LANGUAGE TEACHERS' KNOWLEDGE AND PRACTICE OF METACOGNITION

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Abstract

Language learners' (L2) knowledge about their own learning (also known as metacognitive knowledge) enhances with learners' acquisition of metacognitive skills and successful applications of metacognitive strategies. In these contexts, L2 teachers' knowledge about teaching is quite opposite to "abstract, decontextualized" knowledge, which results in executing "a set of discrete behaviour" (Freeman & Johnson, 1996, p. 400). Similar to the learners, as Freeman and Johnson (1996) argue, the way "teachers actually use their knowledge in classrooms is highly interpretive, socially negotiated, and continually restructured within the classrooms and schools where teachers work" (p. 400). Therefore, language teachers' knowledge of metacognition needs to be improved and applied in their instruction and classroom environment which eventually encourages and guides learners' metacognitive behaviors in L2 learning. The following sections elaborate the previous statement in three sections - 1) citing research related to second language teachers' understanding and practices of teaching of metacognition, 2) defining the role of teacher training programs in promoting metacognition, 3) and inferring ways to develop metacognitive instruction in language classrooms.

Teachers' knowledge of metacognition

According to Fusco and Fountain (1992), "metacognition involves the monitoring and control of attitudes, such as students' beliefs about themselves, the value of persistence, the nature of work, and their personal responsibility in accomplishing goal" (p. 240). Research findings (Azevedo, Greene, & Moos, 2007; Alexander, Graham, & Harris, 1998; Hattie, Bibbs, & Purdie, 1996) support that teaching metacognitive skills to students improve students' achievement as students are "able to recognize and discuss their thinking may be one of the most difficult tasks that they will have encountered" (Kolencik & Hillwig, 2012).

In Ozturk's (2017) study, the self-reported competencies for teaching metacognition of English language instructors were examined with the intervention of a professional development program. Before the intervention, 30 English language instructors' knowledge and practice of teaching metacognition were assessed through Metacognitive Awareness Inventory developed by Schraw and Dennison (1994), in which the scores ranged from 186 to 248 with a mean of 222 (on a scale of 52-260). The researcher also investigated teachers' self-reported competencies in planning a reading lesson and think-aloud protocols before the professional development. The other think-aloud task was conducted after the professional development module to examine their perceived competencies and also for change in their instructional planning. The results show a lack of knowledge or competencies of teaching metacognition in half of the participants. Further, following the professional development, only the highly metacognitive teachers demonstrated the ability to transfer and integrate their knowledge of metacognition into instructional moments.

In their effort to explore teachers' pedagogical understanding and practice of metacognition in terms of reading instruction, Wilson & Bai (2010) created a Teacher Metacognition Survey, which assessed ESL teachers' metacognitive knowledge (declarative, procedural, and conditional) and their use of instructional strategies for students to be metacognitive. The 105 graduate students who participated in this study had K-12 teaching experiences of varying degrees. One of the factors discovered through the study aligns with Clark and Graves' (2005) notion of teachers' explicit modeling of strategies for students before guided and

independent practice of those strategies. The other factor relates to the debriefing of importance of metacognitive thinking strategies to increase student's awareness of using them accordingly. The participants reported metacognition as an active process which needs appropriate application of assignments for activation, engagement, and practice for students to become metacognitive. In addition to that, the research findings indicated the importance of professional development and a teacher education program to assist teachers in improving students' metacognition.

The role of teacher education programs in metacognition

The pre-service program experience builds the foundation of teaching. Though the real teaching challenges occur when teachers start working in their own classrooms, they should possess the aptitude to transform their knowledge and skills of teaching gained in the programs to actual classroom contexts. Feiman-Nemser (2001) elaborated the idea that "a powerful curriculum for learning to teach has to be oriented around the intellectual and practical tasks of teaching and the contexts of teachers' work" (p. 1048). As Duffy (2006) pointed out in his article about how the changing need of the society requires "thoughtfully adaptive teachers" and developing them asks for "a more dynamic, sociocultural approach to the teaching of teachers" (p. 303); he suggested four shifts to promote metacognitive teaching in teacher training programs:

1. Teachers identifying their "moral compass", which is to practice self-regulation and decision making while dealing with emerging uncertainties, which is a common feature in classroom instruction.

2. Through collaborative effort, teachers determine their goals, decide the process of implementation, and evaluate the process as well. In this change of "leadership role", trainers or experts act within a "learning community" or "intellectual community" providing coaching and support (p. 305).

3. Experts in the program should be responsible to promote teachers' capabilities of transforming knowledge, rather than just teaching professional knowledge. For that, teachers need to be provided with ample opportunities to practice self-regulation while performing academic tasks. For example, in a given task, apart from learning an instructional technique, teachers need to explore how to modify the technique according to situations.

4. Teacher-led reflection, longitudinal teaching practice, practice in situations with ground level complexities, and teacher educators' concedable direct intervention–these are the ways experts can assist teachers to become metacognitive in their practice.

In van Velzen's (2012) study on teacher educators, the results indicated that teaching the process of metacognition requires teachers teaching at a metacognitive level. The author elaborated that the process of prospective teachers' noticing the importance of acquiring metacognitive knowledge correlates with teacher educators emphasizing on the role of the cognitive process in learning, rather than on task performance. Therefore, teacher education programs need to provide opportunities to the teacher educators and their students to gain this holistic view of learning, to teach not just the core matter but supplemental instructions with metacognitive strategies.

Metacognitive instruction

Goh and Taib (2006) documented learners' increased knowledge of metacognition and training of practicing relevant strategies through the exercise of metacognitive instruction. Utilizing proper 'tools', teachers are able to integrate metacognitive instruction in their lessons through metacognitive activities and making students aware of the activities (Veenman, Van Hout-Wolters, & Afflerbach, 2006).

Despite teachers' willingness to practice metacognitive instruction, factors such as individual student conditions might impede achievement of lesson objectives. Veenman, Van Hout-Wolters, and Afflerbach (2006) referred to one of these states as availability deficiency which is a student's lack of sufficient metacognitive skills and knowledge. Whereas, in production deficiency, students fail to utilize their metacognitive skills and knowledge "due to task difficulty, test anxiety, lack of motivation, or their inability to see the appropriateness of metacognition in a particular situation" (p. 10). Therefore, Veenman's (1998) principles of WWW&H rule (What to do, When, Why, and How) scaffolds around the fundamental principles of successful metacognitive instruction stated by the authors as: a) embedding metacognitive instruction in the content matter to ensure connectivity, b) informing learners about the usefulness of metacognitive activities to make them exert the initial extra effort, and c) prolonged training to

guarantee the smooth and maintained application of metacognitive activity (p. 9).

To cultivate metacognitive awareness in teaching practices, Scharff and Draeger (2015) emphasized that metacognitive instruction not only be a mere reflection of one's teaching but a process which "continuously takes the pulse of what's going on" (p. 4). The ability to articulate and work towards goals using effective strategies along their way of teaching are the essence of metacognitive instruction and of the instructors. The authors offered four building blocks to encourage instructors about the "explicit, ongoing and intentional self-regulation of instructional choices" in metacognitive instruction (p. 5):

> *1. Teachers need to be aware of the general learning process. Not all learning related strategies are effective; thus, teachers should educate themselves by studying relevant literatures to get comprehensive understanding about how learning works.*
>
> *2. Teachers should get familiar with their students' characteristics, learning context, and goals. This essential information helps teachers to make specific choices and address the necessary changes.*
>
> *3. Even though a preferred method proves to be successful and labeled 'standard' in the field, teachers need to be strategic in their choice of using that specific method to particular skills related to current context and learners.*
>
> *4. Teachers should comprehend students' feedback and adjust their strategies if students' desired outcomes are not achieved. They need to "check in" on students' progress and be prepared to employ alternate strategies.*

The four general ways to increase metacognition in learners, as Schraw (1998) suggested are: "promoting general awareness of the importance of metacognition, improving knowledge of cognition, improving regulation of cognition, and fostering environments that promote metacognitive awareness" (p. 118). The 'flexible' and 'indispensable' nature of metacognition encompasses multiple domains of knowledge regardless of the dissimilarities between the areas of knowledge. This is where metacognition differs from domain-specific cognitive skills; Pintrich (2002) added "on the knowledge dimension; metacognitive knowledge categories refer only to knowledge of cognitive strategies, not the actual use of those strategies" (p. 223). The successful infusion of teachers' well-grounded metacognitive knowledge into their substantial knowledge of the subject to teach, therefore, delineates their effort for teaching metacognition in language classrooms.

Conclusion

A metacognitive person demonstrates an awareness and regulation of one's mental processes (Griffith & Ruan, 2005) and for language learners, this awareness and regulation have to be demonstrated in their language learning process for effective outcomes. Teachers need to support and provide models to learners as they progress towards growing skills of using metacognitive strategies. According to Zimmerman (2013), learners, during efforts at getting better, improve their "accuracy and motivation if a model provides them with guidance, feedback, and social reinforcement" (p. 140). Teachers in the classrooms, hence, should be well equipped to emerge as that model by increasing their metacognitive knowledge, which is achievable through enriched metacognitive experiences.

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