# Teacher-research: Agency of Practical Knowledge and Professional Development

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Educational research has generally attracted negative criticism for its generalisability, contextual independence, and inadequacy in addressing teachers' practical problems in their unique educational settings. Moreover, as classrooms are always complicated environments, teachers are therefore encouraged to become active researchers of their own classrooms in order to maximize their instructional performance and provide optimal learning opportunities for their students within their particular context. To promote teachers' self-inquiry into their own practices, this paper will first define what teacher research is, followed by arguments for its need and significance in the teaching profession. Suggestions to help teachers become engaged in classroom inquiry are provided after commonly reported difficulties are reviewed. This paper is expected to provide considerable insights for classroom teachers as well as school administrators in their search for practical, concrete, and contextually-rich knowledge.

*Keywords*: teacher-researcher, reflective teacher, teacher inquiry, practice-based inquiry, professional development

Teacher research (TR) or teacher inquiry takes many forms and serves a range of purposes, but it is conducted by teachers, individually or collaboratively, with the main purpose of understanding teaching and learning in context and from the perspectives of those who interact with one another daily in the classroom (Miller & Shinas, 2019). TR, which is also described as teacher inquiry (Dana & Yendol-Silva, 2003; Stremmel, 2007), action research (Schutz & Hoffman, 2017; Vaughan & Burnaford, 2016), classroom research (Medgyes, 2017) and practice-based inquiry (Walton & Rusznyak, 2016), is designed by practitioners to seek practical solutions to issues and problems in their professional lives (Miller & Shinas, 2019; Stremmel, 2007; Stringer, 2007). (For the purposes of this paper, these words will be interchangeably used to indicate teachers' systematic study of their own practice). This inquiry is also a journey from difficulties to problem-solving and empowerment when novice teachers develop increasing levels of professional expertise and ability to reflect on and improve their instruction (Cochran-Smith, 2012). In this research, teachers are researchers who are able to self-analyze their work and share their knowledge and experience with fellow teachers (Medgyes, 2017). The students in this research are not treated as subjects but as co-researchers, and their multiple voices and perspectives are included for interpretations (Alexakos, 2015).

A defining feature of TR is the teacher's dual role as practitioner and researcher within the classroom, where they encounter real problems, experience obstacles, and examine why things are as they are on a daily basis. What makes TR different from teaching reflectively is their commitment to a disciplined method and systematic procedures for gathering and analyzing data (Borko, Liston, & Whitcomb, 2007). In other words, TR is intentional and systematic inquiry done by teachers with the goals of gaining insights into teaching and learning, becoming more reflective practitioners, affecting changes at their educational settings, and improving the learning abilities of students (Cochran-Smith & Lytle, 1999; Farrell, 2015; Miller & Shinas, 2019). TR thus stems from teachers' own questions about their daily classroom practice, followed by teachers' collecting and analyzing data, measuring and reflecting on the impact of their instruction, and then adjusting their teaching in response to the findings of analysis (Vaughan & Burnaford, 2016). Although their questions and reflections are context-specific, they enable teachers to relate particular issues to theories of teaching and learning by documenting and analysing such issues.

Distinct from conventional educational research, which examines teacher knowledge and practice from an outsider perspective by employing quantitative methods and epistemologies embedded in the literature. TR primarily uses qualitative methodologies to examine teaching practice from the inside. This type of research is appreciated and valued in response to questions about the relevance of quantitative studies in addressing the complex nature of teaching and learning (Stremmel, 2007). Despite the continued debate about the value and limitations of quantitative approaches in educational research (Davis, 2007), there has been a shift from an exclusive reliance on quantitative methods to the various applications of qualitative methods (e.g., journals, direct observation, field notes, interviews, and artifacts) in the study of teaching and teacher education (Borko et al., 2007; Davis, 2007). There are two major categories of TR: conceptual and empirical (Cochran-Smith & Lytle,1993). Conceptual research, which is theoretical and philosophical, includes teachers' essays, conversations, stories, and books that represent extended interpretations and analyses of various aspects of teaching. The latter involves the collection, analysis, and interpretation of data by the teachers who attempt to create new knowledge, which may be called local knowledge, about teaching and learning, but that knowledge will contribute to improving their classroom practice. Although there is a tendency for the products to be published or presented to academic audiences, TR must be first and foremost accessible and relevant to those who conduct it and those in situations where it is immediately applicable. Moreover, because TR aims to make a difference in the lives of those who encounter real issues and problems in particular settings, at particular moments, and in the lives of particular individuals and groups, teachers are often in the best position to ask and answer questions about their teaching and students' learning (Alexakos, 2015; Miller & Shinas, 2019). With the crucial role of teachers as researchers in their own teaching contexts, this paper plans to discuss the rationale for teachers to be classroom researchers, followed by the potential challenges they may encounter in conducting classroom research, and ends with suggestions for helping them become their own classroom researchers.

## Why should teachers be researchers?

Educational research has historically been criticized for not only its incomprehensibility and inaccessibility to classroom teachers but also its apparent lack of relevance to classroom practices (Hoong, Chick, & Moss, 2007; Medgyes, 2017; Sato, 2018). As claimed by Hiebert, Gallimore, and Stigler (2002), the knowledge produced by educational researchers, or research knowledge, is characterized by its generalisability and contextual independence while the knowledge classroom teachers need is practical, concrete, and contextually rich. Educational research knowledge is thus generally lamented for not adequately addressing teachers' questions and offering unusable answers to their practical questions.

To bridge the so-called research-practice gap, classroom teachers should not act as mere implementers of research knowledge but as active constructors of knowledge. As argued by Stremmel (2007), teaching is a process of continual inquiry and renewal; teachers should be questioners. In fact, "teaching is not a purely technical activity where the end goal is pre-determined and achieved by applying precise methods" (Anwaruddin, 2019, p. 10). For pedagogies to be effective, teachers are expected to question the impact of their teaching on the students because teaching strategies work differently in different contexts for different students (Alexakos, 2015; Farrell, 2018; Loughran, 2002; Miller & Shinas, 2019). Schön (1983, 1987) also depicts teaching as a cognitive process of exploring problems or dilemmas identified by the teachers themselves. In doing so, teachers ask questions that other outsiders or academic researchers may not perceive or deem relevant.

Furthermore, as each classroom contains unique complexities and uncertainties within its own local settings, the teaching decisions teachers make require their understanding and the contextually responsive modification of their research-based knowledge. Classroom teachers should thus learn more about their students before making decisions regarding the appropriate teaching approaches for them. Although students are often overlooked or not viewed as valid resources, collecting and analyzing data taken from students and their classroom is considered a valuable resource. Sometimes teaching approaches or activities deemed to be effective by teachers or experts may not be perceived this way by students. In fact, through analyzing their data, teachers can understand the effectiveness of their teaching from a new or different perspective, which can often be significant and quite different from that of renowned experts. Moreover, by inquiring into their classroom life, teachers can better understand their own practice and the culture of their classroom and schools, then use that knowledge to continually reform, refine, and change their practice and build greater practical

knowledge for themselves. Evidence also suggests that teachers who have been involved in research are open to new ideas and possibilities regarding which strategies might work best for their students that the vast existing literature cannot provide. In fact, as confirmed by Alexakos (2015, p. 41), "researching our practice is an opportunity to learn". Different from positivistic-type research that is conducted to find laws or law-like generalizations, TR is about learning, changing, developing, and implementing practices that assist the learning and teaching of the researcher and all involved. Such research gives teacher-researchers more authentic, useful, and valuable knowledge than the research knowledge generated by academic researchers

For teachers to improve their understanding of their students and selves, pedagogy and practice, and for their professional abilities to be enhanced, they need to utilise both external and internal sources. The external sources include experts, academic researchers, teacher trainers, and supervisors, as well as students or other participants in the educational system. The internal resources for teachers include their self-reflection, which is often ignored in their professional development. When teachers carry out systematic enquiries into themselves and by constantly looking into their own actions and experiences, they can better understand themselves, their practices, and their students. By collecting, analyzing, and evaluating the information about what goes on in their classroom, teachers can identify and better understand their strengths and weaknesses in their own practices and their underlying beliefs, which may then lead to changes and improvements in their teaching (Kostiainen et al., 2018). By following this reflective approach to teaching, teachers make sense of different dimensions of their teaching and, to this end, teachers develop their professional dispositions of lifelong learning, mindful teaching, and self-transformation, instead of the transmission of given knowledge and skills to their students through prepackaged materials (Mills, 2000; Stringer, 2007). Becoming teacher-researchers thus enables teachers to develop a better understanding of themselves, their classrooms, and their practice through the act of reflective inquiry (Loughran, 2002; Stremmel, 2007).

Moreover, when teachers conduct research, their voices can also be heard in discussions about instructional issues and student learning, implementing pedagogical innovations, and curriculum reforms with administrators, policymakers, and researchers (Alexakos, 2015). It is because they have insights into their teaching practices with concrete support for what works best for their students (Schutz & Hoffman, 2017; Vaughan & Burnaford, 2016). In fact, in responding to the needs of their own students within the classroom, teachers have tested the possibilities. Teacher inquiry thus allows teachers to enrich their knowledge and develop the teaching skills needed to assess and respond instructionally. Additionally, such in-depth discussions with policymakers could put teacher-researchers in collaborative contact across departments, disciplines, and grade levels and with colleagues, principals, school counselors, or other stakeholders in their teaching and learning environment. Such collaborations could provide insights, make positive changes in the school environment, and improve student outcomes.

Finally, from their frequent self-inquiry into their own practices and participation in reseach and discussions with others, teachers develop a sense of ownership with the constructed knowledge, and this sense of ownership creates an inquiry stance towards their teaching (Dana & Yendol-Silva, 2003). By cultivating this inquiry stance, teachers play a critical role in enhancing their own professional growth, which can lead to meaningful changes for students. Besides this, in actualizing this stance by engaging in action research, teachers also develop their personal theory of research-based knowledge, which is "sufficiently flexible to guide actions in varied and constantly changing contexts" (Cain & Allan, 2017, p. 721). As asserted by Kincheloe (2011), teacher knowledge is espistemological, complex, situational, and multidimensional with multiple interpretations because teaching and learning are (re)produced and (re)developed in changing relationships within contexts that embrace conflicts and different perspectives. Because of the unpredictable nature of teaching and learning, their personalized research-based theories, practical experiences, and wisdom play an important role in making instantaneous decisions for their own teaching contexts and contributing to their existing knowledge about teaching and learning.

# **Potential Challenges**

Although recent literature has acknowledged the value of TR for nurturing teachers' personal and professional growth, many teachers still remain uninvolved or attach little importance to classroom-based research. What are the sources of their apparent reluctance to conduct research?

As reported in a large-scale international study on English language teachers' conceptions of research by Borg (2009), a lack of time, inaccessibility of relevant published research, and a lack of practical relevance were among the key barriers to teachers' engagement with research. In fact, their disengagement in research is understandable when they are overburdened with school-related duties that take up most of their non-teaching time. Additionally, besides limited access to research databases at their schools, teachers lost their interest in reading research papers because the advice academic researchers give was too abstract and irrelevant to their specific school contexts (Hoong et al., 2007; Medgyes, 2017; Sato, 2018). Furthermore, it is mistakenly assumed that the teacher's main job is to help students learn effectively while researching, documenting, and generating new knowledge about teaching is the job of academic researchers working in research centers or universities (Hoong et al., 2007; Renandya & Floris, 2018). In Borg's (2009) study, teachers also reported that they did research merely to meet the requirements of their higher education, and their motivation to undertake research would peter out once their desired qualifications were obtained.

However, according to Renandya and Floris (2018), contextual factors (i.e., lack of time and proper support) rather than teachers' lack of interest and ability could account for the low percentage of teachers undertaking formal classroom inquiry. Due to their time limitations, it is difficult for teachers to keep themselves updated about recent developments in language learning and teaching. They thus need recent and relevant resources provided as a basis for contextualizing their own classroom-based research to get started with. In fact, teachers are believed to be capable of doing practice-based inquiry because they do informal and ongoing research every day on their teaching and how they can design and deliver more effective and engaging language lessons. For example, when they reflect on their completed lesson, thinking back about what they did right (or wrong) and making plans for ways they can improve their teaching, they are in fact doing research on their classroom. Likewise, when they invite a colleague to observe their lesson and then discuss the strengths and weaknesses of their lesson, they are researching their teaching.

In addition to the unavailability of pedagogically oriented-research studies that teachers can then use as a model for their own research, what challenges teachers tends to be their lack of necessary preparation and adequate understanding of how to do research. As revealed in Renandya and Floris (2018), teachers had difficulties asking pedagogically sound research questions, collecting useful classroom data, going about analyzing and making sense of this data, and drawing useful pedagogical insights from the research. This is because they generally are not taught how to research their teaching and student learning, analyze classroom interactions, and know what constitutes knowledge. Furthermore, Hoong et al. (2007) described teachers' concerns about the dual role of teachers-researchers in classroom research that could compromise the work of teaching and/or research in an unproductive way. Therefore, how to handle the interaction between the dual purposes of teaching and research once teachers step into the classroom as teacher-researchers also requires proper training.

#### How can classroom teachers become researchers?

For teachers to engage in research, appropriate and sufficient assistance in terms of additional time allocation, availability of related resources, inquiry stance disposition, and research strategies is needed. While the last two conditions entail teachers' own practice for their professional growth and development, schools or institutions in charge should facilitate the first two.

## Schools/institutions' proper support

As stated by previous scholars (Borg, 2009; Farrell, 2015; Loughran, 2002; Renandya & Floris, 2018), teachers' motivation to do research is likely to be impeded by their heavy workload as well as their lack of time and resources. It is therefore the schools and policy-making organizations that should provide appropriate assistance to encourage teachers to do research.

Teaching, learning, and research are interrelated and dialectically entangled processes (Alexakos, 2015; Stremmel, 2007); besides balancing teaching and researching time for teachers, schools should make research one of teachers' major tasks. This could fine-tune teachers' mistaken assumption that doing research is only the job of academic researchers (Hoong et al., 2007; Renandya & Floris, 2018). In fact, teaching is not merely actions and activities but also reflection, speculation, questioning, and theorizing. When teachers have supported evidence to indicate that their inquiry activities provide them with solutions to their teaching problems and benefit students' learning, their interest in doing research is likely to be bolstered. Furthermore,

TR can only bear fruit when teachers are given the flexibility and encouragement to improve their programs. School leaders thus need to balance the documented school curriculum with set-aside time to meet the emerging needs and research interests of the teachers. When teachers receive school leaders' permission to implement desirable changes, teachers will be more inclined to inquire into their practices and make necessary adjustments to their teaching.

It is generally believed that school principals' leadership plays an important role in promoting TR in different ways (Stremmel, 2007). Thus, another kind of support from school leaders to facilitate teachers' engagement in doing research is the accessibility to professional groups. These groups are necessary for teachers when help is needed or when they can have deliberate conversations with colleagues about their practices at school. These peer-groups could be formal and informal associations of teachers or "teacher professional learning communities" (TPLC) where participants with the same interests and similar values about teaching and learning work collaboratively and collegially in order to improve student learning (Dana & Yendol-Silva, 2003; Vangrieken, Meredith, & Kyndt, 2017, p. 48). According to Vangrieken et al. (2017), these communities can be organized using top-down to bottom-up approaches which aim to provide different opportunities for teachers' formal and informal learning, respectively.

The top-down organized communities are initiated by the schools and mostly led by a facilitator (an officially trained educator) and aim to teach something to the participating teachers. These communities are similar to traditional professional development programs where the main purpose is to transfer knowledge. Such programs support the learning of beginning teachers by creating environments in which novices can work with expert practitioners and enabling veteran teachers to renew their own professional development as well as assume new roles as mentors. TPLC programs can also be developed from schools' connections with universities or research centers to provide teachers with short-term support. In other words, schools should create opportunities for teachers to work or consult with university faculty or academic researchers to ensure the teachers' commitment to rigor in research. This allows school and university educators to engage jointly in research and rethink practice together, thus creating an opportunity for the profession to expand its knowledge base by putting research into practice and practice into research. However, as reported in Dana and Yendol-Silva (2003), to be effective this model requires special attention paid to teachers' needs and the schools' sociocultural and material contexts where research-based knowledge is supposed to be applied.

Different from the first type of communities, bottom-up structures for TPLC are constructed based on teachers' learning needs and experiences, and they are in line with the concept of informal teacher learning. These communities are established through schools' connections with groups of teachers who can learn from and share with each other through structured and reflective conversations when engaging in continuous cycles of their action research (identifying problems, collecting data to gain insights into the problems, analyzing data, making improvements in practice based on what was learned, and sharing learning with others). As emphasized in Vangrieken et al. (2017), teacher colleagues are an important resource that could provide special contexts to teachers' learning, so well-developed TPLCs build teachers' competence for learning, positively impact their teaching practice and student achievement, and result in schools' continuous improvement. In fact, research conducted by teachers or among teachers and administrators provides a unique look at the program from different perspectives of students, curriculum, and teaching and learning (Stremmel, 2007). In summary, whether in partnership with other teachers or teacher-educators, teachers themselves are viewed as knowledge generators, and their partnerships allow for supportive and reciprocal relationships in the research process (Dana & Yendol-Silva, 2003; Stremmel, 2007; Vangrieken et al., 2017).

## Suggestions for teachers' self-development of inquiry stance and research strategie

### Begin with an inquiring question

No matter how teachers do their classroom research, they have to begin with a significant learning and teaching problem that will then be turned into workable research questions (Renandya & Floris, 2018; Stremmel, 2007). However, unlike academic research, which normally begins with an extensive review of the literature to identify a research gap, TR or practice-oriented research, begins with a practical problem that teachers want to solve. After the problem is identified, teachers need to combine their theoretical/intuitive knowledge and experience with students or even refer to the experiences of seasoned colleagues to develop questions and assumptions

(hypotheses) about the problem. These questions are carefully developed after teachers' thorough observation and deliberation about why certain things are happening in the classroom. These questions are not aimed at superficial solutions, but rather involve the desire to understand teaching or students' learning in profound ways. For example, *How or what can I do to increase my students' levels of engagement in my speaking class?* or *How can I facilitate editing-revising activities with my students who are used to teacher-centered approaches in their paragraph-writing classes?*. Then, data is collected through various means, such as experiments (using new teaching techniques), surveys, video-recorded lessons, classroom observation, students' improvement (grades), interviews, and journals. With the data gathering and analysis, teachers' assumptions about the problem may be reformed or reconstructed. Ultimately, the findings are first shared with students, colleagues, and members of the educational communities and then used to address and/or further reflect on the original problem. This inquiry cycle continues until the teachers have the answers to their questions about learning and teaching problems identified in their own classroom.

## Resolve the conflict of the dual roles of teachers-researchers

As reported in Hoong et al. (2007), this research process is messy and disorderly due to the interaction between the dual purposes of teaching and research. To reduce the degree of the unproductive conflicts between the research and teaching goals when doing research, teachers need to clearly identify the research focus - whether it is on students' learning or on the work of teaching. If the focus is on the former, conflict is more likely to emerge. If that is the case, teachers should continue what they think a teacher is supposed to do in that context because giving the situation another focus (teaching) would result in a clearer picture of what the teacher intends to investigate about student learning. Another way to control the interactional effect of teaching and research agendas in the classroom is the proper division of teacher-researcher work across the boundary of the classroom. In particular, teachers should consciously focus on the research goals outside the classroom, while in class they give students whole-hearted devotion to their teaching. In other words, teachers should focus primarily on the teaching task while keeping their research intents of the project at the back of their mind for most parts of the lesson. Hoong et al. (2007) used the foreground/background metaphor to describe this relationship. In their description, both research and teaching goals are at work in the classroom, but they do not share equal prominence in the teacher-researcher's practice. When teachers enter the classroom, the teacher-at-work is at the foreground and teaching goals become the main driving force for instructional choices and actions. However, the research intents are not altogether absent, but are actively working in the background to influence the thoughts and actions of the teacher. Doing this, their research purposes do not weigh on them while teaching, and this enables them to carry out both the goals of teaching and research in a productive way.

## Become reflective practitioners

Classrooms have long been viewed as a research facility and teachers' own learning environment where they can learn more about their students and the effectiveness of their own teaching performance (Loughran, 2002; Miller & Shinas, 2019; Schön, 1987). Schön (1983, 1987) argues that defining and solving problems stimulates teachers' inquiry and motivates them to participate in an active search for the answers and more effective teaching strategies. This process can be done by teachers' systematic examination of their instruction, classroom activities, and learners' reactions. Therefore, to gain a new level of insight into their teaching and student learning, reflective teachers always have central knowledge questions in mind, such as What happened?, What was the nature of the problem?, Why did events take place as they did?, What were my intentions?, What did I do and why did I do it?, What ideas or feelings prompted my actions?, Did my actions lead to the outcomes I intended?, Did my actions correspond with my intentions?, How did my knowledge, my understanding, and my personal theoretical framework affect my own behavior?, and Given new knowledge, what will I do differently?. Finding the answers to these questions requires teachers to assume a dual role of being the teacher in the class on one hand, and of the critic who sits in the audience watching and analyzing the entire performance on the other hand. The critics utilize the information gathered to develop ways of adjusting the teaching, and then apply them for their improvement of the future lessons. If the adjustments prove successful, teachers will adopt them, otherwise they should not. However, as both learners and curriculums change over time, teachers' reflection should be an ongoing process. Previous scholars (Kostiainen et al., 2018) also acknowledge that such a continuous reflection will support teachers' development of a reflective and inquiry-based stance to teaching. In fact, by utilizing these internal resources, teachers know things about themselves, their own abilities, and their students that other people are not aware of, and that knowledge will make them the most knowledgeable and appropriate person to help themselves improve their instructional practices (Mills, 2000; Stringer, 2007).

To promote classroom teachers' reflective ability, Mermelstein (2018) proposes five practical suggestions for them to follow as separate steps or as an entire cycle depending on teachers' reflection purposes. While the first four suggestions offer more immediate feedback and data that can be applied almost immediately in many situations, the fifth suggestion offers a written account that can be revisited throughout a teacher's career. The first suggestion is that teachers should visit and/or observe both novice and experienced teachers in action to learn what works successfully and what does not. When they notice the errors of others, they can gain insights into whether or not they make similar errors in their classroom that had previously gone unnoticed. Second, they can videotape their own teaching for self-reflection and analysis. It is important to place the recording device unobtrusively and ensure that it can capture a view of the entire classroom and all participants at all times. Another option is to design and implement surveys or questionnaire to get precise and specific answers from the participants in their classroom for later analysis. These instruments will provide teachers with valuable information regarding students' opinions, beliefs, attitudes, and evaluations on the teaching. A fourth suggestion is to conduct interviews with students regarding the effectiveness of the teaching. Interviews can also be conducted with supervisors, peers, students, and even parents to obtain further useful information for improvement. A final suggestion is that teachers should keep both formal and informal types of journals or a portfolio of their own teaching successes and failures. The former is a systematic recording of their own successful and unsuccessful teaching experiences while briefly noting their feelings about a particular practice is considered as the later. In fact, for the purpose of improving and changing practices, journals/portfolios should not merely include a list of what worked and did not but also teachers' feelings and emotions regarding what has happened in the classroom. As explained by Farrell (2018), reflective teachers are not only looking back on their past actions and events but are also taking a conscious look at emotions, experiences, actions, and responses, and then using that information to add to his or her existing knowledge base and reach a higher level of understanding.

## Conclusion

In conclusion, classroom teachers should realize that research is doable because it stems from their own teaching practices. Being aware of their own practices and beliefs that underpin them, becoming active participants in their classroom research and eventually constructing their own knowledge are crucial for classroom teachers to perform their instructional duties to the maximum potential and provide optimal learning opportunities for their students (Alexakos, 2015; Mermelstein, 2018). As stated by Wiliam (2019), classrooms are too complicated for academic researchers to tell teachers what to do; teachers need to know about research so that they can have evidence of what works and what does not within their particular context. Through self-inquiry, teachers gain the necessary professional competence for making better judgements and taking effective actions in any ambiguous situation, which enhances their professional practice and performance in a changing and uncertain environment. In other words, engagement in teacher inquiry is an integral and powerful component to support teachers' active and lifelong learning, enhance their practical experiences in the knowledge-based profession, and cultivate their inquiry stance toward teaching that will serve them, their students, and the field of education well for the duration of their career (Miller & Shinas, 2019). Loughran (2002) and Mathew, Mathew, and Peechattu (2017) state that the secret to success for teachers in self-inquiry is their desire to make a difference for students, their disposition to include students in the processes of learning, their curiosity about what would make their students' learning better, and their willingness to improve their teaching practice.

Teachers are the greatest assets of any education system, the essential elements in a positive learning environment, and the key to high-quality education (Liu & Xiu, 2019). Teacher education thus plays a vital role in reforming and strengthening the education system of any country. Although teachers can develop professionally in a multitude of ways, including involvement in TPLC and participation in professional development activities, classroom inquiry is viewed as a means by which practitioners can develop a greater level of self-awareness about the nature and impact of their performance, an awareness that creates opportunities for professional growth and development (Alexakos, 2015; Mermelstein, 2018; Sato, 2018). Miller and Shinas (2019), however, argue that teacher inquiry is most effective when it is framed and supported by a systematic and carefully scaffolded process. This process requires guidance from experienced teachers and language teacher-educators and support from leaders and policymakers because teachers are often

overburdened and have little time, insufficient preparation, as well as limited energy or resources to do classroom research. It is generally believed that when teachers systematically and critically study their own teaching practices, they can then make a larger contribution to their teaching community by sharing their insight and experiences. In doing so, a much wider understanding of teaching and learning can be gained from a variety of resources that will bridge the research-practice gaps in educational knowledge and change educational practice for the better.

# Acknowledgement

I would like to extend my deep gratitude to Ifzal Syed for his insightful discussions and proofreading this paper.

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