC in learning, they did not view the approach as an enhancer of disciplinary learning. The DBE (2017) explained that the EAC approach has as its main purpose the exposure of learners to the LoLT using content themes, however the teachers in this study did not highlight this use in their discipline. Alford and Windeyer (2014) mentioned that aspects of language may be common to a range of subject areas, but each area will produce and demand different lexico-grammatical and rhetorical textual features that reflect and construct the knowledge of that area in dynamic ways, something the content subject teachers in this study did not reflect or comment on. The absence of this view of EAC as an enhancer of discipline learning by the participants in this study aligns with the DBE's (2017) assertion that the approach has not been fully being implemented in classrooms.

EAC as a Challenge to Pedagogical-Content Knowledge

Drawing from Gibbs' (1988) stages of evaluation and analysis, the participants reflected on what was working and not working in their implantation of the EAC approach. By and large, the teachers explained that they lacked the ability to incorporate EAC in their teaching. Kwaito, an economics and management sciences teacher with three years of teaching experience, stating, *"When I was a learner, I do not remember my own teacher explicitly integrating language and business studies. During my training as a teacher, the university lecturers did not use the approach."* These views were also expressed by Xee, an agriculture sciences and life sciences teacher with six years of experience, who noted, *"It is not a bad approach but we honestly do not know how to implement it in class. In my school, we have workshops on this EAC but I have failed on my own to use it."* Secondly, the content subject teachers viewed the lack of teaching and learning material (TLM) for EAC in their discipline as a challenge. In explaining the need for TLM that is oriented to the EAC approach, Yoli, a life sciences and mathematics teacher with two years of experience, said, *"The scripted lessons* [referencing the DBE, 2017] *and two manuals are not adequate for me to understand what I need to do in class. I think if we had textbooks with the activities that integrate EAC and for, example mathematics, it will help."* A similar view was voiced by Anita, a physical science teacher with five years' teaching experience, who said that "… *the manuals are helpful … I have tried the approach but the challenge is the lack of textbooks. I remember a situation where I asked the learners to read on Newton's third law of motion and answer comprehension questions in pairs. This activity was not successful as the English used in the textbook was difficult for my Grade 8 learners. They get frustrated with this and it is a lot of work for me to go around explaining words that limit learners' comprehension. It is just time consuming …*."

Anita's pedagogical challenge in the lesson represents a curriculum design issue that could have been handled through an activity that stimulated learners' prior knowledge by means of pre-reading activities such as vocabulary development, questioning, or prediction, and the like. Anita's views on these challenges highlight that she lacks the experience to guide learners when reading lengthy contextual texts by introducing content-specific vocabulary to aid comprehension and decoding skills to activate learners' prior knowledge (Aalto & Tarnanen, 2017; Alford & Windeyer, 2014). According to Rapetsoa and Singh (2017), these pre-reading activities activate learners' pre-existing concepts about the world and about the text, thus enhancing their comprehension. The activation of learners' prior knowledge is an effective teaching practice rather than the central focus of implementing the EAC approach.

Langa, a geography and history teacher with four years of teaching experience, highlighted that "I support what my colleagues have said about a lack of learning materials for EAC. In the past in my geography class, I have developed my own TLM but it was a lot of work. There is just too much work from teaching to other

administration duties." Langa explained that teachers are overworked with teaching and administrative duties, which means that they may not have the time to develop and review content materials to suit the EAC approach in disciplinary learning. The teachers' views on EAC learning materials largely refer to the textbooks that learners read in order to receive language and content input. This seems like a limited view of the materials and highlights the gaps in the teachers' PCK conceptualisation, which go beyond the mere implementation of the EAC approach.

The teachers did not include linguistic and structural challenges in their descriptions as it seems that their application of the EAC approach is limited. In reference to the cultural challenges, the teachers in this study viewed EAC as challenging their PCK. Contained in their descriptions of PCK as a challenge is their understanding of teaching knowledge from a sociocultural worldview. This aligns with the observation made by Huang (2011) and Aalto and Tarnanen (2017) acknowledging that teachers are producers of their own PCK, which they draw from both experiential and formal preparation. However, the EAC approach poses a challenge to the content subject teachers as they do not have prior experiences explicitly observing it being implemented in the classrooms. That is, the teachers do not possess the pedagogical conceptualisations to blend content and pedagogy into an understanding of how particular aspects of subject matter are organised, adapted, and represented for EAC instruction. Lasagabaster (2018) and Davison (2006) suggest that this situation can be overcome by having collaborative links between language and content subject teachers, which the participants did not include as part of their instructional repertoires.

Strategies for Improving the Implementation of the EAC Approach

Following Gibbs' (1988) stages of conclusion and action plans, the participants detailed how they would overcome the challenges in the implementation of EAC. The content subject teachers highlighted the need to improve the initial teacher education curriculum and continuing professional teacher development. In explaining this, Mee, with four years of teaching experience, stated, *"I have seen one of the manuals that says we need to integrate listening, speaking, reading, and writing in natural sciences and technology. How do I do it? I have been a teacher for four years but I am still unable to properly use the approach. I do not have the strategies to do this in my class. Maybe, if there was a course not only manuals I can attend, I would better implement the approach."* In support, Ree, a history and life orientation teacher with three years of teaching experience, explained that "*the manuals are just not enough to guide us with the implementation of the EAC approach. I think I can improve my teaching if I observe an experienced history teaching doing it."* The teachers' views indicate that they lacked the posteriori knowledge that is constructed as a result of experiencing (Carolina, 2009) the use of the EAC approach in teaching their discipline. Teachers draw their posteriori knowledge from experience embedded in the formal preparation curriculum, teaching practice, and modelling of how to implement the EAC approach.

Cee, an economics and management sciences teacher, and Bee, a mathematics and accounting teacher, both with five years of teaching experience, explained that they had come to possess experiential knowledge from implementing the EAC approach in their classrooms. Loughran (2019) describes experiential knowledge as not existing prior to an experience or being understood from mere observation. In alignment with this type of knowledge, Bee said, "*I am a very creative person. Having my Grade 10 learners read and answer comprehension questions in accounting was both innovating on my side and motivating for learners. When the reading approach becomes boring, I looked for other ways to engage them such as having them preparing, writing, and presenting financial statements.*" In support, Cee explained that "*I let my learners read, debate, and write about cases studies in economics. While in mathematics, the learners write notes on rules they learn. They also research mathematical rules and present them in class*." This means that some content subject teachers regularly experience the EAC approach, hence the value they assign to it.

The teachers' beliefs that they require professional development indicates that they have no clear understanding of EAC as a pedagogical approach and thus need the knowledge and skills to strengthen their effectiveness in content subject teaching. Notwithstanding this view, some of the teachers recognised that they needed to think about the content to be taught, consider the linguistic demands of their discipline, and creatively facilitate learning that infuses the two. The two teachers (Bee and Cee) who were intentionally practising the implementation of the EAC approach confirmed that the profession cannot be totally mastered. Indeed, it is a lifelong process of constructing knowledge and refining skills through classroom experiences (Aalto & Tarnanen, 2017).

Implications for practice

The findings of this study have implications for the practice of EAC in the high school curriculum in South Africa. First, the EAC documents provided as pedagogical guidelines for EAC implementation are not adequate. Although the in-service teachers are aware of the EAC approach as it is presented in DBE documents, they experience challenges translating the text into action in their classrooms. Hence, there is need to have targeted professional development programmes that equip in-service content subject teachers with instructional modelling that emanates from observable experiences that are discipline-specific. Secondly, the implementation orientation of the EAC approach is fragmented. That is, it focuses only on the content subject teachers, excluding the ESL teachers. The EAC guidelines that the content subject teachers used did not highlight the possibilities of cross-curricular collaborations with ESL teachers for improving their classroom practices. Even when they encountered challenges, the content subject teachers in this study did not seek co-planning and co-teaching interventions with their ESL colleagues. This suggests the need to have EAC as a systematic practice at the school level rather than a classroom practice that, according to most of the participants in this study, was rarely used.

Conclusion

We argued at the beginning of this article that there was a need to explore South African high school teachers' views on the implementation of the EAC approach in their subjects. The findings we have presented suggest that the high school teachers are aware of the importance of the EAC approach. That awareness does not, however, extend to their practices of fostering deep learning opportunities by co-developing the learners' content and language learning. The teachers in this study, although willing to implement the EAC approach, lacked the practical knowledge of how to do it. Accordingly, they indicated the need for a collaborative and scaffolded process for implementing the EAC approach. This process will involve professional development using the strategies of modelling, observation, and mentoring. While this study does not offer a conclusive answer regarding the teachers' viewed needs for the proper implementation of the EAC approach, it does offer a preliminary step for interrogating how both students and in-service teachers are prepared to use the approach. It would be desirable if future studies in this field focus on the implementation of the EAC approach using an action research design in order to enhance teachers' practices.

This study focused on describing the content subject teachers' views on implementing the EAC approach at the classroom level in South Africa. Following Gibbs' (1988) reflective stages, the participants described their feelings and evaluated and analysed their experiences implementing this approach. In answering this part of the research question, the participants indicated that they viewed the EAC approach as having merit for general language development. However, our findings indicated a gap in the content subject teachers' understanding of the merits of the EAC approach for disciplinary learning. Several researchers commented on this aspect as they noted that their understanding of EAC and how it unfolds in different disciplines was underdeveloped.

The content subject teachers viewed the EAC approach as a challenge to their PCK, as they lacked both professional expertise and learning materials to effectively engage the learners. The teachers' views that they have gaps in their teaching knowledge were based on the notion that they lacked the posteriori and experiential knowledge of the EAC approach required to integrate it into their professional repertoires that could have been provided to them during their initial teacher education.

To attend to Gibbs' last stage of the reflective cycle, the teachers concluded their reflections and suggested strategies and action plans for enhancing the implementation of the EAC approach in their classrooms. The content subject teachers explained two strategies for improving this implementation. The first approach is to strengthen initial teacher education to intentionally include the study of implementing the EAC approach in different disciplines. The second approach is enhancing continuing professional teacher development. This concurs with previous research that suggests the need for intentionally collaborative opportunities between ESL and content subject teachers to enhance learners' language development across the curriculum.

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Conflict of interest

The authors declare that they have no conflicts of interest.

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APPENDIX A

FOCUS GROUP DISCUSSION GUIDE

Content subject teachers' views of implementing the English Across the Curriculum (EAC) approach: a study of some South African high schools

SECTION A: PERSONAL INFORMATION

Selected pseudonym	
Number of years as a high school teacher	
Number of years using the EAC approach	
Grade taught	
Subjects taught	
Highest qualification	
Availability for a follow-up study	YES/NO

SECTION B: FOCUS GROUP DISCUSSION

Date	10 August, 2020
Location	_____
Time	10:15-12:10
Number of participants	15
Moderators	_____

1. OPENING REMARKS
2. REMINDER OF THE FOCUS GROUP DISCUSSION
3. GROUND RULES
4. CONSENT PROCESS

As a group, we are going to go over the informed consent form before we start our focus group to be sure that you understand why we are having this focus group and to be sure that you voluntarily want to participate. You are still free to withdraw from the discussion at any time.

Questions	**Gibb's (1988) stages of reflection**
Introductory question We are going to give you a couple of minutes to think about implementing the EAC approach in your subject. Is anyone happy to share his or her experience?	
What is you understanding of the EAC approach? How do you implement the EAC approach in your subject?	Description
What are your favourite aspects of implementing the EAC approach in your subject? What are your least favourite aspects of implementing the EAC approach in your subject?	Feelings
What has worked for you when implementing the EAC approach in your subject? What has not worked for you when implementing the EAC approach in your subject?	Evaluation
What influences how you implement the EAC approach in your subject? What influences you not to implement the EAC approach in your subject?	Analysis
What have you learnt implementing the EAC approach in your subject? What changes would you make based on what you have learnt about implementing the EAC approach in your subject?	Conclusion
What plans would you make to ensure changes you highlighted are implemented when integrating content and language learning?	Action plans
Exit question Is there anything else you would like to say aboutimplementing EAC approach in your subject?	
Wrap up and thank you	

APPENDIX B

THEMES, SUB-THEMES AND CATEGORIES

THEME 1: THE MERITS OF EAC IN GENERAL LANGUAGE DEVELOPMENT	
Sub-theme 1.1: Macro-level merits of EAC	
Categories	**Number of times the participants mentioned the category**
1.1.1: *English proficiency enhances learners' opportunities in global communication.*	15
1.1.2: *The learners need English language for entertainment purposes.*	9
Sub-theme 1.2: Meso-level merits of EAC	
1.2.1: *English proficiency improves learners' mastery of educational concepts.*	13
1.2.2: *English proficiency enhances career prospects.*	15
Sub-theme 1.3: Micro-level merits of EAC	
1.3.1: *English is the language of learning and teaching (LoLT).*	15
1.3.2: *The ability for learners to use English improves the quality of their social interactions inside and outside the classroom.*	10

THEME 2: EAC AS A CHALLENGE TO PEDAGOGICAL-CONTENT KNOWLEDGE	
Sub-theme 2.1: EAC as a hindrance to content learning	
Categories	**Number of times the participants mentioned the category**
2.1.1: *Limited knowledge on how to design lessons that integrate content and language learning*	10
2.1.2: *Limited knowledge on how to facilitate learning activities that integrate content and language learning*	9
2.1.3: *Limited knowledge on how to pace a lesson that integrates content and language learning*	8
2.1.4: *Limited knowledge of the language structures and how they are used in the discipline*	9
Sub-theme 2.2: Lack of EAC teaching and learning materials (TLMs)	
2.2.1: *The textbooks used in different disciplines do not use the EAC approach*	13
2.2.2: *Limited knowledge of developing own TLMs that integrate content and language learning*	10

THEME 3: STRATEGIES FOR IMPROVING THE IMPLEMENTATION OF EAC	
Sub-theme 3.1: Enhancing teacher theoretical knowledge of implementing the EAC approach	
Categories	**Number of times the category is mentioned**
3.1.1: *Improved EAC programmes in initial teacher education*	9
3.1.2: *Enhanced professional development in the implementation of EAC for in-service teachers*	12
Sub-theme 3.2: Enhancing teachers' experiential knowledge of implementing the EAC approach	
3.2.1: *Opportunities for modelling of the EAC approach*	10
3.2.2: *Opportunities to observe EAC experts in the classroom*	7
3.2.3: *Opportunities to be mentored to become EAC experts in the classroom*	6

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University Students' Multidimensional State Boredom and Strategies to Cope with Classroom Boredom

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This study sought to examine how university students' state boredom dimensions (i.e., disengagement, high arousal, low arousal, inattention, and time perception) and their boredom coping strategies (i.e., cognitive approach, behavioral approach, cognitive avoidance, and behavioral avoidance) in the classroom are mediated in relation to gender and academic year. A total of 186 undergraduate students from a Turkish university, majoring in English language teaching in the faculty of education voluntarily participated in the study. The results indicated that the male participants experienced higher levels of boredom than the females in all levels of the state boredom. Additionally, the females had more inclination to use cognitive approach, while the male participants exhibited more behavioral approach to cope with boredom. Secondly, the participants with different academic levels only scored differently in disengagement, a state boredom dimension, and in cognitive approach, a boredom coping strategy. The findings highlight the significance of identifying student boredom and thereby specifying strategies to relieve their boredom in the classroom. Indeed, by gaining a proper understanding of the reactions triggered by boredom in classes, we would be able to spot the developmental paths of these reactions and thereby adopt the necessary measures to deal with student boredom.

***Keywords*:** state boredom dimensions, boredom coping strategies, university students

Introduction

Affective factors commonly refer to the emotional domain of human behavior, and, as a hotly debated topic in second language acquisition (SLA) since the 1970s, has presented important implications and practical applications to language teaching methodology (Brown, 2014). Negative emotional reactions that result from negative feelings or experiences in language learning can act as a barrier to acquisition (Yule, 2014). Intricately intertwined with different affective factors such as inhibition, self-esteem, motivation, anxiety, and risk taking, the construct of boredom also fulfills a primary role in SLA. Over the past several years, the pendulum has swung in favor of an interest in learners, rather than only being concerned with teachers, textbooks, and methods (Yule, 2014) in language education. Hence, this shift is regarded as one of the most fundamental transitions in the field of language learning and teaching, and thereby the focus on the learner is now considered to be of paramount importance in SLA.

The Construct of Boredom in Education

Boredom is described as a deactivating emotion (Pekrun, 2006), an undesirable and displeasing feeling (Mikulas & Vodanovich, 1993), and an apparently never-ending unpleasantness (Fahlman et al., 2013). It has also been argued that boredom is a more frequently experienced emotion than anxiety (Pekrun et al., 2002), and one of the most common complaints in educational settings (Busari, 2018). Indeed, it possesses various constituents (Pekrun et al., 2010), and is likely to arise from a complex, achievement-related emotion (Sharp et al., 2016). Specifically, academic boredom is a type of emotional response that has been reported to be associated with lower academic attainment (Pekrun et al., 2010), academic decline (Mann & Robinson, 2009; Pekrun et al., 2014), and educational malfunctioning (Daniels et al., 2015). The typical symptoms of academic boredom may include yawning, being drowsy, continuously watching the clock, resting head on hand, and slouching in the classroom.

More than two decades ago, Fisher (1993) asserted that the experience of boredom emerges not only from internal factors (e.g., individual differences, personality characteristics, various aspects of capacity, and mental health), but also from external causes (e.g., task and environmental conditions). In the same decade, Neu (1998) also conceptualized internal and external boredom as endogenous boredom and reactive boredom respectively. Not possessing strong incentives, activities (as external factors) that are void of stimulation are less likely to lead to educational attainment. Nor does success come without taking into consideration the individual characteristics (as internal factors) of the students. In fact, academic emotions involving boredom are identified as the feelings the students are likely to exhibit in the class while studying and taking tests and exams in educational environments (Pekrun et al., 2011), and are characterized with subjective control and value perceived by learners in the control-value theory (Pekrun, 2006). This theory of emotion suggests boredom arises when students perceive that they do not have control over the things that are either far beyond or below their abilities (Goetz et al., 2006) and when they do not notice any benefit to their educational endeavors (Pekrun et al., 2011).

Boredom Coping Strategies

Students may employ a set of miscellaneous strategies to cope with boredom in educational environments. Taking a nap, doodling, daydreaming, reading or sending text messages, playing games, and disappearing during the mid-session break are some of Ward's[1] first-hand observations of students' boredom coping strategies in educational settings. In Mann and Robinson's (2009) study, playing games on a cellphone, texting, leaving mid-session, doodling, coloring in letters on handouts, and deciding not to attend the next lecture were also reported to be some of the boredom coping strategies that university students tend to adopt.

Nett et al. (2010) examined the strategies that students adopt to deal with boredom at school and their relative effectiveness, and consequently identified four boredom coping strategies (i.e., cognitive approach, behavioral approach, cognitive avoidance, and behavioral avoidance). Both cognitive or behavioral approach strategies incorporate endeavoring to solve the problem itself, while avoidance strategies include sidestepping or escaping the difficulty. Cognitive approach strategies aim at altering the perception of the situation. To give an example, a language student might remind himself that a reading lesson is extremely important, despite knowing that is boring. This reminding strategy is likely to alter the student's perception without altering the situation and he may not consequently feel bored. Behavioral approach strategies, in contrast, include attempting to fundamentally change the exhausting situation. A student who finds the reading lesson boring might ask the teacher for more appealing tasks. If her request is fulfilled, the situation could be favorably changed, and her boredom could be relieved. Even if her demand is likely to be denied, her attempt to make the teacher cognizant of the fact that the students are bored might lead to the teacher adapting the lesson.

On the other hand, avoidance strategies aim at helping students disregard the exhausting situation, either by thinking of something completely different (i.e., cognitive avoidance) or occupying themselves with something not related with the situation (i.e., behavioral avoidance). For instance, a student might occupy her thoughts about her plan after the lessons so as to evade the boring situation without disappearing from her lessons, or she may chat with a classmate during the lesson to manage the boring situation in the class. Chatting with a classmate during the lesson, texting, and playing games on a cellphone are other typical behavioral avoidance strategies in the classroom.

Boredom in Higher Education

Undoubtedly, universities do not always supply the individual, social, and cognitive incentives required to actively engage each student, despite their securing a seat to study at a preferred place. That is why not only K-12 students but also university undergraduates may feel bored in school (Sharp et al., 2020). Emerging from a variety of factors, as mentioned earlier, academic boredom is likely to be one of the causes of poor academic performance in university. Different dimensions of boredom in educational settings have been explored in various fields of inquiry, ranging from predictors of boredom at school (Daschmann et al., 2011) and students' achievement emotions in elementary school (Lichtenfeld et al., 2012), to boredom at higher education lectures (Mann & Robinson, 2009), college students' boredom in under- and over-challenging situations (Acee, et al.,

[1] Ward, T. (2003, May 20). *I watched in dumb horror*. The Guardian.

2010), and university students' patterns of boredom (Tze et al., 2014), resulting in various scales on experience of boredom such as the Precursors to Boredom Scales, the Achievement Emotions Questionnaire-Elementary School, the Boredom Proneness Scale, the Academic Boredom Scale, and the Academic Emotions Questionnaire respectively.

The Boredom Proneness Scale (BPS), developed by Farmer and Sundberg (1986), is the main inclusive measure of boredom that has been used extensively in empirical research for more than three decades (Fahlman et al., 2013). The initial BPS comprised 28 true-false items with an internal consistency of .79 (Farmer & Sundberg, 1986). The original true-false items were then converted into a 7-point Likert-type format by Vodanovich and Kass (1990) so as to heighten its sensitivity. This scale only assesses the trait boredom of the individuals, that is, the general tendency to experience boredom in different situations, and does not determine the state boredom, which is the definite experience of boredom in the moment. Indeed, state boredom, contrary to trait boredom, is the experience of fatigue in the moment and is identified with various psychosocial issues (Hunter et al., 2015). Asserting that there is a paucity of measurement tools for assessing the state boredom of the individuals, in a recent study, Fahlman et al. (2013) developed the Multidimensional State Boredom Scale (MSBS), based on a theoretically and empirically validated concept of boredom, which was shown to be invariant across gender and regarded as the first and only full-scale measure of state boredom. In Fahlman et al.'s study (2013), MSBS scores were reported to be significantly correlated with measures of trait boredom, anger, anxiety, inattention, depression, purpose in life, life satisfaction, neuroticism, and impulsivity.

Contrary to investigations on boredom, research on students' boredom coping strategies does not abound, and students' strategies to cope with boredom have only currently been scrutinized within a thorough theoretical framework (Eren, 2013). On the other hand, even though recent examinations have diagnosed different causes of boredom in educational environments, little is known about how the recognized causes of boredom link with coping with boredom (Daniels et al., 2015). Additionally, whereas student boredom at school has been extensively investigated and indicated to be linked to varying negative consequences such as poor academic performance, school discontent, and truancy in the aftermath of the experiences of boredom, little attention has been paid to the issue of boredom within higher education (Mann & Robinson, 2009).

Although research has indicated a host of variables that mediate with boredom, investigations on how individuals' gender and academic level can play a mediating role between their state boredom dimensions and copying with boredom strategies have not been scrutinized closely. However, a wealth of studies (e.g., Deng et al., 2016; Fischer et al., 2018; Shields, 2013; Sundberg et al., 1991) highlight the undeniable role of gender in emotional psychology. Indeed, investigating both male and female individuals' differing responses to emotional triggers, here boredom, can pave the way for a better understanding of the extent to which they experience boredom and consequently how they cope with the feelings of boredom in educational contexts. Research on gender differences in educational psychology can obviously result in better measures of feelings of boredom.

Likewise, academic level in alliance with educational emotion has been the subject of investigation over the last decade (e.g., Beiter et al., 2015; Puthran et al., 2016; Respondek et al., 2017; Wang et al., 2012; Wyatt & Bloemker, 2013). Exploring students' academic year as the second mediating variable in the present study can also be illuminating as the university students in these studies reported exhibiting different emotional responses in different academic years. Identifying the construct of boredom, as one of the most frequently experienced emotions in educational contexts, and the way it oscillates among the university students with different academic levels would be enlightening for teacher educators, curriculum developers, and educationists. The present study thereby sought to fill this research gap by investigating how university students cope with boredom in the classroom by identifying their state boredom dimensions using Fahlman et al.'s (2013) MSBS, and recognizing their strategies for reducing boredom by adopting Nett et al.'s (2010) Coping with Boredom Scale.

Previous Research

Whereas students' academic emotions and motivation have been subjected to close scrutiny in educational research (e.g., Altintas et al., 2020; Le & Impett, 2013; Lerner & Grolnick, 2020; Nezlek & Kuppens, 2008; Ruan et al., 2020; Wood et al., 2003; Yeung & Fung, 2012), the study of emotion in education has only recently been taken into account (Schutz & DeCuir, 2002) and only in the recent past has academic boredom been a subject of

inquiry in the literature (e.g., Acee et al., 2010; Goetz et al., 2014; Tze, 2011). The experiences of boredom in educational milieus have been investigated in respect of their associations with unsatisfactory accomplishment at school (Jarvis & Seifert, 2002), high school dropouts (Wegner et al., 2008), achievements in school subjects (Eren & Coskun, 2016; Mann & Robinson, 2009; Pekrun et al., 2011; Raccanello et al., 2018; Sharp et al., 2020), reading comprehension performance (Shehzad et al., 2020), boredom coping strategies (Nett et al., 2010; Nett et al., 2011; Zhou & Kam, 2017), cooperative learning (Fernández-Río et al., 2014), challenging situations (Acee et al., 2010), and perceived autonomy support (Tze et al., 2014).

Some strands of research have compared the boredom of university students from a cross-cultural perspective. Tze's (2011) study, for instance, with Chinese and Canadian students indicated a significant difference in the levels of boredom at university, advocating the claim that Chinese students have a higher boredom threshold than Canadian students in educational settings. The researcher also identified a significant difference between the Canadian and Chinese participants in terms of using boredom coping strategies in which Chinese students outperformed their Canadian counterparts in using varying boredom coping strategies to regulate their experience of boredom. In Tze's (2011) study, approximately 40% of university students reported experiencing boredom in classroom at some point. In Mann and Robinson's (2009) study with university students' boredom coping strategies, almost a third (27 %) of the participants found most of the lectures boring at higher education. Indeed, the results indicated that around 60% of students find at least half of their lectures boring. Similarly, in an attempt to identify the factors that can potentially lead to boredom, Mann and Robinson's (2009) study indicated that laboratory work, online lecture notes, and PowerPoint without handouts are some factors resulting in students' boredom at higher education, while the least boredom causing teaching methods were reported to be group work outside lectures, PowerPoint with handouts, seminars, practical sessions, and group discussions in lectures. Indeed, this study underlines the significance of learner involvement and collaborative learning for alleviating the boredom experience, and thereby boosting acquisition in the classroom.

Tze et al. (2014) examined the patterns of change in classroom-connected academic boredom. According to the findings, the participants reported an overall increase in their boredom experiences. Specifically, this overall increase in classroom boredom did not significantly vary among students. The researchers attributed the increase to the method of learning such as didactic lecturing in tertiary education. However, despite the studies that reported the increasing pattern of change in classroom boredom (Ahmed et al., 2013; Tze et al., 2014), other scholars (e.g., Nett et al., 2010) asserted that individual students are at least somewhat responsible when they experience boredom. They take the view that despite the teacher's diligent attempts to prepare stimulating, hence not boring, tasks and learning environments, some students still may find the activities or the learning situation quite boring.

Along with the investigations into educational boredom, a series of studies also explored students' boredom coping strategies in the educational context. Nett et al. (2011), for example, examined students' boredom coping strategies at trait and state levels, administering a self-report questionnaire to 537 students at grade 11, more than half of whom (approximately 55%) were female. The cognitive approach orientation led to a smaller degree of boredom. Indeed, the scholars argued in favor of interventions encouraging the employment of cognitive approach strategies to cope with boredom. They asserted that students need to be encouraged to bear responsibility for boredom experiences by devoting more attention to the perceived usefulness of cognitive approach strategies to reduce feelings of boredom, improve their motivation and attainment, and consequently promote a more pleasant learning experience for both learners and instructors alike in the classroom. In a different study on boredom coping strategies in the educational context, Eren (2013) explored the mediating functions of university students' boredom managing strategies in the relationship between their perceptions of instrumentality and different aspects of engagement. Perceived instrumentality, boredom coping strategies except cognitive-avoidance orientation, and four aspects of engagement (i.e., agentic engagement, behavioral, engagement, emotional engagement, and cognitive engagement) were reported to be significantly interrelated.

In a recent study examining the mediating function of coping strategies on students' procrastination and motivation, Zhou and Kam (2017) investigated the relationships among attainment purposes, procrastination, self-efficacy, and boredom coping strategies with a group of Chinese college students (N=506). The results indicated that both approach goals and self-efficacy predict approach-oriented coping strategies. In addition, avoidance goals were predictors of avoidance oriented coping strategies. Behavioral avoidance was also reported to significantly predict procrastination. Eren and Coskun (2016) also explored the intermediary

functions of boredom managing strategies and epistemic curiosity in the relationship between students' levels of boredom and achievement scores with more than 500 high school students. The findings indicated that all of the variables were significantly linked to each other. Specifically, interest-type and deprivation-type epistemic curiosity were reported to have significant mediating roles in the relationship between the level of boredom and achievement scores, and were shown to differ across gender, underlining that the achievement scores of female students were significantly higher than those of male students.

Fernández-Río et al. (2014) explored the effect of a cooperative learning-based intervention program on 264 in-service primary education teachers' feelings of boredom. The 12-week treatment for the experimental group was based on the intervention program, while that of the control group was a traditional instructional approach. The results showed a significant decline in boredom in the experimental group. In addition, in respect of gender, female primary education teachers reported significantly lower levels of boredom when learning was cooperative. The findings signified the importance of cooperative learning as a beneficial teaching model in teacher education. In a similar study on language students' boredom experience at university, Pawlak et al. (2020) explored 111 EFL university students' causes of boredom in practical English classes. The results revealed that the sophomores experienced higher levels of boredom during practical English classes than the juniors. The overall results indicated moderate levels of boredom for both groups. More precisely, both groups particularly experienced boredom by virtue of, say, repetitive or monotonous situations, the lack of a challenge in practical English classes, the lack of exciting and/or interesting things to do in the lessons, and the lack of diversity.

In a recent study, Shehzad et al. (2020) investigated the mediating role of boredom coping strategies in the relationship between reading boredom and reading comprehension performance. The boredom attributed to English language reading skills was reported to be significantly, although negatively, related to reading comprehension performance. Additionally, reading boredom indicated a significant and positive relationship with boredom coping strategies. Boredom coping strategies were also shown to play a mediating role between reading boredom and reading comprehension performance. Indeed, the results highlight the significant role of boredom coping strategies in the acquisition of reading skills.

In a qualitative study, Finkielsztein (2019) explored university students' behaviors when they felt bored in class, using the taxonomy of boredom coping strategies. The students reported using more cognitive approaches to cope with a boring situation at the beginning of their studies at university with a progressive decrease over time in their tendency to employ those same cognitive approach when coping with boredom. Finkielsztein (2019) associated this tendency for students' decreasing engagement with their studies with becoming accustomed to the role of a student in educational settings. As a result of being familiar with the procedures and the instructors, they discovered and learned how to deal with a boring situation. In his study, the students reported that they began looking for alternative cognitive involvement (cognitive avoidance strategy) when they found the situation boring. Some metaphoric expressions used by the participating students who referred to cognitive avoidance strategies were a state of numbness, freezing, hibernation, and sleep mode. In addition, behavioral avoidance strategies such as talking to classmates and surfing on the internet were reported to be used by university students in the majority of the boredom-induced situations in the classroom.

Students' perceptions of academic boredom have also been investigated in several studies. Hypothesizing that boredom is a situation-dependent and multidimensional construct, Acee et al. (2010) assessed students' beliefs on academic boredom in under- and over-challenging situations. Task-focused boredom was identified by the tedium and ineffectiveness of a task, while self-focused boredom was identified by dissatisfaction and frustration feelings. Investigating the relationship between boredom and achievement in a native language and mathematics domains with second and fourth-grade elementary school students, Raccanello et al. (2018) found that the second graders experienced lower levels of boredom than the fourth graders. In general, mathematics resulted in better emotions than the native language subject, as younger students mainly exhibited "higher levels of enjoyment and lower levels of boredom and anxiety compared with older elementary students" (p. 16).

Considering all the studies on K-12 and university students' educational boredom profiles, future teachers' boredom experiences in the classroom and how they cope with them using a variety of strategies would be illuminating to the teacher educators in teacher education programs as this emotion, as aforementioned, can

undoubtedly play a debilitating role in learning. Additionally, the foreign language classroom is an actual learning environment, and the students' feelings and their actual experiences of boredom (i.e., state boredom) in this educational setting are likely to differ from the general boredom status (i.e., trait boredom) that they may possess. Indeed, educationists need to specify strategies to mitigate students' boredom in academic milieus (Tze et al., 2015) to pave the way for a more pleasant leaning environment. Identifying how they cope with boredom in the classroom would enable teacher educators to gain a proper understanding of reactions triggered by boredom in classes, and thereby spot the developmental paths of these reactions by adopting the necessary measures to deal with boredom experiences (Tze et al., 2015).

Thus, the present study sought to investigate university students' state boredom dimensions and their boredom coping strategies to investigate how they are mediated between gender and academic level. To this end, the following research questions and hypotheses were formulated:

RQ1: What is the gender-mediated relationship between university students' multidimensional state boredom and their coping with boredom strategies?

RQ2: Is there an academic level-mediated relationship between university students' multidimensional state boredom and coping with boredom strategies?

For the first research question, it was firstly hypothesized that female students would both report lower levels of boredom than the males in higher education, and thereby would be more likely to excel in coping with boredom in the classroom. In the second research question, it was hypothesized that the more advanced the students are in their academic studies at university, the better they would be able to cope with their state boredom.

Materials and Methods

Research Design

This is a primary cross-sectional research study in which two instruments were employed so as to collect data from a cohort of university students within a short period of time. The questionnaires asked participants to think of the dimensions of their state boredom and how they manage to cope with boredom experiences in the classroom.

Participants

Participants in the study were 186 undergraduate students from a Turkish university, majoring in English language teaching in the faculty of education. Students in their freshman, sophomore, junior, and senior classes were invited to voluntarily participate in the study. Of the sample of student participants, 27.4 % (n= 51) were male and 72.6 % (n= 135) were female. The freshmen constituted 30.1 percent (n= 56), sophomores 32.3 percent (n= 60), juniors 28 percent (n= 52), and seniors 9.7 percent (n= 18) of the whole sample of participants. Although convenience sampling was used in the study, each member of the population received an invitation to voluntarily take part in the study and had an equal chance of participation.

Data collection

All the responses were collected from the participants using an online survey development platform (i.e., surverymonkey.com). The online generated link for the survey was sent via email to the cohorts of freshmen, sophomore, junior, and senior students in the department, and a deadline was set to fill in the questionnaires. In the classroom, the required information was also provided to the students regarding the study. They were informed that the investigator was always available to respond to questions or offer explanation if needed. A satisfactory response rate was obtained as 186 students out of 260 invited agreed to voluntarily participate in the study by filling out the questionnaires.

Instruments

Coping with Boredom Scale (CBS)

The CBS, originally designed by Nett et al. (2010), was administered to determine students' boredom coping strategies in the classroom. The scale possesses four subcategories: cognitive approach, behavioral approach, cognitive avoidance, and behavioral avoidance. The scale consists of 20 items in total with five items for each category (Appendix A). All of the items in the scale point to the experience of boredom in 'mathematics class'. For example, one of the cognitive approach items is "When I am bored in mathematics class, I tell myself to concentrate again". The term 'mathematics class' was substituted for the term 'in the classroom' and the modified version of the scale (Appendix B) was administered to the students in a varying number of courses in the department, ranging from reading skills, listening and pronunciation, and writing skills to approaches and methods in language teaching, linguistics, and language and culture. The students replied to the questionnaire on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). The scale showed satisfactory descriptive statistics and internal consistency values of .87, .86, .88, and .83 for cognitive approach, behavioral approach, cognitive avoidance, and behavioral avoidance, respectively.

The Multidimensional State Boredom Scale (MSBS)

The MSBS was used to explore participants' multidimensional state boredom in the classroom. The scale was prepared by Fahlman et al. (2013). It consists of 29 items in total with a different number of items for each subscale (Appendix C). It contains measures for disengagement (10 items), high arousal (5 items), low arousal (5 items), inattention (4 items), and time perception (5 items). The students responded to the items of the MSBS on a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). The coefficient alpha of the full scale of the MSBS was reported to range from .94 to .96. Exploring the utility of the MSBS, Hunter et al. (2015) used differential item functioning to identify if any items functioned differently for male and female participants. Despite obtaining a slightly higher mean score, the male participants (M = 109.5) did not score significantly differently than the female participants (M= 107.6) on their general score on the scale, and this indicates that the MSBS's factor structure was invariant across gender.

Results

This study sought answers to two questions that explored university students' state boredom dimensions and their coping with boredom strategies along with measuring the effects of the mediating variables of gender and academic year. The state boredom dimensions were disengagement, high arousal, low arousal, inattention, and time perception. The coping strategies, as grouped in the questionnaire sub-scales, were cognitive approach, behavioral approach, cognitive avoidance, and behavioral avoidance.

At the outset, it was necessary to establish the reliability of the instruments used for data collection. The two instruments used for data collection purposes in this study were the coping strategies questionnaire with four sub-scales and the state boredom questionnaire with five sub-scales. The internal consistency reliability estimates of these questionnaires based on Cronbach's alpha test were $\alpha = .751$ for the Coping with Boredom Scale and $\alpha = .934$ for the Multidimensional State Boredom Scale.

For the first research question, it was firstly hypothesized that female students would report lower levels of boredom than the males in higher education, and thereby would be more likely to excel in coping with boredom in the classroom. At the outset, a t-test was conducted to explore whether there was any difference between male and female students with respect to their state boredom level and boredom coping strategies separately. Descriptive statistics for the two groups indicated that the male participants had a higher mean score for all the state boredom levels: disengagement (M = 44.88, SD = 11.85), high arousal (M = 20.07, SD = 5.90), low arousal (M = 19.43, SD =5.34), inattention (M = 16.98, SD =56.68), and time perception (M = 19.88, SD =5.35).

The results obtained from the t-test run (Table 1) indicated a significant difference between the scores of male and female participants in all of the state boredom dimensions: disengagement $t(184) = 2.29, p > .023$, high arousal $t(184) = .62, p > .534$, and low arousal $t(184) = 2.16$, $p > .032$, inattention $t(184) = 4.66$, $p > .000$, and time perception $t(184) = 3.23$, $p > .001$

Table 1

T-test results between the male and the female groups' state boredom dimensions

		F	Sig.	T	Df	Sig. (2-tailed)
Disengagement	Equal variances assumed	.16	.68	2.29	184	.023
	Equal variances not assumed			2.30	90.82	.024
High Arousal	Equal variances assumed	.88	.34	.62	184	.534
	Equal variances not assumed			.60	85.98	.544
Low Arousal	Equal variances assumed	.007	.93	2.16	184	.032
	Equal variances not assumed			2.19	93.13	.031
Inattention	Equal variances assumed	26.72	.000	4.66	184	.000
	Equal variances not assumed			3.85	66.19	.000
Time perception	Equal variances assumed	.95	.33	3.23	184	.001
	Equal variances not assumed			3.34	96.81	.001

Consequently, another t-test was carried out to investigate potential differences between the genders regarding their boredom coping strategies. Descriptive statistics for the two groups revealed that the male participants had a higher mean score for behavioral approach (M = 11.98, SD = 4.45), while the mean score of the female participants was higher for cognitive approach (M = 18.41, SD = 3.89). On the other hand, considering the avoidance strategies, the male participants exhibited a higher mean score than the female participants for cognitive avoidance (M = 14.15, SD = 4.89), while that of the female participants was higher for behavioral avoidance (M = 17.26, SD = 4.55).

The results obtained from the t-test run (Table 2) identified a significant difference between them for cognitive approach $t(184) = -2.32, p > .021$ and behavioral approach $t(184) = 2.54$ $p > .012$. However, despite the differences in the means scores of the male and female participants, there was not a significant difference between them for avoidance strategies: cognitive avoidance $t(184) = 1.64$, $p < .102$ and behavioral avoidance $t(184) = -1.42$, $p < .157$

Table 2

T-test results between the male and the female groups' boredom coping strategies

		F	Sig.	T	df	Sig. (2-tailed)
Cognitive approach	Equal variances assumed	008	.928	-2.32	184	.021
	Equal variances not assumed			-2.27	85.95	.026
Behavioral approach	Equal variances assumed	2.199	.140	2.54	184	.012
	Equal variances not assumed			2.34	77.53	.022
Cognitive avoidance	Equal variances assumed	1.016	.315	1.64	184	.102
	Equal variances not assumed			1.56	82.04	.122
Behavioral avoidance	Equal variances assumed	1.553	.214	-1.42	184	.157
	Equal variances not assumed			-1.29	76.32	.199

In the final phase of the first research question, a regression was also run with gender as the predictor and total coping strategies as the outcome variables in SPSS 26. If gender had any significant effect, we could have predicted that it might mediate the effect of total coping strategies on total state boredom. Table 3 contains a report of the case summaries. It includes information about male and female students' means in relation to their state boredom and coping strategies.

Table 3

Male and female students' total state boredom and coping strategy scores

Gender	Total State Boredom	Total Coping Strategy
Male	121.2549	59.1765
Female	107.3333	58.9630
Total	***111.1505***	***59.0215***

The results indicated that while the general mean scores of male and female students' coping strategies were not very different from each other (59.17 vs. 58.96), their state boredom means (121.26 vs. 107.33) differed significantly. This difference might suggest that gender could be mediating the relationship between state boredom and coping strategies. The regression tables would categorically show if this is the case.

A model summary (Table 4) is a summary of the regression results. R and R-squared in this table show the correlation between the observed and predicted values of the outcome variable and the amount of variance explained by the model, respectively. As can be seen, the amount of explained variance is noticeable.

Table 4

Model summary

Model	R	R-Squared	Adjusted R-Squared	Std. Error of the Estimate
1	.202[a]	.041	.036	30.28036

Note. a. Predictors: (Constant), gender

Evidently, there has been an effect for the predictor variable and since there is just one predictor variable, namely gender, we can attribute this effect totally to this variable. This is a conclusion reflected in coefficients table (Table 6) that follows the ANOVA analysis (Table 5).

Table 5

ANOVA showing the effect of the predictor variable

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	7174.099	1	7174.099	7.824	.006[b]
Residual	168709.686	184	916.900		
Total	***175883.785***	***185***			

Note. a. Dependent Variable: Total State Boredom. b. Predictors: (Constant), gender.

Beta in the coefficients table is especially important because it indicates the degree of change in the outcome variable per unit of change in the predictor variable. In other words, for each unit of change in the gender of the participants (from male to female), it is predicted that state boredom would reduce .202% of a unit (Table 6).

Table 6

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	std. Error	Beta		
(Constant)	135.176	8.872		15.237	.000
Gender	-13.922	4.977	-.202	-2.797	.006

Note. a. Dependent Variable: Total State Boredom

In the second research question, it was firstly hypothesized that the more advanced the students are in their academic studies, the better they would be able to cope with their state boredom. To this end, it was firstly explored whether the students' academic year (i.e., freshman, sophomore, junior, and senior) affected their boredom level distinctly. As Table 7 indicates, the results obtained from the one-way ANOVA for the disengagement revealed a significant difference among the scores of the freshmen (M = 42.50, SD = 13.32), sophomores (M = 42.93, SD = 10.15), juniors (M = 37.51, SD = 11.29), and seniors (M = 34.77, SD = 14.51), $F(3, 182) = 2.31$, $p < .05$. However, in respect to high arousal, there was not a significant difference among the scores of the freshmen (M = 19.94, SD = 6.49), sophomores (M = 20.30, SD = 4.95), juniors (M = 18.98, SD = 5.03), and seniors (M = 18.55, SD = 6.88), $F(3, 182) = .77$, $p > .05$. Nor was there a significant difference for low arousal among the freshmen (M = 14.35, SD = 6.18), sophomores (M = 14.45, SD = 5.15), juniors (M = 14.13, SD = 4.48), and seniors (M = 12.72, SD = 5.51), $F(3, 182) = .69$, $p > .05$. The inattention of the participants similarly did not exhibit a significant difference among the freshmen (M = 18.48, SD = 6.17), sophomores (M = 18.28, SD = 4.73), juniors (M = 17.75, SD = 5.27), and seniors (M = 16.44, SD = 6.81), $F(3, 182) = .51$, $p > .05$. Finally, similar to the other state boredom dimensions, the participants' time perception did not indicate a significant difference among the mean scores of the freshmen (M = 17.53, SD = 5.90), sophomores (M = 17.68, SD = 5.59), juniors (M = 18.34, SD = 6.09), and seniors (M = 16.33, SD = 5.67), $F(3, 182) = .55$, $p > .05$. Indeed, apart from disengagement, no dimensions of the state boredom exhibited any significant difference among the participants with different academic levels.

Table 7

One-way ANOVA for the academic level in respect to state boredom dimensions

		Sum of Squares	df	Mean Square	F	Sig.
Disengagement	Between Groups	990.07	3	330.02	2.31	.05
	Within Groups	25935.82	182	142.50		
	Total	***26925.89***	***185***			
High arousal	Between Groups	75.11	3	25.03	.77	.50
	Within Groups	5870.86	182	32.25		
	Total	***5945.97***	***185***			
Low arousal	Between Groups	64.59	3	21.53	.69	.55
	Within Groups	5628.36	182	30.92		
	Total	***5692.95***	***185***			
Inattention	Between Groups	44.45	3	14.81	.51	.67
	Within Groups	5213.37	182	28.64		
	Total	***5257.83***	***185***			
Time perception	Between Groups	56.85	3	18.95	.55	.64
	Within Groups	6206.68	182	34.10		
	Total	***6263.53***	***185***			

Additionally, the effect of the students' academic level on their boredom coping strategies was taken into scrutiny. The results obtained from the one-way ANOVA for the cognitive approach exhibited a significant difference among the scores of the freshmen (M = 19.17, SD = 3.00), sophomores (M = 18.11, SD = 4.53), juniors (M = 16.55, SD = 3.93), and seniors (M = 18.11, SD = 4.01), $F(3, 182) = 4.09$, $p < .05$. In respect to the behavioral approach, however, there was not a significant difference among the mean score of the freshmen (M = 10.76, SD = 3.49), sophomores (M = 11.15, SD = 4.50), juniors (M = 10.13, SD = 3.52), and seniors (M = 11.55, SD = 4.80), $F(3, 182) = .854$, $p > .05$ (Table 8).

Table 8

One-way ANOVA for the academic level in respect to the strategic approach to cope with boredom

		Sum of Squares	df	Mean Square	F	Sig.
Cognitive approach	Between Groups	186.99	3	62.33	4.09	.008
	Within Groups	2773.00	182	15.23		
	Total	***2960.00***	***185***			
Behavioral approach	Between Groups	40.68	3	13.56	.854	.466
	Within Groups	2890.13	182	15.88		
	Total	***2930.82***	***185***			

Similar to the behavioral approach to cope with boredom, the results of the one-way ANOVA for cognitive avoidance indicated no significant difference among the scores of the freshmen (M = 12.37, SD = 4.76),

sophomores (M = 13.43, SD = 4.24), juniors (M = 14.32, SD = 4.43), and seniors (M = 12.44, SD = 4.84), $F(3, 182) = 1.909$, $p > .05$. Nor was there a significant difference among the mean score of the freshmen (M = 16.73, SD = 4.53), sophomores (M = 16.16, SD = 5.56), juniors (M = 18.07, SD = 4.27), and seniors (M = 17.11, SD = 4.86), $F(3, 182) = 1.497$, $p > .05$ with regard to behavioral avoidance. Indeed, neither cognitive avoidance nor behavioral avoidance exhibited a significant difference among the participants with different educational levels (Table 9).

Table 9

One-way ANOVA for the academic level in respect to strategic avoidance to cope with boredom

		Sum of Squares	df	Mean Square	F	Sig.
Cognitive avoidance	Between Groups	116.81	3	38.93	1.909	.130
	Within Groups	3711.74	182	20.39		
	Total	***3828.55***	***185***			
Behavioral avoidance	Between Groups	105.95	3	35.31	1.497	.217
	Within Groups	4294.78	182	23.59		
	Total	***4400.73***	***185***			

Discussion

The purpose of this study was twofold: At the outset, gender-mediated relationship between university students' state boredom dimensions and their coping with boredom strategies were explored. The descriptive statistics for the two groups revealed that the male participants scored significantly higher than the female students, indicating that the male participants experienced significantly higher levels of boredom than their counterparts in all levels of the state boredom (i.e., disengagement, high arousal, low arousal, inattention, and time perception). As the male participants reported significantly in all dimensions of state boredom, they were more likely to find the lessons repetitive, longing for something more exciting (disengagement), find the classroom lectures more irritating while feeling more impatient (high arousal), feel down and empty (low arousal), feel easily distracted (inattention), and wish time would go by faster (time perception) than the female students in university. Indeed, the significant difference in the mean scores of these subcategories reveals that the male participants had greater difficulty, say, devoting attention to the lessons than the females in the classroom. In addition, the male participants were more likely to feel that time passes more slowly for them contrary to the female individuals. This type of perception of time is categorized as a cognitive component of boredom, in which time tends to seem to pass far slower for the bored students in the classroom (Nett et al., 2011). In line with the present study findings, in Vodanovich et al.'s (2011) investigation, the male students reported significantly higher scores in perception of time.

Eastwood et al. (2012) asserted that an individual's emotions can fluctuate between low and high arousal negative affect during a particular situation of boredom. Specifically, the male participants exhibited higher levels of boredom in terms of low and high arousal in the classroom. Identifying that a student experiences a low or high arousal negative affect in the classroom could be important for recognizing and responding to boredom (Hunter et al., 2015) as different cognitive impairments could be associated with each particular type of boredom (Malkovsky et al., 2012).

The finding that, overall, male students significantly experienced higher levels of boredom than females could be related to different factors, such as males' greater desire for various external stimulation, as they tend to demonstrate a stronger need for additional incentives than females (Vodanovich & Kass, 1990). The current study's results are also in line with Von Gemmingen et al. (2003) and Vodanovich et al.'s, (2011) findings in which male students reported significantly higher levels of boredom proneness than female students, and they reported higher mean boredom proneness in terms of external stimulation, respectively.

Indeed, the individuals' inattention in the classroom triggered by boredom has been shown to affect their achievement scores in school. Eren and Coskun's (2016) study on high school students' intermediary functions of boredom managing strategies and epistemic curiosity in the relationship between their level of boredom and achievement scores also revealed that interest-type and deprivation-type epistemic curiosity played significant mediating roles in the relationship between the level of boredom and achievement scores, and differed across gender, indicating that the achievement scores of female students were significantly higher than those of male

students. Indeed, Eren and Coskun's study's results imply that female students experience lower levels of boredom than male students and this can lead to higher achievement scores in school. Although Eren and Coskun's findings are echoed in the present study with respect to the lower boredom experience of female participants, the difference in the participants' achievement scores were not the focus of the present study.

After exploring the differences between male and female participants' state boredom dimensions, and identifying that the male participants experienced more trouble giving their attention to the lessons and exhibited more difficulty perceiving time than the females in the classroom, in the second phase of the first research question, the possible differences between the male and female participants with respect to their boredom coping strategies in the classroom were scrutinized. The results indicated that the male students had a significantly higher mean score in behavioral approach, while the mean score of the female participants was significantly higher in cognitive approaches for coping with boredom, indicating that the male and female participants exhibited different cognitive and behavioral approaches to cope with boredom. On the other hand, with respect to the avoidance strategies, the male participants had a slightly higher mean score than the female participants in cognitive avoidance, while the female participants had higher mean score in behavioral avoidance. However, despite the slight differences in the means scores of the male and female participations, the results did not identify significant differences in terms of the cognitive or behavioral avoidance strategies for dealing with boredom.

As mentioned earlier, individuals adopting the behavioral approach to cope with boredom tend to fundamentally change the exhausting situations. Based on the results, the behavioral reactions (i.e., approach) of the male participants to cope with the boredom were significantly higher than the females. In fact, the male students were likely to employ more behavioral approaches than the female participants by directly asking the instructor to substitute the current tasks in the classroom with more interesting activities. Conversely, individuals adopting cognitive approaches to deal with boredom may employ strategies to change the perception of the situation rather than exhibit behavioral reactions to boring situations. In this study, since the female participants employed more cognitive approach strategies than the male participants, they might cope with a boring situation cognitively by keeping silent and reminding themselves that the current lesson, despite being boring, is important and needs their full attention.

In contrast to the male participants' inclination to exploit the behavioral approach rather than the cognitive approach when dealing with boredom, they interestingly exhibited a tendency to employ cognitive avoidance more than female participants. This means that male students are more likely to occupy their thoughts with something seemingly more interesting and probably avoid the lesson in the classroom by doodling or daydreaming as a strategy to disregard the boring situation cognitively. In fact, in connection with the findings that the male participants' boredom can lead to greater disengagement and emotional arousal, as well as lower time perception and failure to pay attention, it might be concluded that classroom boredom makes male students inattentive and less tolerant toward class time, and this can eventually make them exhibit the behavioral approach or cognitive avoidance to alleviate boredom experiences in the classroom. In Eren's (2013) study, different aspects of engagement were reported to be significantly interrelated with boredom coping strategies except cognitive avoidance orientation. Indeed, it indicates that the male participants with slightly a higher proportion of employing cognitive avoidance to cope with boredom were less likely to be effectively engaged in classroom language learning. The results of this study aligned with those of Nett et al.'s (2011) study in that the cognitive approach orientation was similarly identified with smaller degree of boredom.

In addition to the inclination to use significantly more cognitive approach strategies, the female participants indicated slightly, however not significantly, more tendencies to use behavioral avoidance to avoid the exhausting situations. Specifically, the findings implied that students might divert attention away from boring situations by chatting with a classmate during the lesson, texting, playing games on the cellphone as behavioral avoidance strategies to evade the boring situations in the classroom. In Zhou and Kam's (2017) study, behavioral avoidance was also reported to significantly predict procrastination.

In the second research question, an attempt was made to investigate whether there was a grade-mediated relationship between students' state boredom dimensions and coping with boredom strategies. In so doing, at the outset, the researcher explored whether the students' academic year (i.e., freshman, sophomore, junior, or senior) affected their boredom level distinctly. In fact, different from Pawlak et al.'s (2020) study in which the

sophomores experienced more boredom during practical English classes than the juniors, in this study, no dimensions of the state boredom except disengagement exhibited any significant differences among the participants with different academic levels. This dimension of boredom was shown to be significantly different according to the students' academic year. Specifically, freshmen and sophomores exhibited higher levels of boredom than juniors and seniors, and this likely led to their disengagement in the classroom. In Pawlak et al.'s (2020) study, meaningful differences were similarly identified between the boredom experiences of sophomores and juniors in relation to their perception of the passing of time. As mentioned earlier, the time perception was similarly identified to be different for the males and females in this study.

Additionally, the effect of the students' academic level on their boredom coping strategies was scrutinized. While the cognitive approach exhibited a significant difference among the participants from different educational levels, they did not score significantly differently for the behavioral approach. This means that the participants' educational level was a determining factor in using cognitive approaches to cope with boredom in the classroom. Specifically, the freshmen group used the cognitive approach more than the other groups, while the senior group was reported to employ the cognitive approach the least in comparison with the other groups to deal with boredom in the classroom. These findings can be attributed to the fact that the freshmen possessed the least amount of experience in higher education, and thereby tended to convince themselves that the lessons, although boring, were of importance and deserved more attention, rather than using behavioral approaches to cope with boredom. Similar to the behavioral approach to cope with boredom, neither cognitive avoidance nor behavioral avoidance exhibited a significant difference among the participants with different educational levels. This means that the university students' academic level was not a determining factor in exploiting either cognitive avoidance or behavioral avoidance to cope with boredom in the classroom.

Conclusion

Tze et al.'s (2015) meta-analysis study on the relationship between boredom and academic achievements indicated that classroom boredom can have a stronger negative influence on students' academic achievements than the boredom they experience when studying. Indeed, the present study highlights the significance of identifying student boredom in the classroom in order to specify strategies to mitigate their boredom in academic milieus in general and classrooms in particular. The conclusions drawn from the findings suggest that university students' boredom and their boredom coping strategies need to be closer scrutiny. By gaining a proper understanding of the reactions triggered by boredom in classes, we would be able to spot the developmental paths of these reactions and thereby adopt the necessary measures to deal with their boredom experiences. As mentioned earlier, Mann and Robinson's (2009) study indicated that the nature of courses and the lectures in higher education can impact the students' classroom boredom. Their study provides insight into the fact that learner involvement and collaborative learning need to be thoroughly integrated in the process of learning so as to mitigate boredom experiences in the classroom.

By virtue of the fact that students who effectively manage boredom might be more high-achieving in school, feel more joy and self-confidence, and be more satisfied (Nett et al., 2010), familiarizing the students with the effectiveness of cognitive approach strategies, and using them to effectively reduce feelings of boredom can improve motivation and attainment, and consequently promote a more pleasant learning experience for both learners and instructors alike in the classroom (Nett et al., 2011). It is worth pointing out that one of the limitations of this study was the sample size, from which it could be difficult to generalize the results obtained. Likewise, the courses in the English language teaching department could also be seen as a limitation, given that they all belong to a particular department (i.e., English language teaching) in a university. Utilizing a larger sample size from several university faculties would surely increase the generalizability of the findings. Thus, future studies would be well advised to include larger samples to replicate these findings. The university students' age as a mediating factor and the effect of their personality traits such as intelligence on their boredom management in the classroom also appear to be fruitful avenues for future research.

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Appendix A

Original items of the Coping with Boredom Scale

Cognitive approach

When I am bored in mathematics class…

1) …I try to pay attention to the lesson more.
2) …I tell myself to concentrate again.
3) …I make myself aware of the importance of the issue.
4) …I try to make myself aware that this class is important.
5) …I make myself focus again because the issue is important.

Behavioral approach

When I am bored in mathematics class…

1) …I ask my instructor if we can do something else.
2) …I ask my instructor for more interesting tasks.
3) …I suggest that the instructor add variety to the lessons.
4) …I try to get the instructor off topic so that we discuss an issue that interests me.
5) …I bring up an issue that I think the class is more interested in.

Cognitive avoidance

When I am bored in mathematics class…

1) …I prepare for my next class.
2) …I do my homework.
3) …I study for another subject.
4) …I think about my homework or something I have to study.
5) …I copy the homework for my next class.

Behavioral avoidance

When I am bored in mathematics class…

1) …I talk to the person sitting next to me.
2) …I start talking to my classmate sitting next to me.
3) …I distract myself by interacting with my classmates.
4) …I try to contact other classmates who are feeling also bored.
5) …I occupy myself with my classroom neighbor ore someone who is sitting close to me.

Appendix B

Modified items of the Coping with Boredom Scale

Cognitive approach

When I am bored in the classroom …

1) …I try to pay attention to the lesson more.
2) …I tell myself to concentrate again.
3) …I make myself aware of the importance of the issue.
4) …I try to make myself aware that this class is important.
5) …I make myself focus again because the issue is important.

Behavioral approach

When I am bored in the classroom …

1) …I ask my instructor if we can do something else.
2) …I ask my instructor for more interesting tasks.
3) …I suggest that the instructor add variety to the lessons.
4) …I try to get the instructor off topic so that we discuss an issue that interests me.
5) …I bring up an issue that I think the class is more interested in.

Cognitive avoidance

When I am bored in the classroom …

1) …I prepare for my next class.
2) …I do my homework.
3) …I study for another subject.
4) …I think about my homework or something I have to study.
5) …I copy the homework for my next class.

Behavioral avoidance

When I am bored in the classroom …

1) …I talk to the person sitting next to me.
2) …I start talking to my classmate sitting next to me.
3) …I distract myself by interacting with my classmates.
4) …I try to contact other classmates who are feeling also bored.
5) …I occupy myself with my classroom neighbor ore someone who is sitting close to me.

Appendix C

Items of Multidimensional State Boredom Scale

Disengagement

1) I am stuck in a situation that I feel is irrelevant.
2) Everything seems repetitive and routine to me.
3) I seem to be forced to do things that have no value to me.
4) I feel bored.
5) I am indecisive or unsure of what to do next.
6) I want to do something fun, but nothing appeals to me.
7) I wish I was doing something more exciting.
8) I am wasting time that would be better spent on something else.
9) I want something to happen but I'm not sure what.
10) I feel like I'm sitting around waiting for something to happen.

High Arousal

1) Everything seems to be irritating me right now.
2) I am more moody than usual.
3) I feel agitated.
4) I am impatient right now.
5) I am annoyed with the people around me.

Low Arousal

1) I am lonely.
2) I feel down.
3) I feel empty.
4) I feel cut off from the rest of the world.
5) It seems like there is no one around for me to talk to.

Inattention

1) I am easily distracted.
2) It is difficult to focus my attention.
3) My attention span is shorter than usual.
4) My mind is wandering.

Time Perception

1) Time is passing by slower than usual.
2) I wish time would go by faster.
3) Time is dragging on.
4) Time is moving very slowly.
5) Right now, it seems like time is passing slowly.

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Tadayonifar, M., Entezari, M., & Valizadeh, M. (2021). The Effects of Computer-assisted L1 and L2 Textual and Audio Glosses on Vocabulary Learning and Reading Comprehension across Different Learning Styles. *Journal of Language and Education, 7*(2), 223-242. https://doi.org/10.17323/jle.2021.11020

The Effects of Computer-assisted L1 and L2 Textual and Audio Glosses on Vocabulary Learning and Reading Comprehension across Different Learning Styles

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The current study investigated the effects of computer-assisted L1 and L2 textual and audio glosses on vocabulary learning and reading comprehension across various learning styles. Based on the PET test, 30 homogeneous Iranian EFL learners took the VARK questionnaire and were divided into five learning style groups. Twenty-eight words were selected to be glossed in four reading passages. The selected passages, which were glossed in the four different forms of L1 and L2 audio and L1 and L2 textual by creating hyperlinks on the target words, were presented to the participants through a computer screen. All groups underwent all the treatment conditions and then took posttests.Three-way ANOVAs were run to investigate the effects of learning styles, modes, and language, and their two-way and three-way interactions on the performance of EFL learners on the vocabulary and reading comprehension posttests. While no significant differences between language and mode of glosses on the reading comprehension posttest scores were observed, it was revealed that L1 glosses were more beneficial than L2 glosses for vocabulary learning. The study also showed that the textual glosses were more effective than audio glosses for vocabulary learning. The results further displayed significant differences between learning styles on the vocabulary learning and reading comprehension posttest scores.

Keywords: computer-assisted glossing, learning styles, VARK questionnaire, vocabulary learning, reading comprehension

Introduction

The pivotal role that vocabulary plays in developing all the other language skills and successful second language use in ESL and EFL contexts is hardly disputable (e.g., Nation, 2011). Language researchers have proposed extensive reading as an effective way to acquire a large vocabulary repertoire (Pitts, White, & Krashen, 1989; Waring & Takaki, 2003). However, exposing learners to a wide range of texts with varying word density, especially lower-level learners, might lead to confusion and frustration rather than learning (Hu & Nation, 2000; Jiang, 2000). Therefore, an additional support is needed to assist learners cope with these constraints and provide the optimal conditions for L2 vocabulary learning (Choi, 2016). Glossing, which has been described by Nation (2013) as a short definition or a synonym accompanying the text either in the L1 or an L2, can provide this additional support. The noticing hypothesis (Schmidt, 1995), which declared that in order for the input to be processed further,learners' attention should be drawn to it, provides the theoretical basis for glossing. Multimedia glosses, which utilize different gloss modes such as text, sounds, and pictures to present the definition of words, increase learners' engagement with the texts and provide the optimal condition for the learning of vocabulary items. Therefore, the generative theory of multimedia learning (GTML) (Mayer, 2001) and the dual coding theory (Paivio, 1990), which both support meaningful learning through engagement in visual and verbal cognitive processing, further advocate the use of glossing.

When the issue of glossing versus no glossing has been resolved in favor of the glossing condition (Cheng & Good, 2009; Choi, 2016; Ko, 2012; Watanabe, 1997; Yanguas, 2009; Yoshii, 2006), researchers have tried to consider other features that might have an influence on the efficacy of glosses, like the language used to gloss

the target words (Choi, 2016; Ko, 2012; Miyasako, 2002; Yoshii, 2006), the types of glossing i.e. single or multiple glosses (Al-Seghayer, 2001; Khezrlou & Modirkhameneh, 2016; Kost, Fost, & Lenzini, 1999; Plass, Chun, Mayer, & Leutner, 1998;Rott, 2005; Sadeghi, Watanabe, 1997; Yanguas, 2009; Yoshii & Flaitz, 2002), and computer-mediated glosses (e.g. Khezrlou, Ellis, & Sadeghi, 2017; Türk & Erçetin, 2012), which provided the opportunity for researchers to consider a combination of factors. Some researchers have attempted to compare the effectiveness of electronic glosses to the traditional glosses (Taylor, 2006; Yousefzadeh, 2011) as well as the learners' attitudes towards computerized glosses (Bowels, 2004; Lenders, 2008). The majority of these studies have revealed that the multimedia gloss groups outperformed the traditional gloss groups and that learners had positive attitudes towards e-glossing (e.g. Lenders, 2008). Thus, the researchers have tried to investigate the effectiveness of multimedia glosses taking into account other factors such as different types of multimedia glosses (Sakar & Erçetin, 2005; Yanguas, 2009), individual differences like working memory capacity (Varol & Erçetin, 2019), learning styles (Rassaei, 2017), and proficiency levels (Hu, Vongpumivitch, Chang, & Liou, 2014). Some other researchers have compared the effectiveness of L1 versus L2 multimedia glosses (Barabadi, Aftab, & Panahi, 2018; Hu et al., 2014). Recently, some researchers have been interested in finding the best possible place to put the glossed words and compared in-text, marginal, pop-up, or tool-tip glosses (Abuseileek, 2011; Chen, 2016; Lee & Lee, 2014; Varol & Erçetin, 2019). Conditions (explicit, incidental, and intentional) and time (interactive vs simultaneous presentation) of gloss presentation have also taken into consideration (Khezrlou, Ellis, & Sadeghi, 2017; Türk & Erçetin, 2012).

Presenting glosses in different modes (textual vs. auditory) has also sparked some studies. Sadeghi and Ahmadi (2012) explored the effects of textual glosses, CALL audio glosses, and CALL extended audio glosses (a speaker read the meaning of the target words and provided an example) on learners' reading comprehension. The results showed that the groups exposed to the extended audio glosses outperformed the other groups significantly. Rassaei (2017) also examined the impacts of textual and audio glosses on L2 vocabulary learning. He further investigated the moderating impact of students' perceptual style. The findings indicated that audio glosses were more effective than textual glosses. Moreover, the auditory learners who were exposed to audio glosses showed the greatest amount of vocabulary learning. In a recent meta-analysis and by taking into account 42 related studies in this area, Yanagisawa, Webb, and Uchihara (2020) investigated the moderating effects of gloss format (type, language, and mode), text characteristics (comprehensibility, target word percentage, text type, CALL use, and whether the texts targeted L2 learners or native speakers), and learner characteristics (proficiency) on L2 vocabulary learning from reading. The results revealed that L1 glosses led to better learning than L2 glosses. They further found no significant difference among textual, pictorial, and auditory gloss modes.

As mentioned above, in computer-mediated glossing, many factors have been considered, but the relationship between learning styles, as one of the most important dimensions of individual differences, and multimedia gloss modes needs to be investigated further as there is a lack of studies in this regard. Oxford (2003) defined learning styles as general approaches that learners use in the learning of any subjects, including language. While some researchers found that the match between learning and teaching styles could enhance students' motivation and achievements (Lovelace, 2005; Thomson, Watt, & Liukkonen, 2015), others believed that there is quite a bit of disconfirming evidence that learning styles in any of their various guises provide a foundation for teaching (Hussman & O'Loughlin, 2018; Knoll, Otani, Skeel, & Van Horn, 2017; Willingham, Hughes, & Dobolyi, 2015). Thus, further research is needed to shed more light on this aspect (Liu & Todd, 2014). One way to show if tailoring learning and teaching styles improve L2 performance, which might further lead to the corroboration of the learning style hypothesis, is to compare the vocabulary and reading gains of learners with different learning styles following different multimedia glossing conditions that matched or did not match their learning styles. There is only one research paper in this regard. Rassaei (2017) investigated the impacts of matching multimedia glossing (textual and audio) to perceptual styles only on vocabulary learning by presenting just L1 glosses. Therefore, investigating the effects of tailoring glossing to the learners' learning styles by using both L1 and L2 multimedia glosses on vocabulary learning as well as reading comprehension gains may lead to different results. Moreover, he only used visual and auditory styles, but there are more than two learning styles and some people prefer a combination of styles. Based on this classification, Klement (2014) found that the largest group of students consisted of kinesthetic learning style, which was ignored in Rassaei's (2017) study. Thus, a more comprehensive taxonomy of learning styles is required if the relationship between learning styles and multimedia glossing is going to be measured. The VARK learning style classification was utilized to decrease the limitations of Rassaei's (2017) study as it divides the students into four styles, which is

more representative. Thus, the researchers intended to conduct this study to investigate the effects of computer-assisted L1 and L2 textual and audio glosses on vocabulary learning and reading comprehension considering various learning styles.

Literature Review

Previous research has shown that providing a form of glossing is effective in improving vocabulary learning. This motivated researchers to delve more deeply into the impacts of other factors which might affect their efficacy. Thus, factors like the language used to gloss the target words, types of glosses, and individual differences in learners' performances were considered. However, the studies in the latter group are limited to one or two studies and further research is needed in this area. In this section, the studies which are more relevant to the current study are discussed.

The Language of Glosses

The language used to gloss the texts might influence the effectiveness of the glosses. Therefore, some researchers attempted to explore the efficacy of L1, L2, or a combination of L1 and L2 glosses in their studies. For instance, Ko (2012) asked the participants to read materials under three different conditions of no-gloss, L1 gloss, and L2 gloss. Findings showed that there was a significant difference between glossed conditions and no-gloss condition on the immediate vocabulary test, but no significant differences between L1 and L2 glosses were found. Choi (2016) explored the effects of L1 and L2 glosses on incidental vocabulary acquisition and lexical representations. The participants read a story under three conditions of L1, L2, or without glosses. Similar to Ko (2012), the results indicated that glossed condition groups performed significantly better than no-gloss condition. It was further revealed that although the L1 and L2 groups did not differ in the immediate recall, the L1 group performed better in the long-term retention. In two recent meta-analyses, Yanagisawa et al. (2020) and Kim, Lee, and Lee (2020) examined the impacts of L1 and L2 glosses on L2 vocabulary learning and reading comprehension. They found that L1 glosses were more effective than L2 glosses.

Cheng and Good (2009) investigated the impacts of three gloss types of L1 plus L2 glosses, L1 in-text, and L1 marginal glosses in comparison with the no-gloss condition on reading comprehension and vocabulary acquisition. The study indicated that L1 glosses helped participants learn new words and review the learned words. The results further showed that the participants in the gloss conditions performed better on the vocabulary recall tests, but the glossing conditions did not affect reading comprehension significantly. However, the study indicated that besides the language of glosses, other factors like proficiency levels could affect gloss efficacy and not all levels of students benefit from L1 glosses. To address this, Hu et al. (2014) analyzed the effects of L1 and L2 e-glosses on incidental vocabulary learning. The participants were divided into four groups based on whether they would receive L1 glosses or L2 glosses first. The results showed that the high-proficiency groups who first received L2 glosses remembered more words on the delayed posttest. The study suggested that both L1 and L2 glosses can be effective, but they should be selected according to the learners' proficiency levels.

The amount of leaner engagement with the L1 and L2 glosses also caught the attention of some researchers. Samian, Foo, and Mohebbi (2016) attempted to explore the effect of giving and receiving marginal L1 glosses on L2 vocabulary learning. The participants were divided into L1 glosses giver, L1 glosses receiver, and no-gloss groups. The giver group was asked to do the reading tasks using a bilingual dictionary, and write down the L1 equivalents. The receiver group was asked to perform the same tasks which included L1 equivalents of the targeted words. The control group had no access to marginal glosses while completing the tasks. The results of the immediate and delayed posttests revealed that both the giver and receiver conditions affected L2 vocabulary learning. Further, the study found that the giver group made the most favorable progress over time. In a similar research study, Rassaei (2020) explored the impact of dynamic and nondynamic glosses on EFL learners' vocabulary knowledge. In the dynamic gloss condition, the participants were presented with a set of short passages that were glossed from the most implicit to the most explicit for each unfamiliar word. In the nondynamic glossing condition, a first language definition for each target word was provided. Similar to Samian et al. (2016) who found the beneficial effects of engaging learners more in the text by using a bilingual dictionary, the results of this study also showed that the dynamic glossing condition was more effective than the nondynamic condition for L2 vocabulary learning.

In a multimedia environment, Yoshii (2006) investigated how adding a pictorial cue to the L1 and L2 glosses affected vocabulary learning. There were four glossing conditions: L1 text only, L2 text only, L1 text plus pictorial gloss, and L2 text plus pictorial gloss conditions.Results from the data analysis showed that the difference between picture and no-picture gloss conditions was significant, but the difference between L1 and L2 glosses was not. Rouhi and Mohebbi (2012) also investigated the impact of computer-mediated L1 and L2 glosses on L2 vocabulary learning. The participants of the experimental groups read the passages of their textbook for six sessions. Then, they took the immediate posttest and the delayed posttest. Findings showed the superiority of the glosses groups (L1 and L2) over the control group. Further, the L1 glosses were more effective than the L2 glosses on the posttests. The results suggested that the L1 can be used as an effective tool to gloss the texts.Barabadi et al. (2018) investigated the impact of L1 and L2 glosses along with computer-generated phonological guidance on vocabulary learning. Contrary to Rouhi and Mohebbi (2012), the results indicated that L1 and L2 glosses assisted with phonological guidance resulted in better performance regardless of the language used to gloss the target words. Recently, Yanagisawa et al. (2020) in a meta-analysis indicated that L1 glosses led to greater learning than L2 glosses. However, they observed no interactions between language, proficiency, and mode of glossing.In a meta-analysis, Taylor (2020) examined the key factors related to how CALL glossing can be effective. The findings showed that CALL glosses could promote L2 text comprehension. The study also indicated that large amounts of CALL glossing may not necessarily lead to L2 reading comprehension. The results further revealed that textual glossing with pictures might be the most effective form of CALL glossing.

The conflicting results obtained from the studies in this category indicate that there could be other factors that influence the effectiveness of glosses to improve vocabulary learning and reading comprehension. Thus, some studies explored the effects of utilizing various gloss types to promote vocabulary learning and reading comprehension.

Utilizing Different Gloss Types

Following the generative theory of multimedia learning, Plass et al. (1998) exposed English-speaking German learners to a story that was glossed with either visual, verbal, or both visual and verbal annotations. The results showed that learners recalled the words better when they used both types of annotations. Similarly, the results of the study conducted by Kost et al. (1999) and Yoshii and Flaitz (2002) showed that a combination of annotations resulted in better performance. Al-Seghayer (2001) exposed learners to a reading text that was glossed with either printed text definition alone, printed text definition accompanied by video clips, or printed text definition coupled with still pictures. He found that video clips were more effective than still pictures in both production and recognition measurements. Rott (2005) glossed a text with multiple-choice annotations or single-translation glosses. The results indicated that multiple-choice glosses were more facilitative than the single-translation glosses for establishing lexical form-meaning connections. In an attempt to see whether multimedia glosses improve reading comprehension, Sakar and Erçetin (2005) glossed a text with textual, audio, and visual forms. The results showed that the participants preferred visual glosses significantly more than textual and audio glosses. Although the learners showed positive attitudes towards glosses and hypermedia reading in general, a negative relationship between gloss use and reading comprehension was reported. In a similar study, Yanguas (2009) investigated the effects of textual, pictorial, and textual + pictorial multimedia glosses on comprehension and vocabulary learning. The findings showed that multimedia gloss groups performed better than the control group on the vocabulary test, but no significant differences were reported in reading comprehension. Sadeghi et al. (2016) explored how the three gloss types text–picture, text–audio, and text–picture–audio influenced students' vocabulary learning and reading comprehension. The participants were assigned to four learning conditions: intentional, incidental, and explicit instruction operationalized according to either the presence or absence of explicit vocabulary instruction. All of the groups were exposed to all gloss types. The results indicated that text–picture–audio gloss type yielded better scores. The study suggested that the students' performances with different gloss types were condition-specific.

Individual Differences and Glossing

Some studies attempted to see whether individual differences like intelligence, working memory, educational and proficiency levels, learning styles, etc., had an effect on the efficacy of glosses. For example, Rouhi and Mohebbi (2013) investigated the impacts of pictorial, pictorial + sound, and video glosses on L2 vocabulary

learning in a multimedia context. They further intended to find whether there was a relationship between learners' high spatial intelligence ability and their ability to take advantage of multimedia glosses in L2 vocabulary learning. The results showed that multimedia glosses could enhance L2 vocabulary learning. They found no significant difference between the high and low spatial ability groups. In a recent study, Varol and Erçetin (2019) investigated the role the type of gloss played in terms of content (lexical vs topical), location (pop-up vs separate window), and working memory capacity in L2 learners' recall and comprehension in e-reading. The participants were assigned to four glossing conditions: separate window topic-level glosses, pop-up window topic-level glosses, separate window lexical glosses, and pop-up window lexical glosses. The results indicated that the impacts of gloss content hinged on the type of task used to measure comprehension while the effect of gloss location was less clear-cut. Working memory capacity played a significant role in comprehension. In a meta-analysis, Ramezanali, Uchihara, and Faez (2020) explored the efficacy of an additional gloss mode on L2 learners' word learning. While the findings indicated that the additional gloss mode had medium and small effects, the impacts of additional gloss modes were affected by a range of variables including learners' characteristics such as educational backgrounds and proficiency levels.

Cheng and Good (2009) mentioned that when evaluating the value of glosses, matching text difficulty to students' language proficiency is gaining importance.Another variable that is important in assessing the value of glosses is learners' learning styles. Matching gloss types to students' learning styles might increase the efficacy of glosses. To provide empirical evidence Rassaei (2017) examined the moderating impact of perceptual styles on L2 vocabulary learning while the learners were exposed to L1 textual, L1 audio, and no-gloss conditions. The study indicated that while both gloss conditions resulted in better vocabulary scores than the no-gloss condition, audio glosses were more effective than textual glosses, especially when they were tailored to the students' preferred styles. In that study, the participants were divided only into visual and auditory styles. However, there are more than two learning styles. For example, based on the classification that there are more than two learning styles and some people prefer a combination of styles, Klement (2014) found that the largest group of students favored the kinesthetic learning style, which was not taken into account in Rassaei's (2017) study. Thus, a more comprehensive taxonomy of learning styles is required if the relationship between learning styles and multimedia glossing is going to be measured. The VARK learning style classification was utilized to decrease the limitations of Rassaei's (2017) study as it divides the students into four styles that are more representative. Thus, the researchers intended to conduct the present study to investigate the effects of computer-assisted L1 and L2 textual and audio glosses on vocabulary learning and reading comprehension across various learning styles.

Aims and Research Questions

The current study intended to explore the effects of computer-mediated L1 and L2 textual and audio glosses on vocabulary learning and reading comprehension across different learning styles. In the current study, there were four glossing conditions that were used as the treatment conditions: L1 textual glosses, L1 audio glosses, L2 textual glosses, and L2 audio glosses. Therefore, the following research questions were presented.

1. Do the language and modality of glosses and their interactions have an effect on vocabulary learning?
2. Do the language and modality of glosses and their interactions have an effect on reading comprehension?
3. Do the language and modality of glosses and their interactions have an effect on the vocabulary learning of different learning style groups?
4. Do the language and modality of glosses and their interactions have an effect on the reading comprehension of different learning style groups?

Matreials and Methods

Participants

An initial sample of 40 students studying English as a foreign language at a private language institute in Iran participated in this study. To select a homogeneous group of students, a Preliminary English Test (PET) was run. PET is an examination targeted at Level B1 (intermediate) in the Council of Europe's Common European Framework of Reference. In this test, candidates who scored between 140 and 152 achieved a "Pass" and

received a certificate for Level B1, which means intermediate. Therefore, 30 intermediate learners who scored between 140 and 152 (M=145.16, SD= 3.50) were selected as the final sample and 10 were excluded. They were excluded if they scored either below or above the criterion. The students were attending English classes in the language institute (twice a week for 90 minutes) where all skills were emphasized. The candidates were verbally announced in class, then information about the aims of the study, time devotion, and using their data for the research purpose was presented through written materials and all of them consented to participate. The participants included 10 males and 20 females between the ages of 19 and 20.

Instruments

Vocabulary Knowledge Test

In order to find the target words, a pilot study was conducted prior to the main study with 10 participants who shared similar backgrounds regarding English learning experience and proficiency. They were asked to read the unglossed version of the reading passages and underline the unknown words. Thirty words were selected based on the pilot study, as more than half of the students identified them as unknown (Bowels, 2004). In addition, 10 words that were considered to be critical for understanding the passages were added to the test by the teacher-researchers. Therefore, a vocabulary knowledge test consisting of 40 words (10 verbs, 17 nouns, and 13 adjectives) was presented to the students prior to the beginning of the treatment sessions. The participants were required to write a definition, or a synonym either in their L1 or L2 to show their knowledge about these words. The decision to include or exclude the words as the final target words was reached in light of the selection criterion adopted in Watanabe (1977) (as cited in Tadayonifar, 2016). This criterion suggested that if a word was familiar to more than 20 percent of the participants, it would not be considered as a target word. Twenty-eight words matched the criterion and were selected as the final target words. They consisted of 14 nouns, 8 adjectives, and 6 verbs (Target words: alternative- authentic- express- a stand- convenient- nightmare- temple- expertise - a trend -an audience - consistent -catchy -to charge- a niche- profits-innovative- a demand- survive-to target-to be aware of- effective- a takeover- to adapt - to underestimate- empathy – overworked- aspect- to diagnose). Regarding reliability, Cronbach's alpha was satisfactory for the vocabulary knowledge test (ǎ= .82).

PET Test

The Preliminary English Test (PET) is an English language examination supported by Cambridge Assessment English. It is an intermediate-level examination designed for learners mastering the basics of English and having practical language skills for everyday use. The test has reading,writing, listening, and speaking sections. There are two versions of the PET test: PET and PET for Schools. Both versions have the same types of questions. The PET for schools test, which was used in the current study, includes the content of interest to school-age learners. In this study, the PET test was used to select the homogeneous students. It consisted of four sections of listening, speaking, reading, and writing. The reading sections included multiple-choice, matching, and true/ false questions. Regarding reliability, Cronbach's alpha was satisfactory (ǎ= .71).

Glossed Reading Passages with Hyperlinks

As there were four treatment conditions, four reading passages, which were tailored to the participants' proficiency levels, were selected to be glossed based on the Flesch Reading Ease Formula. The first passage 'A Travel Guide' (374 words) received a score of 69.5, the second text 'Innovations in Business' (431 words) got a score of 60, the third one 'Robot Teachers' (348 words) received a score of 62.4, and the last passage entitled 'Social Media Influencers'(448words) got a readability score of 65.1. The passages were chosen from the British Council website, where graded reading passages are available (https://learnenglish.britishcouncil.org/reading). In addition to their suitability for intermediate-level students, the selected passages included authentic and updated content. The authenticity and the freshness of the content could potentially increase the learners' motivation, interest, and engagement in reading, which in turn leads to more attention to the glossed words. A clear definition was chosen as the input used in L2 gloss conditions and an L1 translation of the target words was chosen as L1 gloss conditions.

Fleming's VARK Learning Style Questionnaire

The VARK learning style inventory, which is a sensory model, was developed by Fleming (2001). The acronym stands for visual, auditory, read/write, and kinesthetic styles. The learning styles include: 1) visual learning

style (learners with visual learning style mostly learn through observation), 2) auditory learning style (learners with auditory learning style prefer to learn by listening and oral presentation of the contents), 3) read/write learning style (learners with read/write learning style learn by note taking and reading), and 4) kinesthetic learning style (learners with kinesthetic learning style learn through experiments, physical activities, and object manipulation). People's performances in different situations provided the basis for designing the VARK questionnaire items. There are 16 items and each item consisted of four options indicating one of the styles of learning. The preferred learning style of each respondent is the one in which s/he has obtained the highest score. If a person obtains similar scores in two or more styles, s/he will be identified as a learner with mixed learning styles. Javadi Nia et al. (2012) found a test-retest reliability of 0.80 for the VARK questionnaire (cited in Shahrki Pour, Ghoreishinia, Zare, & Arbabisarjou, 2016). Fitkov-Norris and Yeghiazarian (2015) revealed that the Rasch model fits the majority of the VARK questionnaire data and the sample data supported the internal validity of the four sub-constructs. The dimensionality of VARK using multi-trait and multi-method confirmatory factor analysis was examined and satisfactory reliability estimates were obtained for its subscales, which validated its use as a diagnostic tool (Leite, Svinicki, & Shi, 2010). This suggested that it could be utilized as a predictor for a person's learning style. In addition to the acceptable reliability and validity measures of VARK obtained in the previous studies, satisfactory test-retest reliability of .79 was also obtained in the current study.

Posttests

In order to measure the effects of our treatment conditions on vocabulary learning and reading comprehension, eight posttests were designed. Four posttests measured the vocabulary gains and the other four posttests measured reading comprehension. Each vocabulary posttest consisted of seven items in which the participants were required to match the definitions with the related words. The selected words were the same as the target words that were glossed in the passages. Therefore, the maximum score on the vocabulary posttests was seven. Each reading comprehension posttest, which focused on the comprehension of the whole text, consisted of six true or false questions. Although there are problems with this format of reading comprehension tests, their ubiquity in educational settings indicates their practicality for teachers. Even in international standardized tests like IELTS and PET, where stakes are high, true/false comprehension items have kept their place. True/false questions can be designed to assess surface-level knowledge as well as higher-order thinking. Learners can answer true/false items quickly, which allows test designers to evaluate more items on a test. They are practical test items for teachers as marking is easy and quick. Ebel and Frisbie (1991) argued that such test items have utility for gauging a broad range of verbal knowledge such as the learners' understanding of an event or a process within a passage. Miller (2009) also believed that by avoiding general, negative, and long complete sentences, and including approximately the same number of true/false questions, true/false items could be turned into a valid evaluation format. Thus, in the present study, which utilized classroom research where practicality matters a lot, true/false items were used for their efficiency and practicality. The maximum score in the reading posttests was six. Regarding reliability, Cronbach's alphas were satisfactory (for the vocabulary posttests ǎ=.78: for the reading comprehension tests ǎ= .71).

Procedure

Based on the PET test, which acted as a homogeneity test, a final sample of 30 Iranian EFL learners studying English at an intermediate level in a language institute took part in this study. The VARK questionnaire was administered to determine their learning styles. Based on the questionnaire, five participants were identified as visual learners and seven as auditory style learners. Read/write, kinesthetic, and mixed styles received an equal number of six participants each. Therefore, the participants were divided into five groups based on their learning styles. The study focused on the possible improvement in students' vocabulary and reading comprehension knowledge among the different learning style groups following the treatments. In other words, the study aimed to tailor each learning style to its preferred treatment condition. Through the proficiency and the vocabulary knowledge pretests, the learners' knowledge of vocabulary and reading comprehension were controlled for. Incorporating homogeneous learners in each group enabled the researchers to attribute the potential improvement after the treatments largely to the effects of the treatments. Therefore, no control group was chosen, as the comparison between groups could provide a clearer picture of the effectiveness of each glossing condition for each learning style than comparing their performance before and after the treatment. Next, appropriate materials were developed. As there were four treatment conditions, four reading passages that were tailored to the participants' proficiency levels were selected to be glossed. Out of these

passages, a total number of 28 words (based on the vocabulary knowledge test) were selected for glossing. The selected passages, which were glossed in four different forms of L1 and L2 audio, and L1 and L2 textual by creating hyperlinks on the target words through Microsoft PowerPoint, were presented to the participants through a computer screen over a period of two months. In the textual glossing conditions, the participants were required to put the cursor on the target words to see the definitions in L2 conditions or translations in L1 conditions. In audio glossing, they were required to click on the hyperlinks to hear the definitions or translations. They were free to refer to the glosses whenever they needed them during the time limit. All of the participants underwent all treatment conditions individually in the classroom setting as part of their class activity. Each session, only one glossed passage was randomly selected and presented to the participants. They were expected to read the glossed passage and then take the vocabulary and the reading comprehension posttests related to that passage after 30 minutes. Thus, in each session two posttests (one to measure vocabulary learning and the other to measure reading gains) were administered. This procedure continued until all glossed passages and their related vocabulary and reading tests were completed. The results were compared to see which glossing condition was more effective for vocabulary learning and reading comprehension. As there was not a separate pretest for measuring the participants' reading comprehension prior to the treatment conditions, the scores from the reading section (true/false part) of the PET pretest were considered as the reading comprehension pretest. As mentioned in the description of the PET pretest, the reading section included multiple-choice, matching, and true/false items.The true/false part consisted of 10 questions and the participants received one mark for each correct answer. The reading comprehension posttest in the current study also consisted of true/false items. Thus, the nature of true/false questions in the PET reading section is similar to the nature of the reading posttest and comparing the scores extracted from the PET pretest with the posttests could show the effectiveness of the treatment conditions in the present study.In order to see whether the mean differences of the reading comprehension pretest and posttest were significant or not, a paired sample t-test was run. Two three-way ANOVAs were also run to investigate the effects of learning styles, modes, and language, and their two-way and three-way interaction on the performance of EFL learners on the vocabulary and reading comprehension posttests. When the results were significant, post hoc analysis was run to find the exact place of difference.

Results

The Effects of Glossing Conditions on Vocabulary Learning

A three-way ANOVA was run to investigate the effect of learning styles, modes, and language, and their two-way and three-way interactions on the performance of EFL learners on the vocabulary tests. Table 1 shows the descriptive statistics of each learning style on the vocabulary posttests.

Table 1

Descriptive statistics; vocabulary by learning styles

Learning Styles	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
visual	3.700	.264	3.175	4.225
auditory	5.036	.224	4.592	5.479
read/write	4.792	.241	4.313	5.271
kinesthetic	4.250	.241	3.771	4.729
mixed	4.375	.241	3.896	4.854

According to Table 1, the auditory group (M = 5.03) had the highest mean on vocabulary. This was followed by read/write (M = 4.79), mixed (M = 4.37), kinesthetic (M = 4.25), and visual (M = 3.70). To check the significance of the observed differences, a three-way ANOVA was conducted. Table 2 displays the results of the three-way ANOVA.

Table 2

Tests of between-subjects effects; vocabulary by learning styles, mode and language

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Learning Styles	24.677	4	6.169	4.410	.003	.150
Mode	12.995	1	12.995	9.290	.003	.085
Language	6.834	1	6.834	4.885	.029	.047
Learning Styles * Mode	55.601	4	13.900	9.937	.000	.284
Learning Styles * Language	1.125	4	.281	.201	.937	.008
Mode * Language	.128	1	.128	.092	.763	.001
Learning Styles * Mode * Language	1.344	4	.336	.240	.915	.010
Error	139.886	100	1.399			
Total	2643.000	120				

The results (F (4, 100) = 4.41, $p < .05$, $p\eta^2 = .150$ representing a large effect size) indicated that there were significant differences between the five learning styles' means on vocabulary posttests. Thus, post hoc Scheffe's tests were run to see the exact place of difference. Table 3 shows the results of the post hoc Scheffe's tests.

Table 3

Post hoc Scheffe's tests; vocabulary by learning styles

(I) Learning Styles	(J) Learning Styles	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
read/write	visual	1.09	.358	.062	-.03	2.22
	kinesthetic	.54	.341	.643	-.53	1.61
	mixed	.42	.341	.828	-.65	1.49
auditory	visual	1.34*	.346	.007	.25	2.42
	read/write	.24	.329	.968	-.79	1.28
	kinesthetic	.79	.329	.231	-.25	1.82
	mixed	.66	.329	.407	-.37	1.69
mixed	visual	.68	.358	.474	-.45	1.80
	kinesthetic	.13	.341	.998	-.95	1.20
kinesthetic	visual	.55	.358	.671	-.57	1.67

Note. *The mean difference is significant at the .05 level.

The results indicated that the auditory group had a significantly higher mean than the visual group ($p < .05$). There were not any significant differences between other groups.

Table 4 shows the descriptive statistics of each modality on the vocabulary posttests.

Table 4

Descriptive statistics; vocabulary by mode

Mode	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Textual	4.761	.154	4.457	5.066
Audio	4.100	.154	3.795	4.404

According to Table 4, there was a mean difference between the textual (M = 4.76) and audio (M = 4.10) modalities on the vocabulary posttests.To see whether the observed difference was significant, the three-way ANOVA was conducted (Table 2). The results (F (1, 100) = 9.29, $p < .05$, $p\eta^2 = .085$ representing a moderate effect size) indicated that the textual mode (M=4.76) had a significantly higher mean than the audio mode (M=4.1) on the vocabulary posttests.

Table 5 shows the descriptive statistics of L1 and L2 glosses on the vocabulary posttests.

Table 5

Descriptive statistics; vocabulary by language

Language	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
L1	4.670	.154	4.366	4.975
L2	4.190	.154	3.886	4.495

Table 5 showed that there was a mean difference between L1 (M = 4.67) and L2 (M = 4.19) glosses on the vocabulary tests. To see whether the observed difference was significant, a three-way ANOVA was conducted (Table 2). The results (F (1, 100) = 4.88, $p < .05$, $p\eta^2 = .047$ representing a weak effect size) indicated that L1 had a significantly higher mean (M= 4.67) than L2 (M=4.19) on the vocabulary posttests.

In this part, the results of two-way and three-way interactions on the performance of EFL learners on the vocabulary posttests will be discussed. The results showed that there was a significant interaction between learning styles and mode (F (4, 100) = 9.93, $p < .05$, $p\eta^2 = .284$ representing a large effect size). As displayed in Table 6 and Line Graph 1, visual, read/write, kinesthetic, and mixed learning styles had higher means in the textual mode; while auditory learning style had a higher mean in the audio mode.

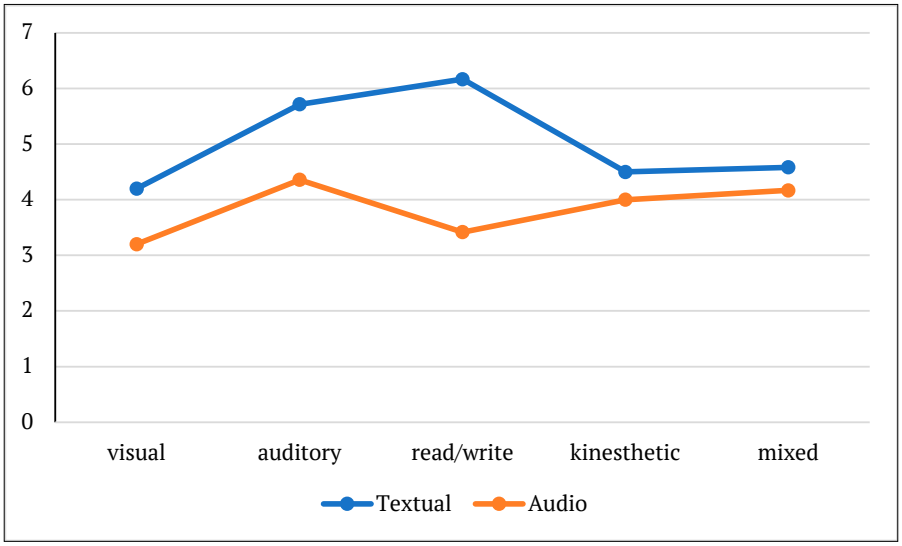
Table 6

Descriptive statistics; interaction between learning styles and mode

Learning Styles	Mode	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
visual	Textual	4.200	.374	3.458	4.942
	Audio	3.200	.374	2.458	3.942
auditory	Textual	4.357	.316	3.730	4.984
	Audio	5.714	.316	5.087	6.341
read/write	Textual	6.167	.341	5.489	6.844
	Audio	3.417	.341	2.739	4.094
kinesthetic	Textual	4.500	.341	3.823	5.177
	Audio	4.000	.341	3.323	4.677
mixed	Textual	4.583	.341	3.906	5.261
	Audio	4.167	.341	3.489	4.844

Line Graph 1

Interaction between learning style and mode; vocabulary test



The results further indicated that there was no significant interaction between learning styles and language ($F (4, 100) = .201$, $p > .05$, $p\eta^2 = .008$ representing a weak effect size), mode and language ($F (1, 100) = .092$, $p > .05$, $p\eta^2 = .001$ representing a weak effect size) and learning style, mode, and language ($F (4, 100) = .240$, $p > .05$, $p\eta^2 = .010$ representing a weak effect size).

The Effects of Glossing Conditions on Reading Comprehension

The participants' reading comprehension scores before and after exposing them to the glossing conditions were compared. On average, the participants scored higher on the posttests (M=15.26, SD=3.18) than the pretests (M= 5.93, SD=1.57). Shapiro-Wilk tests indicated that the scores met the normal distribution assumption respectively for the pre and posttests, W (30) =0.95, p=.21), W (30) =0.95, p=.51). Thus, to explore whether the mean differences of the reading pretests and posttests were significant or not, a paired sample t-test was run. The results indicated that there was a significant difference between the participants' reading comprehension ability before and after the treatment, t (29) = -13.05, p=.000.

A three-way ANOVA was run to investigate the effect of learning styles, modes, and language, and their two-way and three-way interactions on the performance of EFL learners on the reading comprehension tests. Table 7 shows the descriptive statistics of each learning style on the reading comprehension posttests.

Table 7

Descriptive statistics; reading by learning styles

Learning Styles	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
visual	3.200	.285	2.634	3.766
auditory	3.929	.241	3.450	4.407
read/write	4.417	.260	3.900	4.933
kinesthetic	3.667	.260	3.150	4.183
mixed	3.583	.260	3.067	4.100

According to Table 7, the read/write group had the highest mean on reading (M = 4.41). This was followed by auditory (M = 3.92), kinesthetic (M = 3.66), mixed (M = 3.58), and visual (M = 3.20). To check the significance of the observed differences, a three-way ANOVA was conducted. The results are presented in Table 8.

Table 8

Tests of between-subjects effects; reading by learning styles, mode and language

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Learning Styles	18.310	4	4.577	2.811	.029	.101
Mode	.002	1	.002	.001	.971	.000
Language	4.928	1	4.928	3.027	.085	.029
Learning Styles * Mode	20.743	4	5.186	3.185	.017	.113
Learning Styles * Language	6.352	4	1.588	.975	.425	.038
Mode * Language	1.044	1	1.044	.641	.425	.006
Learning Styles * Mode * Language	18.119	4	4.530	2.782	.031	.100
Error	162.810	100	1.628			
Total	***1950.000***	***120***				

The results (F (4, 100) = 2.81, $p < .05$, $p\eta^2 = .101$ representing a moderate effect size) indicated that there were significant differences between the five learning styles' means on the reading posttests.To see which styles had significant differences, post hoc Scheffe's tests were conducted. The results are presented in Table 9.

Table 9

Post hoc Scheffe's tests; reading by learning styles

(I) Learning Styles	(J) Learning Styles	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
auditory	visual	.73	.374	.438	-.44	1.90
	kinesthetic	.26	.355	.969	-.85	1.38
	mixed	.35	.355	.917	-.77	1.46
read/write	visual	1.22*	.386	.049	.00	2.43
	auditory	.49	.355	.756	-.63	1.60
	kinesthetic	.75	.368	.392	-.41	1.91
	mixed	.83	.368	.283	-.32	1.99
kinesthetic	visual	.47	.386	.833	-.75	1.68
	mixed	.08	.368	1.000	-1.07	1.24
mixed	visual	.38	.386	.911	-.83	1.60

Note.*The mean difference is significant at the .05 level.

The results indicated that read/write group had a significantly higher mean than the visual group ($p < .05$). There were not any significant differences between the other groups.

Table 10 shows the descriptive statistics of each modality on the reading comprehension posttests.

Table 10

Descriptive statistics; reading by mode

Mode	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Textual	3.755	.166	3.426	4.083
Audio	3.763	.166	3.435	4.092

Table 10 showed that there was a mean difference between the textual (M = 3.75) and audio (M = 3.76) modalities on the reading tests.To see whether the observed difference was significant, the three-way ANOVA was

conducted (Table 8). The results (F (1, 100) = .001, p > .05, $p\eta^2$ = .000 representing a weak effect size) indicated that there was no significant difference between the textual and auditory groups' means on the reading posttests.

Table 11 shows the descriptive statistics of L1 and L2 glosses on the reading comprehension posttests.

Table 11

Descriptive statistics; reading by language

Language	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
L1	3.555	.166	3.227	3.884
L2	3.963	.166	3.634	4.292

Table 11 showed that there was a difference between the means of the L1 (M = 3.55) and L2 (M = 3.96) glosses on the reading test. To see whether the observed difference was significant, the three-way ANOVA was conducted (Table 8). The results (F (1, 100) = 3.02, p > .05, $p\eta^2$ = .029 representing a weak effect size) indicated that there was no significant difference between the L1 and L2 groups' means on the reading posttests.

In this part, the results of two-way and three-way interactions on the performance of EFL learners on the reading comprehension posttests will be discussed. The results showed a significant interaction between learning styles and mode (F (4, 100) = 3.18, p < .05, $p\eta^2$ = .113 representing a moderate effect size). As displayed in Table 12 and Line Graph 2, visual, auditory and mixed learning styles had higher means on the audio mode; while read/write had a higher mean in the textual mode. Kinesthetic had equal means in the audio and textual modes.

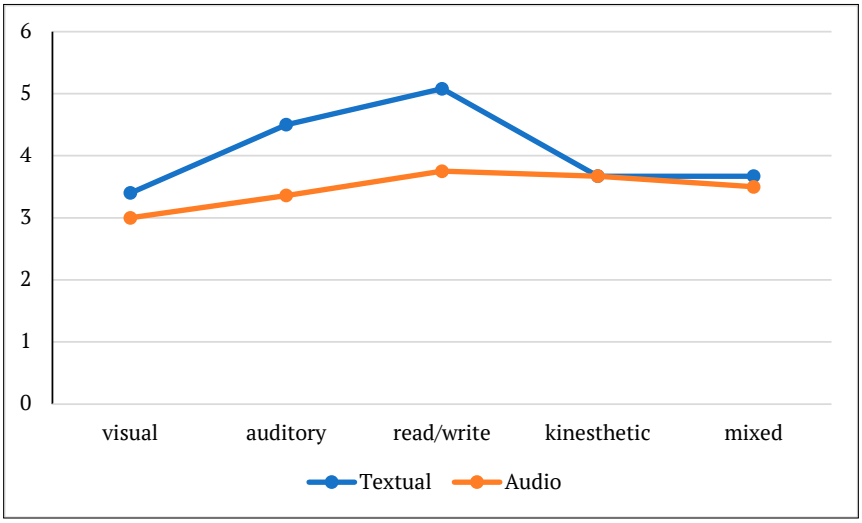
Table 12

Descriptive statistics; interaction between learning styles and mode

Learning Styles	Mode	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
visual	Textual	3.000	.403	2.199	3.801
	Audio	3.400	.403	2.599	4.201
auditory	Textual	3.357	.341	2.681	4.034
	Audio	4.500	.341	3.823	5.177
read/write	Textual	5.083	.368	4.353	5.814
	Audio	3.750	.368	3.019	4.481
kinesthetic	Textual	3.667	.368	2.936	4.397
	Audio	3.667	.368	2.936	4.397
mixed	Textual	3.667	.368	2.936	4.397
	Audio	3.500	.368	2.769	4.231

Line Graph 2

Interaction between learning style and mode; reading test



The results further indicated that there was a significant three-way interaction between learning style, mode, and language ($F (1, 100) = 2.78$, $p < .05$, $p\eta^2 = .100$ representing a moderate effect size). As displayed in Table 13 and Line Graph 3, visual, auditory, and read/write learning styles had fairly close means on textual L1 and L2; however, L2 showed a higher mean for kinesthetic and mixed learning styles. A reverse pattern can be seen for the audio mode. Whereas visual and auditory had higher means on L1, read/write, kinesthetic, and mixed had a slightly higher mean on L2.

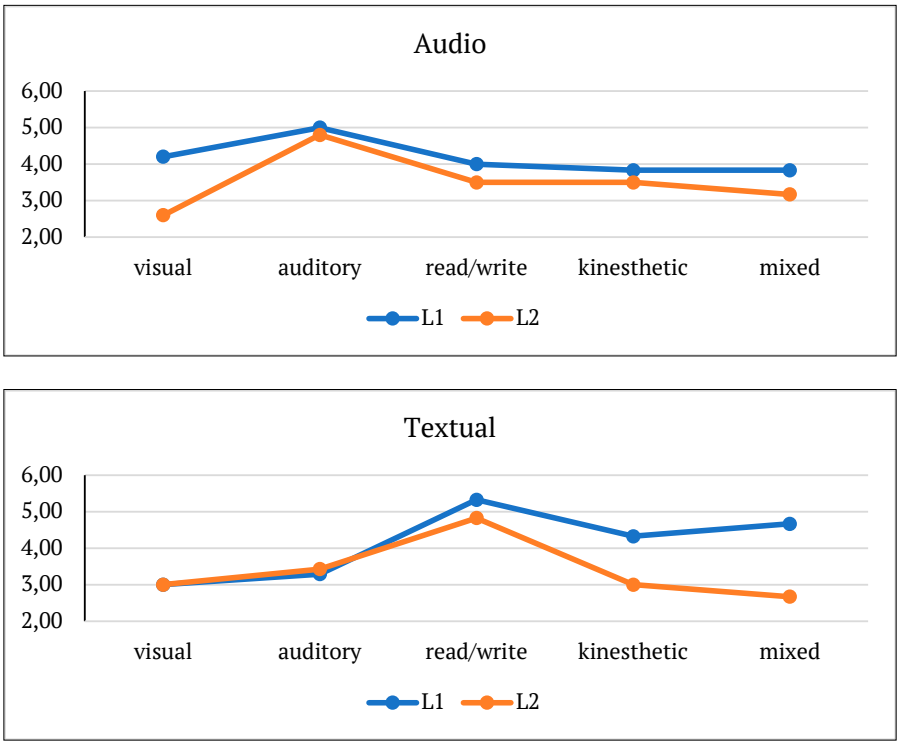
Table 13

Descriptive statistics; interaction between learning style, mode, and language

Learning Styles	Mode	Language	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
visual	Textual	L1	3.000	.571	1.868	4.132
		L2	3.000	.571	1.868	4.132
	Audio	L1	2.600	.571	1.468	3.732
		L2	4.200	.571	3.068	5.332
auditory	Textual	L1	3.286	.482	2.329	4.243
		L2	3.429	.482	2.472	4.385
	Audio	L1	4.000	.482	3.043	4.957
		L2	5.000	.482	4.043	5.957
read/write	Textual	L1	5.333	.521	4.300	6.367
		L2	4.833	.521	3.800	5.867
	Audio	L1	4.000	.521	2.967	5.033
		L2	3.500	.521	2.467	4.533
kinesthetic	Textual	L1	3.000	.521	1.967	4.033
		L2	4.333	.521	3.300	5.367
	Audio	L1	3.833	.521	2.800	4.867
		L2	3.500	.521	2.467	4.533
mixed	Textual	L1	2.667	.521	1.633	3.700
		L2	4.667	.521	3.633	5.700
	Audio	L1	3.833	.521	2.800	4.867
		L2	3.167	.521	2.133	4.200

Line Graph 3

Interaction between learning style, mode, and language; reading test



The results also showed that there was no significant interaction between learning styles and language ($F (4, 100) = .975$, $p > .05$, $p\eta^2 = .038$ representing a weak effect size) and mode and language ($F (1, 100) = .641$, $p > .05$, $p\eta^2 = .006$ representing a weak effect size).

Discussion

The present study explored the impacts of glossing mode, language, and learning style on L2 vocabulary learning and reading comprehension. There were two glossing modalities (audio vs textual), five learning styles (visual, auditory, read/write, kinesthetic, and mixed), and two different languages (L1 vs L2). The first and third questions, which aimed to find an ideal glossing condition for vocabulary learning, are discussed together.

In the first research question, the researchers intended to explore the language of glosses as well as the modality through which they presented the glosses and their impacts on vocabulary learning. In line with previous studies (Cheng & Good, 2009; Choi, 2016; Kim et al., 2020; Rouhi & Mohebbi, 2012; Yanagisawa et al., 2020), the results revealed that L1 glosses were more beneficial than L2 glosses for vocabulary learning. The study further revealed that textual glosses were more effective than audio glosses in vocabulary learning. Therefore, the L1 textual glossing condition can be considered the best condition for vocabulary learning. The first speculation from these findings is that L1 glosses (L1 translations) were easier to understand than L2 glosses, especially in the written format. This is because in L2 glosses, the participants were required to comprehend the meaning of words both withinthe text and in the provided glosses. This reached the highest level of difficulty for learners when they were required to listen to an audio definition of the target words in L2. Thus, L2 audio glosses were the most difficult to be comprehended and the least effective glossing condition for vocabulary learning. In other words, texts glossed with the L2 might be above the participants' current proficiency levels. This speculation is in harmony with Cheng and Good (2009), who stated that when evaluating the value of glosses, matching text difficulty to students' language proficiency is important. The second explanation might be related to the difference between the modality of the texts and the glossing conditions. To put it another way, for the audio glossing conditions, the glosses and the texts were different in terms of the

modality, as it might have interfered with the participants' vocabulary learning through glossing. However, in the textual glossing conditions, the glosses were presented in the same modality with the text. This juxtaposition, which is the primary reason for the effectiveness of glosses, might have helped the participants learn the meaning of the target words more easily. Varol and Erçetin (2019) found working memory capacity played a major role in the comprehension of glossed texts. Thus, another speculation is that in L2 glosses, particularly when they are presented in an audio format, learners' memory capacity might determine the efficacy of the glosses. L2 glosses might be less useful for learners with a low working memory capacity while the same glossing mode can be effective for those with a high working memory. However, as the working memory capacity was not taken into account in the current study, future studies might shed more light on the role of working memory capacity and how it benefits from L1 and L2 audio and textual glosses in multimedia environments. The impact of working memory capacity might also be present when dynamic and nondynamic gloss types are presented to learners. As Samian et al. (2016) and Rassaei (2020) indicated, exposing learners to implicit gloss types could enhance the effectiveness of glosses more than explicit types. The results of the current study are different from these studies in that L1 glosses were found to be more effective than L2 glosses. However, there might be other factors like the working memory capacity of the participants, which can affect gloss usefulness.

This finding is in contrast with Rassaei (2017) who found that audio glosses were more effective than textual glosses. However, it should be noted that in that study, only L1 glosses were used. As mentioned earlier, L2 glosses, particularly in audio mode, would put more pressure on the learners and this would affect their vocabulary learning negatively. There might be another reason for this difference. In Rassaei (2017), the participants were directed to new slides to see the textual glosses. This might have negatively influenced the flow of reading in that mode. In the current study, the participants could see both the text and the glosses at the same time by putting the cursor on the target words. Another reason for this difference is that in Rassaei (2017), the participants were divided into only two perceptual styles (visual and auditory). However, there are more than two learning styles (Klement, 2014) and some learners have mixed learning styles. Thus, presenting various glossing conditions to a group of students who were divided into a more comprehensive and representative categorization based on their learning styles can provide a clearer picture of the true nature of learning style constructs and how they match with instruction.

In the third research question, the researchers intended to find an optimal glossing condition for different learning styles to improve vocabulary learning. The results of the three-way ANOVA showed that there were significant differences between the five learning styles' means on the vocabulary posttests. Post hoc analysis showed that the auditory style had a significantly higher mean than the visual style. A significant interaction between learning styles and mode (auditory vs textual) was also observed. The auditory learning style had a higher mean in the audio mode and other styles had higher mean scores in the textual mode.Thus, the most effective condition for vocabulary learning is when audio glosses are presented to those with auditory learning styles. Previous studies (Johnson, Prior, & Artuso, 2000; Rassaei, 2015, 2017; Slack & Norwich, 2007; Tight, 2010) also found that learning styles had a significant moderating impact. This means that when the instructional methods are tailored to the students' learning styles, they would have a better performance. Ramezanali, et al. (2020) further showed that the effects of glosses are affected by learners' characteristics. These findings are also close to Tight (2010) and Taylor (2020) who argued that utilizing multiple modalities might be even more effective than matching individual preferences. That is why the concept of learning styles has remained an important factor in instructional settings for many years. The results of the current study indicated that learning styles can be taken into account in addition to other characteristics like educational backgrounds and proficiency levels.Therefore, the answer to the first and third research questions is that for the visual, read/write, kinesthetic, and mixed styles, L1 textual glossing can be considered the ideal condition, and for the auditory style, the L1 audio condition led to better vocabulary learning scores.

The second and fourth research questions, which dealt with finding an ideal glossing condition for improving reading comprehension, will be discussed together. In the second research question, the researchers intended to explore the optimal language and mode to present the glosses for improving reading comprehension. The results showed that there was no significant difference between the language (L1vs L2) and mode (audio vs textual) of glosses on the reading posttests.As a result, it can be stated that creating different glossing conditions did not lead to significant differences among the participants on their reading comprehension posttests scores. The results of this part are in line with Cheng and Good (2009) who found that creating

different glossing conditions did not affect reading comprehension positively. The use of glosses in Sakar and Erçetin (2005) and multimedia glosses in Yanguas (2009) also did not lead to the improvement of reading comprehension. One reason for the non-significant effect of glossing conditions on reading comprehension could be that while learners were involved in the reading process, they paid less attention to the glossed words in either form. It is also possible that when learners looked at the glossed words in each glossing condition, they lost track of the ideas within the texts.In other words, the glosses distracted the readers from the text and affected the flow of reading negatively. Another reason for this lack of a relationship might be the nature of the posttests. As Yanagisawa et al. (2020) stated, learning gains might be mediated by test formats. Thus, a different reading comprehension test might lead to different results. In the fourth research question, the researchers aimed to find an optimal glossing condition for different learning styles to improve reading comprehension. The results of the three-way ANOVA revealed that there were significant differences between the five learning styles' means on the reading comprehension posttests. This confirmed the hypothesis that tailoring instruction to learning styles improves learning. Husmann and O'Loughlin (2018) reported that as learners' performances were not correlated with their learning styles, the conventional wisdom concerning learning styles should be abandoned by educators and students. However, as the results of the current study revealed, learning styles can be considered an important factor in assessing the efficacy of educational treatments, but different contexts might lead to different results and factors like the subject matter under investigation and the way learning styles have been identified should be considered.

Conclusion

The objective of this study was to explore the effects of computer-mediated L1 and L2 textual and audio glosses on vocabulary learning and reading comprehension across different learning styles. In other words, the present study aimed to tailor the perceptual styles to glossing conditions. The research questions were successfully answered according to the results. The findings of this study indicated that with regard to vocabulary learning, L1 textual was the most effective glossing condition. It was further understood that despite the effectiveness of this condition for the visual, read/write, kinesthetic, and mixed styles, the L1 audio glossing condition was more effective for the auditory style. The conclusion that can be drawn is that tailoring glossing conditions to preferred learning styles can be effective. The study further indicated that while there was no significant difference between the language (L1vs L2) and mode (audio vs textual) of glosses, significant differences between the learning styles were observed on the reading comprehension posttest scores.

Implications and Limitations

The findings of the current study have some implications for material developers, learners, and teachers. The results suggested tailoring conditions to learning styles. Therefore, material developers should provide a wide range of glossed passages that suit different learners with different styles. They should also take into account the learners' L1, as the results showed the positive role of L1 in glossing conditions for vocabulary learning. With the increase in the use of technology in language classrooms, teachers can incorporate both audio and textual gloss conditions for improving vocabulary learning based on their preferred learning styles. Another implication for teachers is that they can confidently use the students' L1 to gloss the target words as many studies on glossing have shown the positive role of the L1. Learners can take advantage of the results of the current study in several ways. Learners should be more aware of their likes and dislikes in the learning process. In other words, they should recognize the effective ways in which they learn more efficiently. One of the ways they can do this is to understand their preferred style of learning and ask their teachers to provide the right materials for their specific styles. The results of this study showed that textual glosses suit read/write style and audio glosses suit auditory style. Thus, it is recommended that learners of these styles should look for these conditions if they want to learn vocabulary better.

There were some limitations in this study. The first limitation is about the participants, who consisted of just 30 intermediate learners with the same L1 due to practicality issues. Moreover, for conducting an experimental study, 30 participants might not be enough to yield generalizable results. Therefore, the results should be interpreted with caution. Conducting the same study with a larger number of participants who have different proficiency levels and different L1s could shed more light on the effectiveness of glossing conditions. The second important limitation is the lack of a control group. In the present study, a control group was not selected

as the focus was on tailoring treatment conditions to learning styles. In so doing, the researchers used both proficiency and vocabulary knowledge pretests to ensure the homogeneity of the participants before exposing them to the experimental treatments. However, in order to provide a broader understanding of the effects of different glossing conditions on learners' vocabulary and reading comprehension knowledge, including a control group could help. The third limitation is that the researchers only conducted an immediate posttest to investigate the effects of glossing conditions on reading comprehension and vocabulary learning. Therefore, a topic like 'the immediate and long-term effects of computer-mediated L1 and L2 textual and audio glosses on vocabulary learning and reading comprehension' is recommended. The fourth limitation is related to the reading comprehension pretest. Although the PET test included a reading section and was conducted prior to the study, future studies could use a reading comprehension pretest to evaluate the reading comprehension ability of the participants separately. Additionally, the reading comprehension posttest consisted only of true/false questions, which might raise doubts about the value of such items for measuring reading comprehension. The current project was conducted in a classroom setting and the materials were part of the class activities. Therefore, a complete counterbalancing of the treatment conditions was not possible. Although the researchers included target verbs, nouns, and adjectives in all of the conditions to ensure the same level of difficulty across the conditions, the order of exposing participants to the conditions might have influenced the final outcome. Therefore, the final limitation is related to counterbalancing. Future studies can take this into account to reduce the order effects.

Conflicts of interest

The authors declare that they have no conflicts of interest.

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Foreign and Bilingual Language Education in the UK and Spain: A Study of Similarities and Differences

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Language learning, as a means to promote intercultural awareness and communication as well as to help citizens prosper professionally, is one of today's main goals of educational systems around the world. In Europe, several guidelines have been published, and significant efforts have been devoted to encouraging the development of the quality of foreign and bilingual language education to improve citizens' communicative skills. Although there were attempts to foster foreign language proficiency in some parts of the United Kingdom between the 1990s and the early 2000s, the country has not traditionally considered languages among its educational priorities. Nonetheless, Brexit seems to have increased the need to learn languages in the country. In some other European countries, however, Content and Language Integrated Learning (CLIL), an additive bilingual approach, has been implemented since the early 2000. Considering that the nations in the United Kingdom and the regions in Spain have the freedom to organise educational affairs, an analysis of the provision of foreign and bilingual language education in the United Kingdom and Spain appears relevant. This paper presents the results of a systematic review of 2012-2020 literature in the field of foreign and bilingual language education in both contexts. The differences that exist within the United Kingdom concerning foreign language teaching are discussed, and information in relation to the provision of CLIL in some Spanish regions is also examined. The findings show that foreign language teaching is provided across the United Kingdom, whereas bilingual education is offered in the form of Welsh-, Irish-, and Gaelic-medium education mainly, although CLIL is also implemented in England.

Keywords: language learning policies, bilingual education policies, Content and Language Integrated Learning (CLIL), comparative study, systematic literature review, foreign language education

Introduction

The 21st century has triggered profound changes in society. These have provided human beings with a wide range of resources for accessing information and knowledge, but they have also posed new social demands, such as the ability to communicate with people in an increasingly multilingual and multicultural world. In this sense, being competent in at least one modern foreign language (MFL) is considered a key factor "for social inclusion, mutual understanding and professional development"[1]. Furthermore, the growing requirement that schools in Europe are facing in order to confront the culturally diverse classroom reality is compelling teachers and students to become intercultural and global citizens (Smolcic & Katunich, 2017).

[1] Council of Europe. (2018b). Common European framework of reference for languages: Learning, teaching, assessment. Companion volume with new descriptors. Council of Europe.

In this context, and following the Council of Europe[2] and the European Commission[3,4] guidelines, European education bodies have started to develop bilingual (and multilingual) education programs (i.e., education using more than one language of instruction; García, 2009, p. 17) aiming to promote linguistic diversity and intercultural communication. Among the existing approaches to bilingual education, Content and Language Integrated Learning (CLIL) has grown in the past 40 years (Bower, 2021; European Commission[5]), providing content instruction through an MFL so as to reinforce language learning and develop learners' intercultural awareness and global integration (Coyle et al., 2010). Inspired by the Canadian language immersion programs, North American bilingual education, and European international schools (Pérez-Cañado, 2012), CLIL "is a dual-focused educational approach in which an additional language is used for the learning and teaching of both content and language [simultaneously]", which are "interwoven, even if the emphasis is greater on one or the other at a given time" (Coyle et al., 2010, p. 23). According to Dalton-Puffer and Smit (2013), unlike other forms of bilingual education, CLIL is an additive bilingual approach in which the language of instruction is an MFL instead of a second national language and is usually implemented after the learners are competent in their mother tongue. Likewise, the language continues to be offered as an MFL-specific subject together with CLIL lessons and teachers "are normally non-native speakers of the target language and are typically content rather than foreign-language specialists" (Dalton-Puffer & Smit, 2013, p. 546). Other clear differences between CLIL and any other type of bilingual education are discussed by Cenoz et al. (2014): CLIL implementation starts once learners have acquired a certain level of literacy in their first language, whereas bilingual education begins earlier. In CLIL, students are taught the language to acquire a certain command of the target language that allows them to communicate, while the primary goal of other types of bilingual education is native-like proficiency. As for the target language, in bilingual education it is normally a second one (e.g., co-official languages in bilingual communities) as opposed to CLIL, in which it normally takes place through a foreign language. In this article, the term 'CLIL' is used to refer to the form of additive bilingual education associated with CLIL, whereas 'bilingual education' is reserved for the bilingual education that is provided in bilingual communities (e.g., Wales or Catalonia).

However, bilingual education is not a new phenomenon despite its recent popularity. It has been developed in countries like Belgium, Luxembourg, and Finland for decades (Horner & Weber, 2015; Izquierdo, 2017; Mehisto & Genesee, 2015). It must be borne in mind that the situation in these three countries is quite different from others in Europe since establishing bilingual education in territories with more than one official language does not present the same challenges as introducing additive bilingual education in monolingual and/or larger countries, such as the United Kingdom (UK) and Spain, the focus of this article.

This paper examines some similarities and differences between the provision of foreign and bilingual language education in the UK and in Spain. To do so, a systematic review of scientific literature published between 2012 and 2020 was followed to answer the following research questions: (RQ1) What are the main characteristics of the bilingual programs (if any) implemented in the UK? and (RQ2) What are the similarities and differences between the language policies of the UK and Spain?

An Overview of Foreign and Bilingual Language Education in the UK and Spain

Despite receiving a large number of immigrants every year (European Commission[6]), the UK has not traditionally considered languages among its main educational priorities due to the power of English as the new *lingua franca* (Lanvers, 2014; Lanvers & Coleman, 2017; Lo Bianco, 2014). This high immigration flow has been worldwide for decades (Oakland, 2016), with over 300 languages being spoken in London at the beginning of the century (Baker & Eversley, 2000), with Bengali and Polish some of the most widely spoken in the city as well as the rest of England and in Wales[7].

[2] ibid

[3] European Commission. (1995). White paper on education and training – Teaching and learning – Towards the learning society. Commission of the European Communities.

[4] European Commission. (2003). Promoting language learning and linguistic diversity: An action plan 2004 – 2006. Commission of the European Communities.

[5] European Commission. (2017). Key data on teaching languages at school in Europe. 2017 edition. Eurydice report. Publications office of the European Union.

[6] European Commission. (2020). 2019 annual report on intra-EU labour mobility. Final report January 2020. Publications office of the European Union.

[7] Office for National Statistics. (2013, March 4). Language in England and Wales: 2011. https://bit.ly/3dAapzJ

The UK is not the only country with difficulties in language learning. Other countries with similar issues know they must prioritise English as the language to be learnt, which is not the case in the UK (Kelly, 2018). However, Brexit seems to be posing demands for citizens of the UK in terms of language and intercultural skills. As Holmes (2018) explains, "the implications of leaving the EU [...] would mean the likelihood of increased bureaucracy" which would imply that the UK's "capacity in language skills and cultural competence will be seriously put to the test" (p. 63). Thus, urgent action needs to be taken in the country in this sense.

There were several initiatives in the UK from 1990 to 2010 to foster language learning and even teacher's continuous training (usually referred to as 'continuing professional development' in the UK) in the field of languages in the country, which were lauded across Europe. In this light, it is worth mentioning the Centre for Information on Language Teaching and Research (CILT) established in 1966, which played a special role in supporting MFL learning and teaching. CILT supported language teaching from 1966 to 2011 by promoting research in the field, creating materials to help teachers, and monitoring trends in language teaching, among other actions (McLelland, 2018). Likewise, the establishment of specialist Language Colleges in 1995 and the National Languages Strategy developed in England from 2002 to 2010[8], although there are attempts to develop a new one[9], provided not only teachers with access to information, advice, and training about language teaching but also set out structured and progressive objectives for MFL teaching for students, who were granted access to a wide range of languages (Dobson, 2018). Other more recent government-funded initiatives include the Teaching Schools Council review[10], the National Centre for Excellence for Language Pedagogy[11], and the Mandarin Excellence Programme[12].

There is a "widely held – if not undisputed – view that the UK is lacking in the necessary language skills for the future, partly because of the status of English as the language of international communications" (Tinsley & Board, 2013, p. 3). Although this 'English is enough' myth is not exclusive to the UK (for instance, English monolingual practices seem to prevail at US universities and at a macro institutional level [Britton, 2021] and even in Spanish regions [Relaño-Pastor, 2015]). Lanvers (2017a) tries to explain that the main reasons for the disinterest in languages among learners in the UK tend to be connected to sociocultural factors. The author emphasises three main reasons for such a lack of interest in languages: (i) the unrealistic idea of the global importance of English in the country (Schulzke, 2014); (ii) the 'climate of negativity' and the consequent loss of confidence of language learners in the UK derived from the debate on their poor language skills (Graham & Santos, 2015); and (iii) the withdrawal of the UK from the European Union (Lanvers, 2017a).

It is worth mentioning though that in Wales and Scotland, local government and education institutions are concerned with the MFL provision and with the protection of their minority heritage languages. In Wales, for instance, efforts have been translated into a five-year plan that proposes "studying English, Welsh and at least one MFL from primary to examination level"[13]. Similarly, Scotland is developing the 1+2 Language Strategy to promote the learning of the mother tongue in addition to two MFLs[14], although there are also language immersion programs in which Gaelic is used as the medium of instruction (MacQuarrie & Lyon, 2019).

In the Spanish context, Izquierdo (2017) explains that foreign language learning and teaching changed in the last decade of the 20th century after the publication of the European Commission's *White paper on education and training*, which proposed that secondary education students should start studying "certain subjects in the first foreign language learned" (European Commission, 1995, p. 47), setting the path for an innovative foreign language teaching method in which the foreign language could also be used for the teaching of content subjects. Spanish education bodies have directed multiple efforts to apply the European Commission's guidelines in order to promote MFL learning, linguistic diversity, and intercultural awareness by developing bilingual programs based on CLIL. Bilingual education in the monolingual regions of the country began in 1996 with the

[8] Department for Education and Skills. (2002). Languages for all: Languages for life. A Strategy for England. Department for education and skills.

[9] The British Academy. (2020). Towards a national languages strategy: Education and skills. The British Academy, Arts and Humanities Research Council, Association of School and College Leaders, The British Council, Universities UK. https://bit.ly/3bqpMYT

[10] Teaching Schools Council. (2016). Modern Foreign Languages Pedagogy Review. Teaching Schools Council. https://bit.ly/37wGqVN

[11] Department for Education. (n. d.). National Centre for Excellence for Language Pedagogy. Department for Education.

[12] Department for Education. (2018). Mandarin Excellence Programme. Department for education.

[13] Welsh Government. (2015). Global futures. A plan to improve and promote modern foreign languages in Wales 2015–2020. Welsh Government. https://bit.ly/2meNAcJ

[14] Scottish Government. (2012). Language learning in Scotland: A 1+2 approach. Report and recommendations. Scottish Government. https://bit.ly/2mcn9UM

agreement between the Spanish Ministry of Education and British Council, which was developed to promote English language learning among Spanish students[15] (MEC/British Council, 1996) and set the base for bilingual education (trilingual in the case of bilingual areas) in Spain. The agreement, which is still in force in more than 80 primary schools and more than 50 secondary schools, aims to develop an English-Spanish integrated curriculum from kindergarten to secondary education (Dobson et al., 2010).

The UK and Spain are somewhat similar in administrative terms. The nations in the UK have the competence to organise educational affairs. Spanish regions (known as 'autonomous communities') also have the freedom to regulate their own education (and language education) policies, while still using LOMLOE, the country's education law, as a base (Ley Orgánica 3/2020). This has resulted in different methods of implementing bilingual education across the country, with teacher requirements, languages of instruction, and subjects taught through bilingual education varying from one autonomous community to another. For instance, the situations in the Community of Madrid and Community of Andalusia, two of the forerunners of bilingual programs in Spain, differ; for instance, educators participating in bilingual education need to have a certified C1 (i.e., advanced) level of the language in Madrid while a B2 (i.e., upper-intermediate) level is required in Andalusia[16,17].

Both countries share sociocultural aspects as well. The UK and Spain both have a wide array of minority and majority languages spoken among their citizens. In Spain, not only are the co-official languages (i.e., Basque, Catalan, Galician, and Valencian) spoken but minority languages such as Aragonese, Aranese, Asturian, and Leonese are as well. Likewise, Welsh, Scottish-Gaelic (Gàidhlig), Scots, and Irish (Gaeilge), together with other minority languages (e.g., Ulster-Scots and other regional ones like Cornish) are spoken in the UK apart from English[18]. Spain and the UK also face separatist challenges in some parts of their territories, which are partly linked to their linguistic reality; for instance, in Catalonia, Catalan is regarded as a factor for identity construction (Escolano, 2021), whereas a similar situation exists in Northern Ireland with Irish (Dunlevy, 2020).

Although there may be European countries implementing bilingual education whose students have better academic and linguistic results (such as Canada, Belgium, or Luxembourg; see Izquierdo, 2017), the similarities between Spain and the UK previously discussed makes it relevant to compare them.

Materials and Methods

This study follows a systematic literature review. It analyses empirical and theoretical works and aims at collecting information about language and bilingual education provision in the UK. The review also seeks to compare the situation in the UK and Spain in the field of MFL and bilingual programs considering their similarities.

In order to reduce bias in the review, the following sub-sections and Figure 1 describe the research protocol followed, which was developed according to Kitchenham et al.'s (2009) and Okoli's (2015) guidelines and stages, namely: (i) pre-test literature review, (ii) initial search, (iii) literature selection, and (iv) data extraction, analysis, and synthesis.

[15] MEC/British Council. (1996). Documento técnico de mínimos (I) necesarios para el adecuado desarrollo de la experiencia de educación bilingüe que se realiza en los centros educativos adscritos al convenio entre el Ministerio de Educación y Cultura y el British Council de España. MEC/British Council.

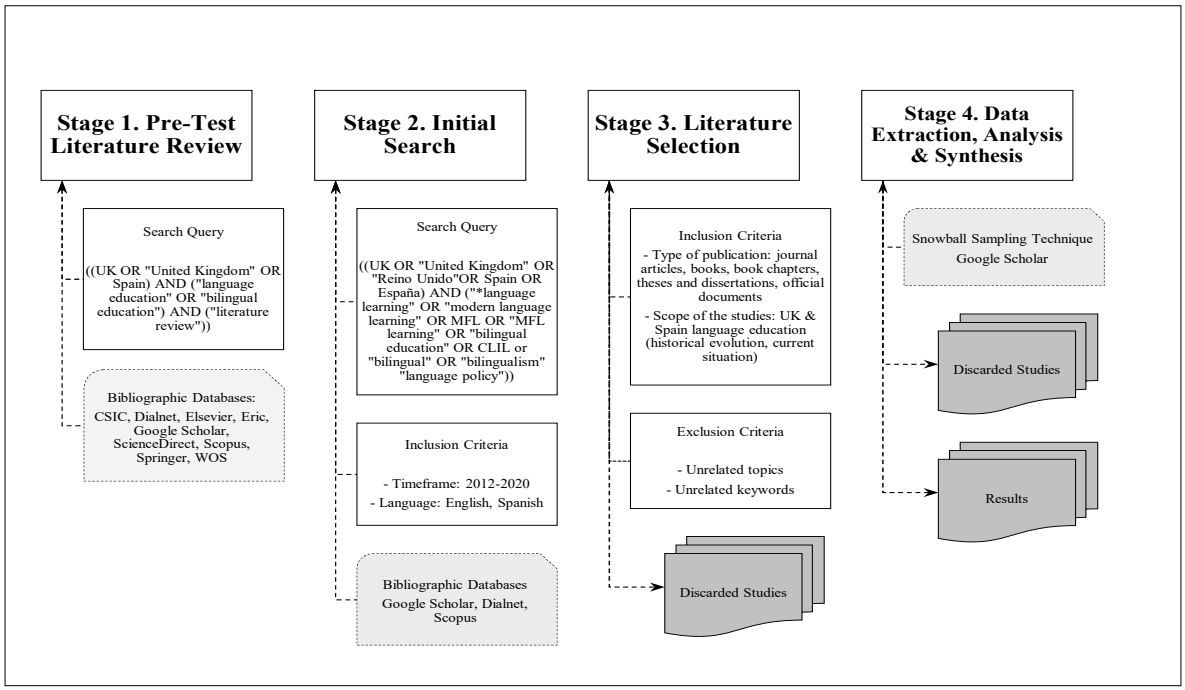
[16] Comunidad de Madrid. (2019). Madrid, comunidad bilingüe 2018-2019 [Madrid, bilingual community 2018-2019]. Comunidad de Madrid.

[17] Junta de Andalucía. (2016). Plan estratégico de desarrollo de las lenguas en Andalucía [Strategic plan for the development of languages in Andalusia]. Horizonte 2020. Junta de Andalucía. https://bit.ly/2OXiYK5

[18] Council of Europe. (2018a). Application of the European charter for regional or minority languages. Biennial Report by the Secretary General of the Council of Europe to the Parliamentary Assembly Communication Secretary General. Council of Europe.

Figure 1

Research procedure



Note. Own elaboration.

Stage 1. Pre-Test Literature Review

This stage included: (i) checking if previous systematic reviews on the UK's language and bilingual education provision have been carried out; (ii) performing a general search in bibliographic databases (CSIC, Dialnet, Elsevier, Eric, Google Scholar, ScienceDirect, Scopus, Springer, WOS) to measure the estimated size of the documentary corpus; and (iii) identifying keywords to include in the search query.

Stage 2. Initial Search

In this stage, the research protocol was developed by (a) stating the RQs, (b) creating the search query (Figure 1), (c) identifying relevant bibliographic databases (Google Scholar, Dialnet, and Scopus), (d) establishing the timeframe (2012-2020), and (e) limiting the languages under research (Spanish and English). Afterwards, an initial search was conducted in the identified bibliographic databases to create an initial documentary corpus.

Stage 3. Literature Selection

This stage included: (i) analysing the titles, abstracts, and keywords of selected papers following inclusion criteria (journal articles, books, book chapters, theses and dissertations, and official documents analysing the historical evolution and the present situation of language and/or bilingual education in the UK and Spain were selected) and exclusion criteria (studies with unrelated topics and/or keywords); and (ii) minimizing bias by having the researchers work independently (the papers were individually analysed by the three researchers to guarantee that all of them were checked multiple times).

Stage 4. Data Extraction, Analysis, and Synthesis

This stage included: (i) obtaining the full texts from the selected databases, (ii) using Mendeley software to extract data from the full papers and organize detailed bibliographic information; (iii) using the snowball sampling technique to expand the documentary corpus (using Google Scholar to identify related studies that have cited the already selected studies; Jalali & Wohlin, 2012); (iv) performing a descriptive synthesis to identify categories of analysis (year of publication, authors, countries, and research dimensions); (v) minimizing bias by having the three researchers work co-operatively (the papers were individually analysed by the research team to guarantee they were checked multiple times –attention was paid to the research methods, study focus,

and findings–; when disagreeing, the team discussed and negotiated until reaching consensus); and (vi) answering the RQs.

Microsoft Excel was employed for analysing information of selected studies, while Bardin's content analysis technique (2013) was applied to categorise the papers and help draw conclusions. Analysis followed reading, analysis, synthesis, deduction, and induction methods to build a well-organised review (Okoli, 2015).

Results and Discussion

The systematic literature review was carried out from September 2020 to April 2021.

Stage 1. Pre-Test Literature Review

Initially, the pre-test search query defined in Figure 1 was applied. Four papers reviewing MFL and bilingual education provision in Europe, the UK, and Spain and published between 2012 and 2020 were selected. Since no literature reviews regarding the UK were found, the researchers chose all of the relevant papers analysing either the historical development or provision of language/bilingual education in these contexts. The chosen studies (described below) were analysed to reveal areas of research regarding language/bilingual education that could help refine subsequent searches by identifying relevant keywords.

Izquierdo (2017) presented an in-depth analysis of the origins and evolution of bilingual education in different European countries including Spain, highlighting how the Council of Europe's recommendations have set the path for many educational institutions; the author also highlights the limited presence of bilingual education in the UK. In the context of Spain, González (2015) analysed the factors involved in language learning and educational policies in compulsory education by comparing the situations in Spain and the Netherlands; the author reveals a certain heterogeneity in educational policies and teaching methods, although some differences can be found in terms of institutional initiatives (for instance, in Spain there are more regulations supporting MFL learning and teaching in pre-primary and primary education, while the Netherlands seems to have extensive experience in MFL promotion through secondary education).

The UK's history in language education was discussed by Vidal (2017), McLelland (2018), and Dobson (2018). Vidal (2017) reviewed the main concerns about the drop in the numbers of MFL learners and investigated the factors affecting the uptake of MFLs in secondary education in the UK, pointing out students' feelings of not being good enough at languages as the main cause. McLelland (2018) provided a review of Britain's MFL provision, analysing the history of language learning and teaching, the languages commonly learnt (generally French), and changes that have led to the current situation. Dobson (2018) analysed the provision and evolution of foreign language teaching in England since the 1970s, highlighting issues such as the preponderance of French, German, and Spanish among the range of languages studied, the higher proportion of female students taking MFL lessons as opposed to males, the low take-up rates of languages after the age of 14, the uncertainty of many teachers "about the place of grammar and its relationship to communication" (p. 77), the lack of continuity in the implementation of language policies, and the participation and influence of the UK in European projects, among other aspects.

Stages 2 and 3. Initial Search and Literature Selection

The initial search allowed the researchers to redefine the search query. With the new query, a total of 116 studies were selected, out of which 11 were discarded due to lack of relevance; thus, the final documentary corpus consisted of 105 papers. Table 1 shows the distribution of selected studies by type and year of publication, including total number and percentage.

Table 1

Distribution by type and year of publication of studies identified in stage 2

	Book chapters	Articles	Books and others	No.	%
2012	2	1	1	4	3.81
2013	1	1	4	6	5.71
2014	1	6	1	8	7.62
2015	0	6	4	10	9.52
2016	0	5	5	10	9.52
2017	5	8	4	17	16.19
2018	11	8	9	28	26.67
2019	1	2	5	8	7.62
2020	1	10	3	14	13.33
No.	22	47	36	105	100
%	20.95	44.76	34.29	100	

Note. Own elaboration.

Stage 4. Data Extraction, Analysis, and Synthesis

Out of the 105 selected papers, 43 referred to the Spanish context and 62 to the UK, distributed as follows: 18 papers focused on the UK from a general perspective (although many of them devoted significant space to England), 5 analysed the context of Wales, 12 dealt with England, 18 studied Scotland, and 9 referred to Northern Ireland. Below, the main results and findings are described and references to the most significant papers are included.

The UK has been traditionally linked to language diversity since many languages of colonisation, migration, and conquest (e.g., Celtic languages, Latin, Viking, French) have been present in the islands (McLelland, 2018) but also due to the waves of immigration to the UK experienced in the 20th century, which increased the ethnic, cultural, and linguistic diversity of the country (Oakland, 2016). In this sense, it could be said that language learning, yet in an informal way, has never been something unknown in the country. Present trends, however, show an overall decline in the number of students learning languages other than English (Lanvers, 2017a) and, furthermore, language learning beyond the compulsory stages has increasingly become an elitist practice (Lanvers, 2017b).

As for the chosen MFL, it is remarkable that, probably due to the proximity of France, French has remained the 'first' foreign language in primary and secondary schools, although, as McLelland (2018) explains, command of the language is limited. However, Spanish seems to be earning its place among MFL choices in the UK since late 20th century (McLelland, 2017), and nowadays it is attracting more and more students from all across England (Tinsley & Doležal, 2018), Northern Ireland (Carruthers & Mainnín, 2018), Scotland (McKelvey, 2017) and Wales (Tinsley, 2018a). German also occupies a privileged position among language choices but, again, it is losing importance due to the rise of Spanish (Collen, 2020; McLelland, 2018).

In relation to methods of teaching, the reality did not differ much from elsewhere in Europe until the end of the 20th century. Grammar-translation methodologies directed language teaching for a long time until the publication of the *White Paper on Education and Training* and the *Common European Framework of Reference for Languages* and the communicative turn in language education (Kramsch, 2013, p. 64). The role of the CILT was crucial for the transformation of language provision thanks to its efforts to support and encourage specialised language research, creating materials and curriculum guides to help teachers, monitoring trends in language teaching, and, in sum, offering "a ready-made platform" for teachers all across the country (Dobson, 2018, p. 78). Unfortunately, the work of the CILT came to an end after 2010 with the new Conservative-Liberal Democrat Coalition Government, whose policies led to the creation of a new teaching agency, the transfer of funding from language teaching to general education budgets, and a general loss of supporting infrastructure for language teaching.

The UK has played an important role in the development of language education in Europe, mainly in the form of collaborations in transnational research projects, although unfortunately such contributions and efforts have not always been translated into consistent language policies in the country. Many scholars (Lanvers, 2017a, 2017b; Smith & McLelland, 2018; Vidal, 2017) have discussed the reasons that explain the UK's lack of language abilities or interests, and most of them seem to agree on the main one: the rise of Global English. The establishment of their mother tongue as the most used international language leads to native speakers of English believing that language learning is unnecessary (Crystal, 2012; Lanvers, 2014; Lo Bianco, 2014). Additionally, research also points at the uninspiring MFL curricula (Busse & Walter, 2013, p. 451) and the "English hegemonic perspectives" and "focus on English competencies" that control language policies to the detriment of languages other than English (Lanvers, 2014, p. 151).

The consequences of Brexit have been repeatedly discussed in recent studies (see Broady, 2020). Tinsley (2018b), for example, points at how Brexit could have a devastating effect on language education as the UK would not be able to apply for EU funding aimed at promoting language learning and mobility (e.g., the Erasmus+ program). Holmes (2018) explains how leaving the EU will not only mean an increase in bureaucracy, but also the constant test of the UK's language skills and cultural competence when negotiating with different countries and their corresponding languages and cultures. Indeed, "building a prosperous Britain post-Brexit will depend on capitalising on the knowledge and skills of the labour market, including its ability to speak multiple languages and understand diverse cultures" (Holmes, 2018, p. 64), and based on this premise, the UK's nations seem to be taking action to provide students with a quality environment to develop their language abilities and cultural agility as important employability skills for the 21st century.

In Scotland, the diversity of languages spoken by its population and the official status of English, Gaelic and Scots as home languages have led to the implementation of language policies to provide Scottish citizens with opportunities for MFL learning (McKelvey, 2017). These efforts have not been influenced by Brexit (Doughty & Spöring, 2018) as the very first attempts to develop quality language policies began in the early 2010s. In this sense, the *1+2 Language Strategy* has been implemented since 2011, aiming at ensuring the learning of one MFL from the first year of primary education and a second MFL from the fifth all the way through compulsory education[19]. Unfortunately, there is little evidence about whether the strategy is showing positive results. Gaelic-medium education is provided in some Scottish schools to promote the learning of non-linguistic subjects through Gaelic and revitalise the use of Gaelic (Bòrd na Gàidhlig, 2018; MacLeod & Smith-Christmas, 2018). As for the use of Scots, the language has received increasing public recognition since 2010 and, consequently, it is starting to be more appreciated as part of Scotland's identity, history, and culture (TNS-BMRB, 2010, as cited in Hancock, 2014, p. 173). As for the Scots language, there are no Scots-medium-instruction programs available at any educational stage, nor official policies or specific references in curricula that regulate its use. In primary education, some features of Scots may be introduced in the study of literature but not as an independent subject. In secondary, the teaching of Scots is normally part of the syllabus of English departments, although some secondary schools are introducing a specific department so as to give students the opportunity to study the history and development of the language. In vocational studies, some teachers may use Scots informally or, on some occasions, deliver their lessons through Scots or a mixture of Scots and English; there are, though, some programs in universities in Aberdeen, Edinburgh, and Glasgow that provide undergraduates with the chance to learn the Scots language, linguistics, and history (Niven, 2017). Scholars have highlighted how local policies have helped revitalize Gaelic and Scots[20], similarly to what happens in Spain with Basque, Catalan, Valencian, and Galician, or in Finland with Karelian, Sami, and Swedish (Juaristi et al., 2008, as cited in Hancock, 2014, p. 170).

In Wales, the *Bilingual plus 1* strategy is the official language policy, a five-year plan that tries to respond to the decline of MFL learners (as in the other nations of the UK) by requiring children learn Welsh and English from the start of school, and one MFL in the fifth year of primary education. It aims at increasing the number of students aged 7-19 studying MFLs (French, German, and Spanish seem to be the most common), as well as at improving language proficiency and the understanding of the value of language learning (Welsh Government, 2015). Despite government efforts, studies reveal that numbers of MFL learners continue to drop (Tinsley,

[19] Scottish Government. (2017). A 1+2 approach to language learning from primary 1 onwards. Scottish Government. https://bit.ly/2lQtbtO

[20] Council of Europe. (2018a). Application of the European charter for regional or minority languages. Biennial Report by the Secretary General of the Council of Europe to the Parliamentary Assembly Communication Secretary General. Council of Europe.

2018a). It is also noteworthy how language policies have contributed to the revitalization of Welsh, especially thanks to the expansion of Welsh-medium education, together with the introduction of the obligatory learning of Welsh from the age of five (Hancock, 2014, p. 171). Three types of bilingual schools can be found in Wales: (i) Welsh-medium schools with a significant use of English, where 50-70% of the curriculum is taught through Welsh; (ii) English-medium schools with a significant use of Welsh, where a 20-50% of the curriculum is taught through Welsh; and (iii) dual stream schools, where students opt to be placed in a Welsh-medium group or an English-medium one (Jones, 2017, p. 200).

In England, schools provide 7-to-11-year-old students with up to 60 weekly minutes of MFL learning, with French and Spanish being the main languages taught, although some schools also teach German, Chinese, Latin, or other languages in smaller proportions. In secondary education, few schools offer MFLs other than French, German, or Spanish to 11-to-16-year-old learners, usually in the form of two or three weekly lessons of one hour each (Tinsley, 2019). Concerning bilingual education, there are examples of CLIL implementation in schools in England where interest grew during the 1990s and early 2000s (cf. Coyle, 2013; Dobson, 2020). Nevertheless, as Dobson (2020) explains, developing CLIL in the UK is still a great challenge due to the differences in implementation from that in mainland Europe, where CLIL "is almost synonymous with teaching through the medium of English; no other language has this standing in the UK […], with the exception of those areas where Gaelic- or Welsh- medium education is well established" (p. 508).

As part of the UK, modern languages education in Northern Ireland is quite similar to that in England and Wales in terms of policy and assessment (Carruthers & Mainnín, 2018). Some primary schools offered language learning (including Spanish, Irish, French, German, and Mandarin) in early years as part of the Primary Modern Languages Programme (PMLP), which ran from 2007 to 2015. In the majority of primary schools, languages are occasionally taught during class time, often by generalist teachers, although by specialist language teachers as well (British Council Northern Ireland, 2019).

In secondary schools, learning a second language is compulsory for pupils aged 11-14, with French, Spanish, German, and Irish being the most common languages. Since the 1970s, there has been an increase in numbers of schools providing Irish-medium education (Grádaigh, 2015). According to the Department of Education of Northern Ireland (2015), Irish-medium schools can be broadly categorised in three types: (i) schools with full instruction through Irish, with Irish being the medium of instruction for all subjects except for English and another MFLs in secondary education; (ii) partial instruction through Irish, in which students only learn some subjects through Irish and the rest are taught through English (except for the MFL); and (iii) bilingual centres, where both Irish and English are intended to be used equally.

In Spain, as the regions have the freedom to organise their education policies[21], each one directs its efforts to promote language learning, linguistic diversity, and intercultural awareness by developing CLIL programs. As in the UK, the situation varies from one place to another. From a general perspective, CLIL programs have been implemented since the early 2000s, preceded by Andalusia and Madrid, but also in Catalonia, the Basque Country, and Extremadura, the last regions to develop CLIL (trilingual in the case of Catalonia and the Basque Country). In all of them, English is the most adopted language of instruction (Izquierdo, 2017).

In relation to monolingual regions, CLIL has been implemented since 2005 in Andalusia, with English being the main language of instruction, but with French and German also offered (as established in the *Plan Estratégico de Desarrollo de las Lenguas en Andalucía*; Junta de Andalucía, 2016). In primary education, arts, physical education, and science are common subjects taught through the MFL. The Canary Islands have implemented CLIL since 2004, and one hour per week of each content subject chosen (except for Spanish, Latin, or religion) is taught in the MFL (English with few exceptions; Gobierno de Canarias[22]). CLIL is also being implemented in Extremadura[23] with English, French, and Portuguese as possible languages of instruction for the teaching of up to two content subjects.

[21] Ley Orgánica 9/1992, de 23 de diciembre, de transferencia de competencias a Comunidades Autónomas que accedieron a la autonomía por la vía del artículo 143 de la Constitución. BOE no. 308, 24 December 1992.
[22] Gobierno de Canarias. (2018). Plan de impulso de las lenguas extranjeras [Plan to promote foreign languages]. Gobierno de Canarias.
[23] Orden de 20 de abril de 2017 por la que se regula el programa de Secciones Bilingües en centros docentes sostenidos con fondos públicos de la Comunidad Autónoma de Extremadura y se establece el procedimiento para su implantación en las diferentes etapas educativas. DOE no. 83, 3 May 2017.

In relation to some of the Spanish bilingual regions, three Spanish-Basque bilingual programs have been developed in the Basque Country, where both languages are used to different degrees (Arzoz, 2012); likewise, a trilingual model is also offered with Basque, Spanish, and an MFL (commonly English) as languages of instruction. In Catalonia, CLIL is followed, with an MFL as the language of instruction, including Catalan and Spanish as independent subjects (Gobierno de Cataluña, 2018).

Conclusion

This paper has examined some similarities and differences between the provision of foreign and bilingual language education in the UK and Spain. It is necessary at this point to answer the research questions of the study. Concerning RQ1 (Which are the main characteristics of the bilingual programs (if any) implemented in the UK?), bilingual education is indeed being implemented in the UK mainly in the form of Irish-, Gaelic- and Welsh-medium education and, in some contexts, in the form of CLIL projects, although CLIL as implemented overseas seems "hardly replicable in the UK" (Dobson, 2018, p. 81). As for RQ2 (What are the similarities and differences between the language policies of the UK and Spain?), language education in the UK is somewhat like that of Spain, as both countries students can learn at least two MFLs; furthermore, CLIL can also be found in the UK, mainly in England. Despite the differences in the way foreign and bilingual language education are provided in both contexts, the UK and Spain do not differ much in theory; in both contexts, for instance, the attempts to foster language proficiency have increased significantly since the 1990s and early 2000s (see Dobson, 2018; McLelland, 2018). In practice, however, more institutional efforts are needed in the UK to overcome the commonly accepted lack of interest in languages and the poor language skills so as to eradicate the 'climate of negativity' and consequent loss of confidence of British learners toward languages (Graham & Santos, 2015; Schulzke, 2014).

These results and conclusions should be considered in light of two limitations. First, although Spain and the UK share sociocultural similarities, other similar monolingual countries and contexts could be examined in future studies. Second, the number of studies gathered in the literature review could also be expanded in order to draw more conclusions.

This analysis has discussed the differences that exist within the UK in relation to language teaching. These seem to be the result of the freedom of the four nations that comprise the UK to make decisions regarding educational affairs. Language teaching is provided across the UK, whereas bilingual education is offered in the form of Welsh-, Irish-, and Gaelic-medium education mainly, although CLIL (the common approach used in Spain) has been implemented from time to time in England. In any case, more research is still needed in both contexts.

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Conflicts of interest

The authors declare that they have no conflicts of interest.

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The Language of Argumentation: Book Review

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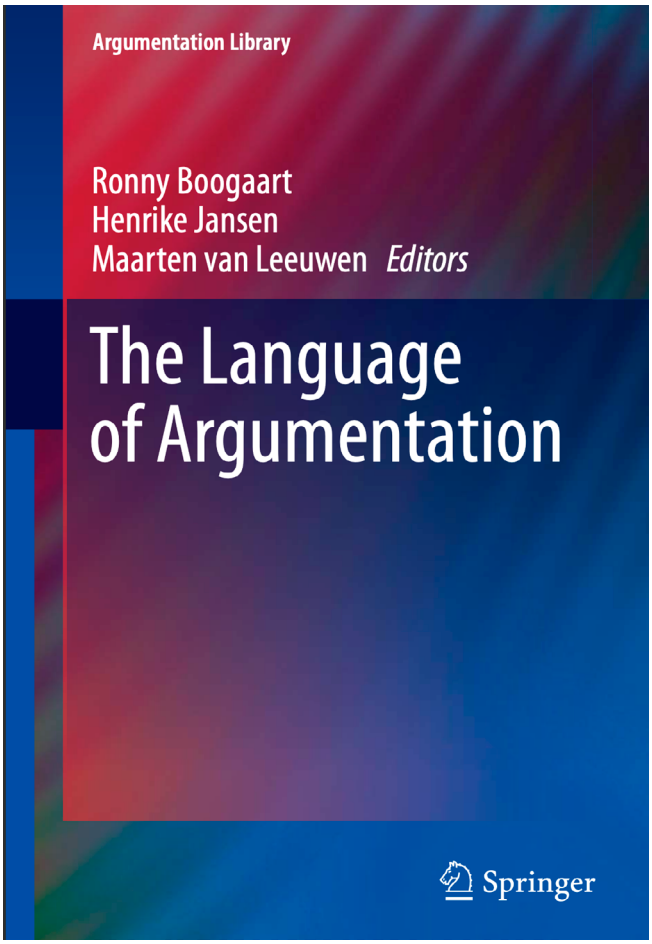
Boogaart, R., Jansen, H., van Leeuwen, M. (Eds.). (2021). The language of argumentation. Springer. ISSN: 1566-7650

The Language of Argumentation by Ronny Boogaart, Henrike Jansen, & Maarten van Leeuwen (Eds). Switzerland: Springer Nature Switzerland AG. 2021 aims to provide important theoretical insights to the international community of argumentation theorists by informing them of recent developments in the field. Some aspects of argumentative texts may emerge as a result of the argumentation process. This book covers different types of argumentative procedures and enthymematic argumentation, argumentation structures, argumentation schemes, and fallacies. Specifically, contributions are solicited from authors trained in informal or formal logic, modern or classical rhetoric, and discourse analysis or speech communication.



One of the central aims of the rhetorical tradition has been the analysis of language's communicative capabilities to present arguments with the maximum effect over time. *The Language of Argumentation* brings various approaches to gain a more global perspective on current research in this domain and facilitate discussion within and across disciplcines. This book is divided into three sections. In Chapters of Part I, leading researchers in their respective fields reflect on broad theoretical and methodological issues. Part II chapters begin with a specific argumentative move and present the various ways in which it manifests in discourse, and Part III chapters start with one particular rhetorical figure or linguistic construction and are focus on its argumentative function and strategic potential. The introduction to the chapters provides an overview of the book, links the chapters together, relates them to developments in argumentation theory and linguistics, and describes their significance within the issue of the book: argumentation is fundamentally linked to language.

In Part I Theoretical and Methodological Considerations, in the chapter "*Characterizing Argumentative Style: The Case of KLM and the Destructed Squirrels*," Frans van Eemeren investigates the concept of "argumentative style" within the framework of pragma-dialectical argumentation theory. Among theories of argumentation, the pragma-dialectical approach has always included a language use perspective in the study of argumentative discourse. In the chapter "*Argumentation in Evolution: On the Relationship Between Dyadic and Public Communication,*" Arie Verhagen contributes to the debate about the origin and function of argumentative language by critically examining two views on the evolution of

argumentation. Verhagen demonstrates that there are two significant differences between these approaches: one regarding the evolutionary stage at which argumentation is assumed to have emerged, and the other regarding the importance of dyadic communication (social interaction) or public communication (community-wide decision making). Blair's argumentation theories address a particular topic in the domain of language and argumentation, namely language used in argumentation; in the chapter "*Technical Terminology and Argument Analysis and Appraisal,*" Anthony Blair addresses the question of whether laymen arguers need a technical vocabulary to understand (i.e., interpret and assess) argumentation. Finally, in the chapter "*Analyzing Rhetorical Style: Toward Better Methods*," Jeanne Fahnestock, whose works on style and persuasion are considered landmarks in the field of argumentation language, notes that linguistic analyses of a text typically produce so much data that analysts can easily select those data that suit their ideological agenda.

Chapters in Part II focus on relation between argumentation and language. In the chapter "*Those are your words, not mine!" Defense Strategies for Denying Speaker Commitment*" in contrast to traditional studies of commitment in linguistics researchers seek to demonstrate that both denials of responsibility to an implicature and denial of commitment to literal meaning exist in people. In the chapter "*Uses of Linguistic Argumentation in the Justification of Legal Decisions*," Eveline Feteris, Harm Kloosterhuis, and José Plug examine linguistic arguments based on the (alleged) semantics of the wording in a statutory norm. The fact that linguistic arguments can be used in four different ways and for four other purposes helps explain why the use of linguistic arguments in legal decisions is as divisive as it is lauded as a means of determining the principles of the Rule of Law. Andrea Rocci in the chapter "*Diagramming Counterarguments: At the Interface Between Discourse Structure and Argumentation Structure*" is more focused on discourse structure, while Assimakis Tseronis in "*How Face Threatening Are Disagreement Moves? A proposal for an integration of insights from politeness theory into argumentation theory"* is more focused on argumentation structure. Tseronis classifies the moves in question using the formal distinction between declarative and interrogative utterances.

Part III From Language to Argumentation focuses on "flipping the argument/language connection" by using a specific linguistic form as the starting point rather than an argumentative function. In the chapter "*The Strategic Use of Metaphor in Argumentation*," Roosmaryn Pilgram and Lotte van Poppel investigate the strategic functions of metaphor in argumentative discourse by combining insights from the extended pragma-dialectical theory of argumentation with insights from cognitive linguistics' three-dimensional (3D) metaphor model (Steen, 2008). In the chapter "*The Maxims of Common Sense: Strategic Manoeuvring with Figurative Analogies*," Bart Garssen argues that figurative analogies should be viewed as arguments based on a causal or symptomatic argument scheme rather than analogy argumentation. A figurative analogy is an example of indirect language; the argument must be reconstructed to be evaluated. This raises the question of why arguers would use such a presentational device when a more direct presentation is also possible. In response to this question, Garssen discusses three strategic functions of figurative analogies: transferring the "phoros" (source) connotations to the "theme" (target), preventing an antagonist from raising critical questions, and introducing controversial propositions as starting points.

Bregje Holleman and Henk Pander Maat report on two such experiments in the chapter "*Empty is Emptied: How Frame Choice Affects Previous State Inferences*," testing the effect of the attribute framing device, i.e., the choice of one value of a two-sided variable as in "the glass is half full/half empty." Ineke Sluiter discusses the phenomenon of "anchoring" in the chapter "*Old is the New New: The Rhetoric of Anchoring Innovation*," beginning with how this concept is used in linguistics to capture the semantics and pragmatics of grammatical categories such as tenses and pronouns. Egbert Fortuin describes the argumentative function of one Russian expression in the chapter "*Drawing Attention to Information in Russian Argumentation: The Function of the Performative Expression važno podcˇerknut' ("It Is Important to Emphasize")*. Henrike Jansen and Francisca Snoeck Henkemans present a study of the argumentative and rhetorical function of the English expression "not for nothing" in the chapter "*Strategic Manoeuvring with the Expression «Not for Nothing.*" They describe the various types of standpoints and the various types of argument schemes that can be used with them. Furthermore, they show that the strategic value of "not for nothing" stems from the implication that adequate support has been provided when, in fact, this support has been left implicit.

Finally, in the chapter "*Everybody Knows That There Is Something Odd About Ad Populum Arguments*," Steve Oswald and Thierry Herman describe the argumentative function and rhetorical potential of the expression "everyone/everybody knows P" from a post-Gricean (relevance-theoretic) perspective. They place a particular

emphasis on two issues with regard to construction: understanding "everyone/everybody" as a universal quantifier and finding different types of propositions stored in the variable P. These academics contend that, while linguistic issues reveal the construction's rhetorical potential as well as which uses are illicit, those issues also serve as instructional devices. Through the examination of a single construct, they obtain greater insight into appeals to commonly held beliefs, illustrating the value of a linguistic-pragmatic approach to inquiry on the topic of argumentation.

In summary, three parts of this book examined various general observations about argumentation and language and the interconnectivity of those phenomena to support Fahnestock's theory, demonstrating how general observations such as these are followed by the approach and lead to the discovery of more narrowly defined devices, such as figures of speech. All the material begins with a well-formulated and somewhat preliminary argument and then followed by a review all the other types of argumentations in the book. One way to illustrate the concept is to say that in most arguments, people start with a particular argumentation function (a claim, an explanation, etc.) rather than a specific linguistic form (a pronoun, a definite article, etc.).

This book is dedicated to Ton van Haaften, who recently retired from Leiden University as a Full Professor of Dutch Discourse Studies. Van Haaften's research has concentrated on the interface between language use and argumentation, particularly in the institutional domains of law and politics, where the linguistic-stylistic approach is explicitly integrated into the pragma-dialectical theory of strategic maneuvering. Van Haaften worked tirelessly to develop a coherent research program for the Leiden Dutch Discourse Studies group by focusing the group's research on the intersection of linguistics and argumentation and encouraging members to collaborate on this topic specifically. His academic work demonstrates how to connect the study of language use and argumentation by synthesizing and integrating insights from both academic disciplines.

This book's insights may relate to argumentation itself, but they may also apply to aspects of argumentative texts that result from the process of argumentation. Thus, there is a variable associated with the language of argumentation in this book. This book covers numerous topics, such as the features of enthymematic argumentation, argumentation structures, argumentation schemes, and fallacies, while additionally providing examples of enthymematic, hybrid, and forceful approaches. This book will be of great interest to people in learning language argumentation regarding knowledge of appeals to common wisdom, further illustrating the importance of using a linguistic point of departure in studying argumentation and the significance of these interconnections, as demonstrated in this excellent book for all readers.

This is an engaging and practical book for practitioners, academics, researchers, and guidance and counseling students. The explanation is concise and written in an accessible technical and academic English. The proposed framework for argumentative language is the result of extensive argumentative literature, practice, model, and rigorous research conducted by several scholars and edited by Ronny Boogaart, Henrike Jansen, and Maarten van Leeuwen (Eds). Additionally, the proposed framework has been implemented on guidance and argumentative theory and activities in several demonstrations and implementations of various types of argumentation, most notably in language. As a result, it provides a comprehensive, concrete, and applicable framework. Perhaps, as this is a practical guidebook, each definition used in this book is not discussed in detail. Finally, it undoubtedly serves as a straightforward guide for the reader to understand what language of argumentation can imply and how it can be applied in numerous facets of life, to appreciate the significance of both general language of argumentation evaluation and culturally based implementation of the theory of argumentation, which are rarely the focus of resources. We believe that this book can serve as a valuable resource for all readers and scholars interested in comprehending the language of argumentation in theory and practice, mainly to improve the field's skills and competencies.

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Autonomy in Language Education. Theory, Research and Practice: Book Review

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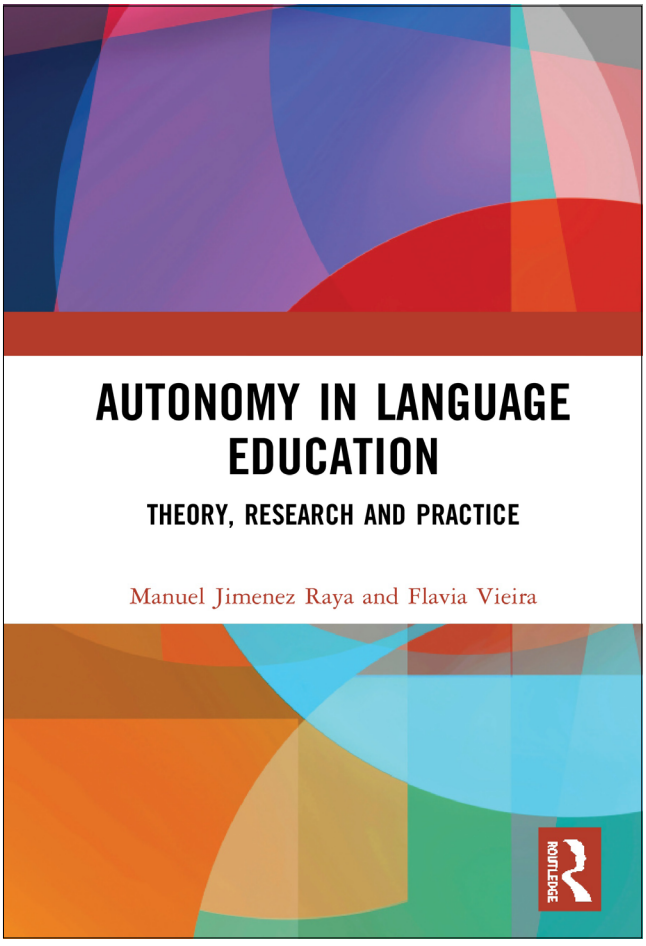

Helping learners become self-sufficient is a great necessity, and as learner autonomy development has to do with the development of teacher autonomy (Little, 1995), the onus falls mainly on the teachers and learners themselves. What defines success cannot be reduced to simply language use and performance any longer and the incorporation of the principles of learner involvement and learner reflection call for a stronger focus on learner autonomy (see Little, 1999). *Autonomy in Language Education: Theory, Research and Practice,* which was edited by Manuel Jimenez Raya and Flavia Vieira, addresses the call for such focused efforts, providing a comprehensive perspective and discussion of the theoretical, historical, pedagogical, conceptual, and ideological elements of autonomy. It offers new insights into the concept of autonomy, particularly for learning, teaching, and implementing in language education.

The book consists of fourteen chapters preceded by an introduction and followed by a conclusion section. In each chapter, we can discern the echoes of Henri Holec's influential ideas regarding autonomy. The editors have arranged it under two main sections, and the first part is devoted to the historical and theoretical route of autonomy while we see research on and practical approaches of autonomy in the second part. The book starts with a list of authors who contributed to this book. In the introduction section, the editors inform us of the need for such a book. They also provide information about Henri Holec, who is seen as the father of autonomy, sharing some of his thoughts or statements regarding autonomy. Furthermore, the editors discuss the pedagogical perspectives toward the achievement of autonomy and come up with suggestions as to how teachers should provide their students with autonomy.

The first chapter, written by David M. Palfreyman, gives an overview of the historical context of Holec's well-known book, *Autonomy and Foreign Language Learning* (AFLL). Palfreyman examines the book with reference to key terms, the themes that were associated with autonomy, the citations that were made, as well as the frequency of the employed key terms. In the second chapter, Xuesong (Andy) Gao and Jingjing Hu focus on the

rise of self-regulation studies in language learning strategies and present a sociocultural view of language learners' self-regulated learning by displaying their own study and referring to other scholars' thoughts and research. Authored by Jo Mynard, the third chapter informs the reader from a sociocultural perspective about the origins, definitions of advising in language learning, and the significance of it for language learners. To display the most useful tools for language learning, Mynard reviews the model of advising in language learning (ALL), followed by a revised version of this model.

The fourth chapter discusses the context and the practice of learning beyond the classroom by referring to four features: location, formality, pedagogy, and control. Then Reinders presents a framework for improving learner autonomy in the language learning settings through making use of learning beyond the classroom. In the following chapter, Benson and Lamb, reflecting through dialogues, elaborate on the reasons for becoming interested in the field of autonomy and the impact of Holec's work on their ideas and teaching approaches. Moreover, the authors discuss the workability of Holec's ideas in modern times, and they regard autonomy from the perspective of multilingualism and plurilingual multicompetence. In the sixth chapter, Garold Murray presents his own opinions of learner autonomy and Holec's model from the perspective of complex dynamic systems theory. With this perspective, the author regarded certain factors that supported the emergence of autonomy: space and place, feelings and embodiment, change, and imagination. An evaluation of Holec's model and implications for further research are also made.

The second part is dedicated to the research on and practical approaches of autonomy. Vera and Junia Braga present a review of studies on autonomy in Brazilian journals. By making a review of research in the documented journals, the authors identified whether learner autonomy or teacher autonomy was more common, which definitions of autonomy were employed, which aspects of autonomy were considered, and in which way the findings are helpful for the scholars. Chapter eight, authored by Alice Chik and Silvia Melo-Pfeifer, aims to shed light on young learners' autonomy in language learning through a visual narrative approach, and the authors demonstrate the findings of a comparative study with German and Australian students who were enrolled in primary schools. The subsequent chapter is written by Leena Karlsson and Fergal Bradley, who provide information about the autonomous learning modules, referring particularly to their past, present, and personal stories. Throughout the chapter, the authors employ a biographic style that they have been using in their courses. Moreover, the authors focus on peer-groups to improve their students' autonomy, and writing from experience was viewed as a way of exploring autonomy.

The tenth chapter is concerned with the changes in self-access language learning. Through a set of interviews, Katherine Thornton demonstrated the key factors of self-access language learning. Further, the author provides information about the role of technology in self-access centres and its significance toward learner autonomy. In the following chapter, Maria Giovannna Tassinari and Jose Javier Martos Ramos inform the readers about self-access language centres, referring to previous studies and reflection of self-access practice. The authors provide a historical overview as well as the ways self-access could contribute to learners, teachers, and self-access language centre managers. Moreover, the authors discuss the influence of self-access language centres on learner autonomy. In the following chapter, the focus falls on pre-service teachers' views regarding the promotion of learner autonomy. Borja Manzano Vazquez focuses on pre-service teachers' perspectives toward autonomy in foreign language teaching. To this end, the author examined twenty-four pre-service teachers in terms of their willingness, ability, and opportunity to implement autonomy in their future teaching practice.

In the thirteenth chapter, Manuel Jimenez Ray discusses the role of teacher education for autonomy through the lens of the possible-selves theory, teachers' identity development, and professional identity. The last chapter, written by Flavia Viera, presents the role of inquiry in autonomy-oriented practicum settings. To offer insight about this subject, Viera examined eight student teachers' practicums. The examination provides an example of how the experiences of students in terms of pedagogical inquiry are useful for supporting learner autonomy and teacher autonomy. Lastly, the editors finish the book with concluding remarks in which they provide readers with the research viewpoints of the different authors and the implications of the studies. The editors' provision of a synthesis of research stances under three headings, namely archaeologic, review, and experience, contribute much to our understanding and the categorization of the research.

Autonomy in Language Education: Theory, Research and Practice, is a must-read book because it adds multiple voices from diverse settings, offers different methodological frameworks and provides profound implications

for teaching and learning autonomy. For some students, relying solely on classes is not enough to learn a certain language, which makes out-of-class activities or investments a great necessity. This book presents different strategies and activities to develop learner autonomy in different settings. It also provides many frameworks from different perspectives toward learner or teacher autonomy, and resources for encouraging levels of autonomy in language education, which will be helpful for teachers to develop learner autonomy in classrooms or courses. All these make it an efficient guide for teachers hoping to help their students become more autonomous.

The book touches on the concept of autonomy in many aspects through the critical eyes of different authors. Even though the book consists of many chapters and is authored by different writers, it can be stated that the book is thoughtfully crafted, well-designed, and comprehensible. Throughout the chapters, a balanced blend of praise and criticism is presented. The healthy mix of pros and cons contributes significantly to the objectivity, enabling wiggle room for readers to make their own judgements. In addition, most of the authors clarified the reasons for utilizing autonomy in their courses and the way in which or from whom they were initially influenced in terms of autonomy. The authors also provided examples of how they employ autonomy in the language learning process. Such narratives help the authors create a dialogue with the readers.

A few suggestions could serve as room for improvement. In chapter nine, many footnotes were used. This might cause a problem for some readers as the footnotes could prove to be burdensome, even leading some to get a bit lost while reading it. Moreover, most of the chapters in this book focused on adult learners, leaving little space for young learners. Therefore, for teachers who are working at the primary stage or even in kindergartens, a greater emphasis here would be more beneficial to help promote learner autonomy in young children.

Without a doubt, as English teachers, it is our duty to prepare students and provide them with opportunities to take charge of their own learning, and this book provides foreign language teachers with many ideas for helping students become autonomous learners. Shedding light on various theories and presenting a critical view of language education, this book informs readers about potential future innovations and challenges. Thus, this book will not only be helpful and beneficial for in-service or pre-service teachers, it will also be useful for graduate students. Individuals who have an interest in the topics of education or teaching should also find it useful.

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