2 Metacognition in Language Learning and Teaching

An Overview

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Introduction

Several factors correlate with success in language learning, such as high motivation (Masgoret and Gardner 2003), a rich amount of target language input (Ellis 2002), skill and dedication on the part of the teacher (Hattie 2009) and explicit language instruction (Norris and Ortega 2000). Yet researchers increasingly point to the importance of metacognition in enhancing language learning (for example, Anderson 2002, 2008; Chamot 2005; Wenden 1998). The learner is typically the main focus of most studies and overviews on metacognition (Wilson and Bai 2010), but in this introductory chapter, both language learners and language teachers will be at the centre of the discussion. The aim of the first part of the chapter is to clarify the concept of metacognition and discuss how metacognition relates to language learning and teaching. In the second part, I present and discuss common methodological tools and approaches to metacognition research. Thereafter, I focus on how learners' metacognition can be promoted and discuss central aspects of language teaching that teachers should be able to reflect on in order to enhance their own and their learners' metacognition. Finally, I discuss the extent to which language teachers have actually implemented a metacognitive instructional approach to language learning.

The Concept of Metacognition

The ability to reflect on one's own thoughts and experiences is probably a unique human capability; humans can reflect on their lives, thoughts and actions, whereas animals cannot. Furthermore, humans are the only species that can plan their future, think about their past and learn from their experiences, and to some extent also foresee what will happen to them. They can also imagine what it is like to be someone else; that is, they can feel empathy for others. Metcalfe (2008) argues that people's ability to reflect on their own thoughts, or metacognition, is a recent result of evolution; whereas animals are purely instinct and stimulus bound, metacognition allows humans to exert self-control over their actions.

Most researchers attribute the concept of metacognition to John Flavell. He defines metacognition as “one’s knowledge concerning one’s own cognitive processes and products or anything related to them” (1976, 232). Flavell (1979, 907) suggests three domains of metacognition, namely *metacognitive knowledge*, *metacognitive experiences* and *metacognitive strategies*. In the domain of *metacognitive knowledge*, person knowledge refers to knowledge of oneself and others as cognitive processors. It includes knowledge and beliefs about what people think they can and cannot do well. Further, it includes knowledge and beliefs about how and to what extent factors like age, gender, intelligence, motivation, personality and educational background influence learning. Task knowledge refers to an understanding of how a task should be managed and “how successful you are likely to be in achieving its goal” (1979, 907). Strategy knowledge refers to beliefs about which strategies are effective to achieve a goal. Flavell states that metacognitive knowledge typically involves a combination of these three types. Furthermore, Flavell (1979, 906) defines *metacognitive experiences* as “any conscious cognitive or affective experience that accompany and pertain to any intellectual enterprise”. *Metacognitive strategies* refer to the deliberate use of strategies to control one’s own cognition. Flavell (1987) later expanded the concept of metacognition to explicitly include not only cognitive but also affective variables. He also makes clear that the different domains of metacognition are often not easy to separate from each other.

Veenman, van Hout-Wolters, and Afflerbach (2006, 4) rightly state that “while there is consistent acknowledgement of the importance of metacognition, inconsistency marks the conceptualization of the construct”. In fact, recent decades have seen a proliferation in attempts at defining and classifying metacognition. General and short definitions like “thinking about one’s own thoughts” (Hacker 1998) and “reflections on cognition” (Schoenfeld 1987) are often cited, but definitions related exclusively to learning are also common. Thus, the field uses the concept of metacognition in a variety of ways and with different superordinate and subordinate categories depending on researchers’ backgrounds and research interests. A further complicating factor is that other terms are also used for metacognitive knowledge, experiences and strategies, and it is therefore hard to set clear boundaries for the field. Examples of such concepts are belief, reflection, theory of mind, metamemory, critical thinking, awareness, cognition, autonomy, learning strategies, self-regulation and self-efficacy, and it is not always clear how these concepts relate to metacognition (Veenman, van Hout-Wolters, and Afflerbach 2006, 4). Also in the field of language learning and language teaching, several terms are used, partly interchangeably. However, it is not the goal of this chapter to provide an overview of the various usages (but see Tarricone 2011 for an attempt to make a comprehensive taxonomy), nor is it to conclude that one understanding of metacognition is better than another. Rather than taking an essentialist approach to research

on metacognition, I argue that researchers should aim at providing a clear presentation of their understanding of the concept in their respective studies (Janicki 2006).

The Concept of Metacognition in Language Learning and Teaching

Wenden (1987) was probably the first researcher to call attention to the importance of metacognition in language learning and teaching. In her review of research on metacognitive knowledge, she sets out to clarify how this research field relates to already established theories and research on language. Wenden understands metacognitive knowledge as knowledge about one's own learning. Drawing on Flavell, she acknowledges three categories of metacognitive knowledge, namely person knowledge, task knowledge and strategy knowledge. Furthermore, Wenden distinguishes between metacognitive knowledge and metacognitive strategies. Metacognitive strategies are defined as “general skills through which learners manage, direct, regulate, guide their learning, i.e. planning, monitoring and evaluating” (Wenden 1998, 519). In accordance with cognitive psychology, Wenden categorises planning, monitoring and evaluation as the three components of self-regulated learning. She refers to what learners already know about a subject as domain knowledge. Consequently, domain knowledge is viewed as separate from metacognitive knowledge, but Wenden underscores that both these knowledge types are necessary when solving a task.

Prior knowledge is regarded as one of the most important contributors to subsequent learning (Weinstein and Mayer 1986). Thus, reflecting on what is needed to master a task also involves reflecting on learners' prior knowledge of similar tasks and subjects. I would therefore argue that learners' and teachers' reflections on what they know and what they do not know comprise a central component of their metacognition. This understanding remains in agreement with general definitions of metacognition, such as “thinking about one's own thoughts” (Hacker 1998) and is in line with researchers like Tobias and Everson (2002) and Paris and Winograd (2013). Tobias and Everson (2002) refer to this component as knowledge monitoring, a fundamental or prerequisite process for further learning. Thus, a conscious analysis of what one knows about—for example, certain language structures or the city of London—is necessary for realising what still must be learnt and planning how learning can be achieved. Furthermore, an awareness of one's emotions is increasingly seen as a central component of metacognition (Fisher 2018, this volume; Hiver and Whitehead 2018, this volume; Papaleontiou-Louca 2008). Consequently, I have adopted a broad understanding of metacognition in this chapter. Metacognition thus refers to *an awareness of and reflections about one's knowledge, experiences, emotions and learning* in the contexts of language learning and teaching.

Included in this definition are all aspects of thinking about language, language learning and teaching; for example, what learners and teachers know or do not know about languages and language learning (see Vold 2018, this volume; Hasselgård 2018, this volume; Hiver and Whitehead 2018, this volume), what they think about their own abilities to learn and/or teach languages (see Knospe 2018, this volume; Fisher 2018, this volume), reflections on emotions concerning experiences related to language learning and/or teaching (see Arntzen and Eriksen 2018, this volume; Fisher 2018, this volume) and how to learn and teach as well as monitor one's own learning and/or teaching (see Forbes 2018, this volume; Hiver and Whitehead 2018, this volume).

Following from this definition, the concept of *language awareness* covers my understanding of metacognition to a large extent. On its website, the Association of Language Awareness (ALA)¹ defines language awareness as “explicit knowledge about language, and conscious perception and sensitivity in language learning, language teaching and language use”. Consequently, the superordinate category, Metacognition, relates to an awareness of and reflection on one's knowledge, experiences, emotions and learning in all domains, whereas its subordinate category, Language awareness, relates to reflections on one's knowledge, experiences, emotions and learning in three subdomains: Language, Language learning and Language teaching (Figure 2.1).

Obviously, these domains are closely related, and metacognition in language teaching, for instance, typically involves reflection in all three domains simultaneously. Furthermore, each of these three subdomains can be divided into several new categories depending on the theoretical viewpoints and interests of the researchers. A consequence of this quite general understanding of metacognition is that many related research fields fit under the heading of metacognition. For example, investigations of teachers' and learners' beliefs, the teaching and use of learning strategies, metalinguistic and multilingual awareness, intercultural awareness and self-efficacy can be claimed

Figure 2.1 Metacognition in relation to language awareness and its subdomains.

to belong here. In later chapters of this volume, other authors will examine several of these topics more closely.

Methodological Tools and Approaches in Metacognition Research

Clearly, people's thoughts about their own thoughts cannot be directly observed. Thus, information about metacognition must be collected in indirect ways, either inferred from people's behaviour or based on self-reports. The most commonly used research instrument in metacognition research is probably the self-report questionnaire. Researchers have developed a large number of such questionnaires. Some set out to measure metacognition in general, such as the Metacognitive Awareness Inventory (MAI) developed for adults by Schraw and Dennison (1994) and its modified version, the Jr. MAI, which measures metacognition among children and teenagers (Sperling et al. 2002). The Strategy Inventory of Language Learning (Oxford 1990) can be claimed to take a general approach to metacognition in language learning, whereas other questionnaires have been developed for use in particular contexts and for particular learning tasks; for example, the Metacognitive Awareness Listening Questionnaire (Goh 2017; Vandergrift, Goh, Mareschal, and Tafaghodtari 2006) and the Metacognitive Awareness of Reading Strategies Inventory (Mokhtari and Reichard 2002). Furthermore, in Chapter 9 of this volume, Zhang and Qin (2018) present and discuss a new questionnaire developed to examine learners' metacognition when writing in online environments. Other questionnaires have been developed to measure teachers' and/or learners' beliefs about effective foreign language pedagogy, such as Horwitz' (1988) Beliefs About Language Learning Inventory (BALLI) (see also other questionnaires related to beliefs developed by Bell 2005; Lee 2009; Levine 2003).

Self-report questionnaires include statements or questions concerning participants' knowledge, beliefs and/or activities during learning or teaching. Typically, the respondents are asked to indicate on a Likert scale how often they perform a learning or teaching activity or to what extent they agree with a certain statement. Clearly, questionnaires have many advantages. They can be distributed to a substantial number of participants, are less time-consuming than other instruments, are efficient in terms of financial resources, and allow for quantitative analyses (Dörnyei and Taguchi 2010, 6). However, self-report questionnaires, especially the general ones, have also been criticised for having low validity (e.g. Bråten and Samuelstuen 2007; Cohen 2011; Woodrow 2005). For example, how accurately can learners and teachers give reports on what they generally do? How differently are the scale points on the Likert scale (e.g. often, sometimes) interpreted by participants of different ages, cultures and educational backgrounds? And which important strategies are not included in a questionnaire

that might shed light on learners' and teachers' metacognition? To attempt to meet these challenges, researchers suggest various procedures. For example, Bråten and Samuelstuen (2007, 3) propose a set of guidelines which may increase the validity of self-reports:

First, a specific task (e.g., a text) must be administered, to which the items on the questionnaire are referring. Second, the task must be accompanied by an instruction. This instruction should include information about the task purpose (e.g. reading purpose). Additionally, individuals should be directed to monitor their strategies during subsequent task performance and informed that they will be asked questions afterwards about how they proceeded. Third, to minimize the retention interval, the strategy questionnaire itself must be administered immediately after task completion. Fourth, in referring to recent episodes of strategic processing, the wording of task-specific items would have to be different from more general statements. That is, general-item stems such as 'when I study' or 'in this course' must be omitted in task-specific items.

Evidently, Bråten and Samuelstuen's suggestions are also valuable when designing other types of self-report studies, such as interviews. Other researchers, e.g. Dinsmore, Alexander, and Loughlin (2008), emphasise the value of triangulation when doing research on metacognition, since an analysis of different data types from the same participants may give deeper and more valid insights into the phenomenon of metacognition than each instrument alone. For example, Lee (2009) let language teachers report both on their beliefs about correction and their actual correction procedures when giving feedback on learners' written texts. In addition, Lee analysed teachers' actual written feedback and interviewed a number of the teachers about both their questionnaire responses and their written feedback. This triangulation of methods made it possible for Lee to identify several mismatches between what teachers said and what they actually did.

Researchers in the field now more often publish studies which combine several data collection tools, such as self-reports with various types of behaviour observations. In addition to classroom observation or observation of individual learners, approaches such as eye tracking, keystroke logging and screen recording are increasingly applied (see, for example, Knospe 2018, this volume). With such methods, we can "build tasks that may not only instigate awareness, reflection, or regulation, but that will also document subtle moves and actions with minimum intrusion" (Dinsmore, Alexander, and Loughlin 2008, 406). Furthermore, several authors in this volume provide examples of other innovative methodological approaches that have been shown to provide valuable insights into learners' and teachers' metacognition. Examples include the use of spoken narratives (Arntzen and Eriksen, Chapter 11), blogging (Fisher, Chapter 12) and learners' group

discussions of machine translated texts to tap into learners' metalinguistic awareness (Vold, Chapter 5).

Data on metacognition collected in the ways described above are frequently used in combination with other data types. Such studies commonly examine to what extent high scores on metacognition are associated with high proficiency. For example, metacognitive judgements measure how well participants can assess their knowledge, abilities and strategies, i.e. what they know and what they do not know about a certain topic or task or how successful they will be at solving a task. Typically, the self-ratings of the participants are either preceded or followed by the completion of a test to compare actual knowledge and the participants' own ratings (Schraw 2009). In this field of metacognition research, the concept of self-efficacy is often used to refer to learners' beliefs in their ability to perform a task. Studies have shown that participants' self-efficacy beliefs are strong predictors of performance, and are often stronger than other personal variables and learners' actual abilities (Bandura 1997). Consequently, two learners with similar abilities but with different measures of self-efficacy are likely to succeed in their language learning to varying degrees. For example, Mills, Pajares, and Herron (2007) examined whether university language learners' self-efficacy beliefs would predict their achievement as measured in grades at the end of the semester. They found that students who thought they were capable of using effective metacognitive strategies to monitor their studies of a foreign language were more likely to have academic success than students who thought they were less capable of monitoring their work. Metacognitive judgements can be made in several ways. The most common approach is to make a continuous confidence judgement that ranges from no confidence to complete confidence; for example, a Likert-type scale ranging from 0 (not confident at all) to 7 (completely confident) for items in Mills, Pajares, and Herron's (2007) study.

Finally, intervention studies examine to what extent teachers' pedagogical approaches aimed at enhancing learners' metacognition have an impact on learners' awareness of their knowledge, abilities and learning processes and/or on their proficiency. Well-designed intervention studies include two or more independent learner groups in a pre- and post-test design. Macaro and Erler's (2008) examination of the impact of reading strategy instruction may serve as an example in this context. In their study, three intact classes of year 7 to year 8 students of French as a foreign language took part in a reading strategy instruction programme with a duration of 14 months. During these 14 months, their teachers, who had been instructed by the researchers, spent an average of 10 minutes per week from normal class time on the strategy programme. Similar to other metacognition instructional approaches (see below), this programme consisted of cycles of awareness raising, modelling, trying out strategies in the classroom with and without teacher support, and evaluation. Before and after the intervention, the researchers measured the learners' French reading comprehension,

their reading strategy use, and their attitudes towards French. The same measures were carried out in a comparison group of 54 learners, also from three intact classes at the same age level. These learners did not receive any strategy instruction. Results showed that while there were no differences between the groups before the intervention had started, the learners of the intervention group outperformed the learners of the comparison group on measures of reading comprehension in the post-test. Furthermore, the intervention group tended to report more frequent use of independent strategies than the comparison group, who seemed to use more teacher-reliant strategies, such as “Wait for the teacher to explain the text”. Finally, the intervention group reported significantly more positive attitudes towards reading in French than the comparison group in the post-test. Thus, the conclusion of this particular study is that regular but short intervals of strategy instruction can have positive impacts on learners’ language skills, language learning knowledge, and even their motivation. Several studies reported on in this volume included an intervention; Knospe (Chapter 7) and Forbes (Chapter 8) examined learners’ metacognition in writing in the context of their intervention studies, whereas Bøhn and Myklevold (Chapter 10) investigated the effect of a metacognitive instructional approach to learning communication strategies.

Promoting Metacognition in Language Learners

When reviewing research on metacognition, it becomes clear that certain principles are part of most metacognitive instructional models: the activation of learners’ prior knowledge, reflections on what learners know and want to learn, explanations and modelling of learner strategies by the teacher, and learners’ own involvement in making goals for monitoring and evaluating the learning process. For example, Anderson (2002, 2008) suggests that metacognition about learning consists of five primary components or skills which can be trained in the language classroom. For all components, the teacher has a key role in explaining, modelling and creating an atmosphere which encourages reflective discourse. The following components are suggested by Anderson:

- (1) Preparing and planning for learning. Students reflect on what they need or want to accomplish and what they can do to accomplish their learning goals.
- (2) Selecting and using learning strategies. Anderson (2002, 3) states that “the metacognitive ability to select and use particular strategies in a given context for a specific purpose means that the learner can think and make conscious decisions about the learning process”.
- (3) Monitoring strategy use. Students should be trained to keep track of their strategy use. While in a learning process, students could, for example, ask themselves questions about their strategy choices, how well

these particular strategies work, and to what extent they use them the way they intended.

- (4) Orchestrating various strategies. For most learning tasks, students must apply several strategies. Thus, it is beneficial to students in their learning process to effectively coordinate the various strategies they know.
- (5) Evaluating strategy use and learning. The fifth component is summed up in four questions that Anderson suggests should be asked cyclically during the learning process: (1) What am I trying to accomplish? (2) What strategies am I using? (3) How well am I using them? (4) What else could I do? Anderson emphasises that these questions can be regarded as the essence of the first four components and that all of them work best together.

Several questionnaires have been developed to assist teachers and learners in their metacognitive reflections. Within language learning, Oxford's (1990) SILL (Strategy Inventory of Language Learning) is probably the most well-known and widely used tool, both for research and for reflection with learners. The questionnaire consists of 50 statements formulated as learning strategies; for example, "I look for words in my own language that are similar to new words in English" and "I encourage myself to speak English even when I am afraid of making a mistake". The strategies are divided into six categories: memory, cognitive, metacognitive, social, compensatory and affective strategies. Learners are asked to decide the frequency of use for each strategy on a five-point Likert scale ranging from "Never or almost never true of me" to "Always or almost always true of me". Questionnaires such as the SILL can be useful for enhancing learners' metacognition in several ways. First, by filling out the SILL and analysing the results, learners can become aware of which strategies they tend to use in their language learning process and also which strategies are rarely employed. They can then make plans for expanding their strategy repertoire by trying out new strategies. Second, having learners take the SILL may help teachers obtain an overview of which strategies their learners prefer, and also which strategies are being under-used. This information can be valuable in deciding which strategies should be explained, modelled and tried out in the classroom.

Whereas Oxford's SILL provides an overview of learners' strategy use, but has frequently been criticised for being too general (see, for example, Cohen 2011; Woodrow 2005), other questionnaires are directed at specific aspects of students' knowledge and/or concentrate on certain skills. For example, the Metacognitive Awareness Listening Questionnaire (MALQ) by Vandergrift et al. (2006) can be used in the classroom as a starting point for raising learners' and teachers' awareness of listening comprehension and listening strategies. The MALQ should be administered directly after language learners have completed a listening task. Thus, there is a close link between the actual task and the metacognitive activity, which is likely to increase the learning outcome compared with using more general questionnaires, such

as the SILL (Oxford 1990). Similarly, the questionnaire, Language Learners' Metacognitive Writing Strategies in Multimedia Environments (LLM-WSIME), by Zhang and Qin (2018, this volume) can enhance learners' metacognition of their writing processes when applied and reflected on in combination with online writing tasks.

While the approaches discussed above are mainly concerned with metacognition about the language learning process, other approaches are aimed at learners' knowledge monitoring. One example is the use of the so-called KWL model. The objective of this model is to help learners become aware of their prior knowledge (Know), what they still must learn (Want to know) and what has been learned (Learned). This model was originally developed to enhance learners' awareness of their reading processes and increase their reading proficiency (Ogle 1986). However, this approach is also a good starting point for helping learners become aware of and assess their knowledge more generally (e.g. as a reflection tool in teacher education, Mok et al. 2006; and for enhancing students' mathematics achievement, Tok 2013). Typically, learners use a chart with one column each for Know, Want to know and Learned. In the first column, learners jot down what they already know about a given topic. In the second column, they ask questions about the things they still do not know and want to learn. After having processed information through reading, listening and/or communicating with others, learners write down what they have learned in the third column. These activities can be done individually or in groups. The teacher's role is to explain the purpose of the KWL approach, show through modelling how it can be used, continuously support the students when using the model, and reflect on, with the students, the usefulness of such approaches for learning. Of course, the KWL model may also be a valuable tool for teachers to monitor what their learners already know, which topics should be dealt with in class, and what students have and have not learned from teachers' instruction.

The Common European Framework of Reference for Languages (CEFR) (Council of Europe 2001a) explicitly encourages learners to become aware of what they know about language(s), about intercultural encounters, what they do when communicating, and how they can become better language learners. Together with the CEFR, the European Language Portfolio (ELP) was introduced by the Council of Europe in 2001 (2001b) and is an example of materials that can foster learners' metacognition. The ELP has both a documenting and pedagogic function, whereby it encourages learners to document their linguistic resources for all the languages they know and are learning and to reflect on their language learning and intercultural awareness in a systematic manner. First, it consists of a Language Passport section in which learners can document their language proficiency for all the languages they know and are learning. Second, it includes a section called Language Biography, which aims at facilitating learners' reflections on language and intercultural encounters, as well as planning and assessing their learning

process. Furthermore, the Language Biography encourages learners to state what they can do in each language and to document their linguistic, cultural or language learning knowledge. Finally, the Dossier invites learners to include materials which can illustrate and document achievements or experiences reported in the Language Biography or Passport. However, despite attempts at implementing the ELP in several countries, the ELP seems to be unknown to many teachers and is rarely used in the language learning classroom (Heyder and Schädlich 2014; Larssen and Høie 2012; Little, Goullier, and Hughes 2011; Mikalsen and Sørheim 2012). Instead, teachers primarily rely on course textbooks (Bachmann 2004). In light of this tendency, it is vital for language textbooks to include tasks which encourage students to be metacognitively active: for example, to explore similarities and differences between languages and cultures, to reflect on their knowledge and abilities, and to explore how they can try out, monitor and evaluate various learning strategies.

Language Teachers' Metacognition

Teachers often find themselves in highly unpredictable settings; every day, they meet students with varying abilities and motivations who are placed together in groups with different and constantly changing dynamics. In other words, teachers must be reflective in a constantly changing environment (Lin, Schwartz, and Hatano 2005). Metacognitively aware teachers reflect on their knowledge, beliefs and teaching practices; they plan, implement, monitor and evaluate their own teaching as well as students' learning on a daily basis and use their insights to improve teaching. Regarding language teachers, they should ideally have a reflective approach to their work in at least four different ways (see Svalberg 2007 for a related discussion, and Hiver and Whitehead 2018, this volume), namely as:

- (1) Language users: Language teachers should be proficient in their language(s) and know how to serve as language models for their learners.
- (2) Language analysts: Language teachers should have a well-developed metalinguistic knowledge of language(s) to be aware of their own linguistic choices and able to explain language(s) to their learners. Metalinguistic knowledge in this context refers to "an individual's ability to focus attention on language as an object in and of itself, to reflect upon language, and to evaluate it" (Thomas 1988, 531). Included in this understanding is an awareness of similarities and differences across languages, which are referred to by some researchers as crosslinguistic or multilingual awareness (James 1996, 139; Jessner 2018, this volume).
- (3) Culture educators: Teachers have a key role in promoting learners' intercultural competence. For this reason, they need to have knowledge of intercultural communication as well as how they can help learners adjust their own thinking and behaviour in interaction with other

people. Dypedahl (2018, this volume) explores some general principles for designing courses in language teacher education that can enhance such a metacognitive approach to intercultural learning. He suggests that intercultural awareness should be regarded as one integral component of intercultural competence, defining it as *the conscious monitoring and adjustment of one's own thinking and interaction with other people*. Among other things, this involves “a conscious understanding of the role culturally based forms, practices, and frames of understanding can have in intercultural communication, and an ability to put these conceptions into practice in a flexible and context specific manner in real time communication” (Baker 2012, 66). Furthermore, teachers should reflect on how they can assist their learners in the process of becoming more aware of culturally based norms, beliefs and behaviours. This should be combined with broad cultural knowledge of the teacher's own country and the countries where the target language is spoken.

- (4) Language learning educators: Language teachers must have knowledge of how languages are learned and how they can help learners enhance their own learning by assigning an active role to the learners. Language teachers should motivate their learners to reflect on what they know about language(s), culture(s) and language learning and how they can develop their knowledge further.

Clearly, language teacher education should play a key role in training future teachers to reflect on their own knowledge and practices as well as in implementing a metacognitively oriented pedagogy.

The European Portfolio for Student Teachers of Languages (EPOSTL) (Newby et al. 2007) was developed to assist student teachers in reflecting on their knowledge about central aspects of language teaching, monitoring their progress, and recording their experiences during teacher education. The EPOSTL consists of an introductory section which encourages student teachers to reflect on their language teaching experiences from a learner's point of view and formulate their expectations of the language teacher education course(s) they take. The main part of the EPOSTL, the self-assessment section, consists of 193 can-do statements related to central aspects of teaching foreign languages. These are divided into seven general categories, each with several sub-categories: Context, Methodology, Resources, Lesson Planning, Conducting a Lesson, Independent Learning and Assessment of Learning. Examples of statements include “I can critically assess my teaching in relation to theoretical principles”, “I can select texts appropriate to the needs, interests and language level of the learners” and “I can evaluate and select activities which enhance the learners' intercultural awareness”. The intention of the EPOSTL is to make student teachers reflect on these statements individually, together with peers and teacher educators as well as with their mentors in schools. The student teachers are encouraged to record the dates for when they “can do” a certain statement.

However, when considering the implications of each of the statements above, it seems clear that a thorough reflection on each statement requires not only knowledgeable students, but also a lot of time. Each of the 193 statements requires time to reflect, seek out relevant knowledge, try out and monitor various practices in the classroom, and evaluate the outcome individually and with colleagues. To go through all the statements during teacher education may easily appear too overwhelming for the students and could likely lead to a superficial treatment of each of them. Thus, the EPOSTL should rather be seen as a starting point for reflection which continues after teacher education is completed, something which has also been suggested by the authors (Newby et al. 2007). Actually, the EPOSTL could perhaps better be regarded as a valuable tool for lifelong reflection in an ever-changing profession, and thus could be named the European Portfolio for Teachers of Languages (EPOTL). This change could also make in-service teachers realise its relevance more easily. The testing and implementation of the EPOSTL is still in an early phase, and the tool likely needs further revision (Burkert and Schwienhorst 2008). Vetter (2012), for example, criticises the lack of a multilingual perspective in the EPOSTL. Nevertheless, first reports suggest that both student teachers and teacher educators find the use of the EPOSTL helpful in terms of enhancing reflection and self-assessment (Cakir and Balcikanli 2012; Fenner 2012).

In addition to self-reflection regarding knowledge and beliefs, it is critical that teachers know how they can create a learning environment where students can be involved in metacognition, i.e. to reflect on and explore their knowledge and beliefs about languages and cultures, abilities and learning. In this volume, Jessner (Chapter 3) provides several examples of how teachers have successfully fostered increased metacognition with respect to learners' metalinguistic and multilingual awareness, whereas Dypedahl in Chapter 4 discusses and suggests how metacognition of intercultural competence can be emphasised in language teacher education.

Teachers' Knowledge about Metacognition in Language Learning

Little is known about teachers' knowledge and beliefs about metacognition and to what extent they have actually implemented a metacognitive instructional approach (Hiver and Whitehead 2018, this volume). However, Wilson and Bai (2010) imply that an emphasis on metacognition is not widespread in classrooms and that teachers are still "more likely to test comprehension than teach comprehension" (271). Wilson and Bai thus wonder whether teachers have understood what is required of them to create a learning environment which can enhance metacognition. Findings from two studies in the Norwegian context may shed more light on this issue.

A questionnaire study (Haukås 2012) investigated language teachers' perceived importance of reflection in language learning in the classroom. The

questionnaire consisted of both attitudinal questions and factual questions. The attitudinal questions were related to teachers' perceived importance of spending time on students' language learning processes and on implementing language learning as a part of the curriculum. The factual questions asked the teachers to report on how frequently they worked on enhancing learners' metacognition. In all, 145 teachers participated in the study. The data analysis showed that most teachers find it important that their students learn and reflect on how languages can be more efficiently acquired. Furthermore, the majority of the teachers report that they regularly spend time in the classroom explaining various learning strategies to their learners. Some also show through modelling how strategies can be used. However, in most classrooms, metacognition instruction seems to stop there; very few teachers report giving their learners the opportunity to try out various learning strategies for themselves, reflect on their learning with others, set goals for their own learning, and, ultimately, evaluate their own performance. Thus, the key elements of metacognition instruction—that is, letting learners be active in exploring and reflecting on their own knowledge and learning—seem to be missing in Norwegian language learning classes. As Wilson and Bai (2010) suggested, many teachers admit that their knowledge of metacognition instruction, i.e. developing learners' knowledge of learning strategies in this study, is limited: 67% report needing to learn more about enhancing learners' metacognition about language learning and how to teach before spending time on these issues in their classrooms.

An interview study of 12 third language teachers on their beliefs and practices regarding a multilingual pedagogical approach (Haukås 2016) generated similar findings as in Haukås (2012). Within a multilingual pedagogical approach, learners' already acquired linguistic and language learning knowledge is regarded as a prerequisite for further language learning (see also Jessner 2018, this volume). This means that teachers should assist learners in becoming aware of and drawing on their existing knowledge to enhance further language learning. In the classroom, learners should be engaged in various activities which are meant to help them become aware of what they already know about a given topic from previous language learning and whether this knowledge can be applied in further language learning. During the interviews, the teachers reported that they frequently point to similarities and differences between languages the students already know and are learning. However, their students are seldom given the chance to activate prior language knowledge or to explore similarities and differences between languages on their own, i.e. to reflect on and look for transfer opportunities between old and new knowledge. Furthermore, the teachers report that they rarely reflect on the language learning process with their students or to what extent learning strategies used for acquiring previous languages can be transferred to new language learning contexts.

In sum, the two studies discussed above reveal that teachers have a positive attitude towards focusing on learners' metacognition, i.e. activating

their prior knowledge and enhancing their language learning awareness. However, the teachers seem to have restricted knowledge of how to implement an approach which may enhance learners' metacognition. Above all, learners are not given an active role in their own learning. Neuner (2009) states that changes in how teachers approach their teaching can succeed only if the following three conditions are met: (1) teachers are convinced that curriculum changes will lead to more efficient and motivated learning, (2) teachers receive sufficient training in the new approach and (3) teachers have access to teaching materials that can facilitate their work. Obviously, if teachers lack the recognition that a metacognitive approach to teaching may be more efficient, then these teachers will be resistant to implementing it. Consequently, teachers clearly need to learn more about metacognition and metacognition instruction before they can see how such an approach can enhance their students' learning.

Conclusion

The aim of this chapter has been to provide a theoretical basis for understanding the concept of metacognition and establishing the importance of metacognition as a tool for learning and professional development within language learning and teaching. Students should become aware of how they can build on their existing knowledge to enhance the language learning process, but at the same time be able to define their knowledge gaps and set goals for how these gaps can be overcome. Language teachers play a key role in supporting their students in their language learning efforts by reflecting on and modelling what learners know and how languages can be learnt. However, in order to support students in their language learning, language teachers themselves must be metacognitively aware in several respects.

Note

1 www.languageawareness.org/web.ala/web/about/tout.php

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