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Metacognition as a superordinate concept of metalinguistics: The role in developing reading skills in a foreign language

Abstract. The paper provides a theoretical analysis of the relationship between metacognition and its subordinate concept metalinguistics. Understanding that language and cognition are inextricably linked, the aim of the paper is to highlight the holistic nature of learning. From this perspective, metalinguistic abilities, such as phonological awareness, word awareness, form awareness, and pragmatic awareness are introduced and suggestions for activities and everyday interactions to facilitate their development are outlined. Furthermore, the paper focuses on explaining the role of metacognition and metalinguistics in particular towards the development of reading skills. Based on the three kinds of metacognitive knowledge, i.e., declarative knowledge, procedural knowledge and conditional knowledge, the paper provides a five-step instruction of a reading comprehension strategy, applicable for both L1 and FL reading development.

Keywords: metacognition, metalinguistic knowledge, metalinguistic awareness, reading comprehension, bilingualism, reading in a foreign/second language.

1. Introduction

The importance of attaining developed reading skills is indisputable. Through reading, learners are able to access new information, new ways to achieve their goals, and new ways to solve their problems. Difficulties in reading result in ensuing struggles with general academic performance. Indeed, it is believed that many learning problems that students exhibit are related to the inability to use metacognitive reading strategies appropriately. Poor readers in general do not possess the knowledge of effective reading strategies and are often unaware of when and how to apply the knowledge that they do possess (Horner & Shwery 2002). They often need specific training in metacognition in order to develop independent learning and deep engagement in reading. A large body of research has demonstrated that metacognitive processes – and metalinguistic ones in par-

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ticular – lead to reading success at school (Woolley 2011). However, very few teachers adequately assist students in becoming independent learners by implementing training in metacognition.

The aim of the paper is to outline the relationship between metacognition and metalinguistics, understood as its subordinate concept. Subsequently, the paper discusses the role metacognition and metalinguistics seem to play in both the mother tongue (L1) and foreign/second language (FL/L2). This theoretical framework is further expanded to outline the possibilities for promoting metacognitive and metalinguistic reading strategies in both L1 and FL/L2 classroom environments by introducing the model of developing metacognitive awareness during reading, which takes into consideration the pre-reading, during reading and post-reading phases of a reading act.

2. Metacognition as a means to monitor and reflect on thought processes

Generally, metacognition is understood as our ability to be aware of and regulate our own thinking. This skill is an essential part of effective learning. As Neaum (2017) explains, when learning we need to be able to monitor and regulate our mental processes and draw on cognitive strategies to help us. For example, when reading a book we quickly become aware of whether or not we have understood the text. This shows that we are monitoring our thinking processes. According to Pressley et al. (1987), metacognition helps learners to be consciously aware of what they have learned, recognize situations in which it would be useful and processes involved in using it.

The history of metacognition dates back to the late 1970s. The term metacognition was first coined by Flavell (1978), who refers to it as both an individual's knowledge and cognition about cognitive phenomena. Thanks to this understanding an individual is able to exercise conscious control over the products of their cognitive processes (Tunmer et al. 1984).

There is a quite straightforward relationship between metacognition and cognition. As Garner (1987) points out, cognition and metacognition differ in that cognitive skills are necessary to perform a task, while metacognition is necessary to understand how the task is performed. From this viewpoint it is vital to perceive metacognition as “cognition about cognition”, which Flavell (1981) explains as the ability to perform mental operations on the products of other mental operations. An individual with developed metacognition is aware of how they can control their own thought processes. In addition to this explanation, O'Malley et al. (1985) assert that metacognitive strategies involve thinking about the learning process, planning for learning, monitoring of comprehension or production while it is taking place, and self-evaluation of learning after the language activity is completed. On the other hand, cognitive strategies are more directly related to individual learning tasks and entail direct manipulation or transformation of the learning materials.

Flavell's hypothesis of metacognition has been developed by many researchers. As Schraw (2002) sees it, most of them differentiate between two components of metacognition, *knowledge of cognition* and *regulation of cognition*. The former refers to what a person knows about their own cognition or about cognition in general. It includes three different kinds of metacognitive awareness: 1.) declarative knowledge, which refers to knowing “about” things, 2.) procedural knowledge, which

refers to knowing “how” to do things, and 3.) conditional knowledge, which refers to knowing the “why” and “when” aspects of cognition (Brown 1987; Jacobs & Paris 1987; Schraw & Moshman 1995).

The latter component of metacognition, i.e., *regulation of cognition*, refers to a set of activities that help students control their learning. It includes three essential skills: planning, monitoring, and evaluation. Planning involves the selection of appropriate strategies and the allocation of resources that affect performance (Jacobs & Paris 1987). Schraw (2002) provides examples such as making predictions before reading, strategy sequencing, and allocating time or attention selectively before beginning a task. Monitoring refers to an individual’s awareness of comprehension and task performance. The ability to engage in repeated self-testing while learning can serve as an example. Evaluating refers to the assessment of the product and efficiency of one’s learning. A typical example includes re-evaluating one’s goals and conclusions.

Schraw (2002) asserts that metacognitive regulation improves performance in a number of ways, such as a better use of attentional resources, a better use of existing strategies, and a greater awareness of comprehension breakdowns. Indeed, the impact of developed metacognitive regulatory skills on learning is immense. As a number of studies (Cross & Paris 1988; Brown & Palincsar 1989) report, there is a significant improvement in learning when regulatory skills and an understanding of how to use these skills are included as part of classroom instruction. Studies also suggest that regulatory skills improve with training and practice (Delclos & Harrington 1991). Moreover, Schraw (2002) points out that improving one aspect of regulation (e.g., planning) via instruction may improve others (e.g., monitoring).

As Tunmer et al. (1984) state, an approach similar to that of Flavell can be found in the proposals of Brown (1978) and Brown and DeLoache (1978). In accordance with Vygotsky’s view, they refer to metacognition as the ability to reflect upon one’s cognitive functioning, which plays an important role in a child’s problem-solving abilities. Also like Flavell, Brown and DeLoache (1978) claim that in different contexts, different types of awareness are appropriate, though they also affirm that there are certain metacognitive skills which are useful in practically any situation.

Flavell (1978) as well as Brown and DeLoache (1978) agree that the development of metacognition during childhood has a major impact on children’s thinking. As Tunmer et al. (1984) explain, they consider metacognition as the ability to reflect upon and monitor the products of the individual’s thought processes as a result of an increased awareness of the nature of cognitive functions. Therefore, the development of such awareness is perceived as providing the child with much more control over their thinking. Donaldson (1978) suggests that it is this development that enables children to succeed on many formal tasks used to assess their thinking, such as Piagetian tasks of conservation or classification.

The paper further expands on the issue of metacognition within the narrowed context of metalinguistics. This perspective highlights the holistic nature of learning: that language and cognition are inextricably linked. Yet, as Bialystok (2001) implies, the terms used in the field of metalinguistics are often unclear. Many authors use different terms to describe the same concept of metalinguistics, such as metalinguistic abilities, metalinguistic knowledge, metalinguistic awareness, etc.

However, there is a semantic difference between metalinguistic awareness and metalinguistic knowledge. The former refers to the early stages of children becoming aware of language, while the latter refers to the later stages when children have developed explicit representations of aspects of linguistic structures (Bialystok 2001). Nevertheless, for the sake of this presented paper, the original terminology provided by the authors is meant to refer to metalinguistics as a broad umbrella term.

3. Metalinguistics and its position within metacognitive abilities

Brown and DeLoache (1978), like Flavell (1981), distinguish between several metacognitive abilities, all of which develop gradually during childhood in familiar contexts. They represent a set of specific functions, such as metamemory, meta-attention, metalearning, metasocial cognition, and metalanguage or metalinguistics, which encompass an individual's knowledge or awareness of memory, of attention, of learning, of social cognition, and of language. All these meta-abilities equally contribute to the development of metacognition. Besides the theoretical works of DeLoache and Flavell, empirical research (e.g., Whyatt 2007) also confirms a close relationship between metacognition and metalinguistics.

With regard to metalinguistic abilities, Tunmer and Herriman (Tunmer et al. 1984) affirm that metacognitive control is a more fundamental ability than metalinguistic awareness, one which is reflected in a wide range of situations and tasks, including those that require reflecting upon and manipulating the structural features of the spoken language. Broadly speaking, this aspect of metacognition promotes the ability to think and talk about language (Neaum 2017). As Nagy and Anderson (1995) see it, metalinguistics refers to the ability to reflect on and manipulate the structural features of language independent of meaning.

Tunmer and Bowey (1984) explain that the psychological processes involved in metalinguistic abilities are both logically and psychologically distinct from those involved in language comprehension and production. Similarly, the type of processing required in metalinguistic operations is also unlike that of normal sentence comprehension and production. As Cazden (1975) further clarifies, language is normally treated as transparent, something to be “looked through” rather than focused upon. Processing of this sort is generally referred to as “automatic”, which can be placed in contrast with “control” or “executive” processes. These entail an element of choice in whether or not the operations are performed, as well as relative slowness and deliberateness in the application of such operations. According to Tunmer and Bowey (1984), control processing characterizes the kind of linguistic functioning associated with metalinguistic abilities, since the latter involve deliberately reflecting on the structural features of language per se by means of a conscious analytic ability. A person does not normally notice elements such as the individual phonemes and words comprising a given utterance, or the grouping relationships among constituent words unless they deliberately think about it; that is, unless they invoke control processing to reflect upon the structural features of the utterance.

In accordance with the above stated assertion, Tunmer and Herriman (Tunmer et al. 1984) define metalinguistic awareness as the ability to invoke control processing to perform mental operations on the products of mental mechanisms involved in sentence comprehension and production. Similarly, Pratt and Grieve (1984) explain metalinguistic awareness as the ability to think about and reflect upon the nature and functions of language.

Metalinguistic awareness is manifested in a child's growing ability to "see" the language beyond its functional use (i.e., language used in an implicit, unanalyzed way to communicate with others), to switch attention from the functional use of language and focus on the language itself. It requires that children learn to think about and manipulate the structural features of language (Lightsey & Frye 2004). In other words, children develop the ability to think about and play with language apart from its meaning. Neaum (2017) elaborates this premise and sees metacognitive knowledge as the ability to treat language as an object composed of words and meanings. It is the ability to recognize that language has a structure, that it consists of words, that words have meaning, and that the structure of language – the words and meanings – can be examined, discussed and manipulated.

Tunmer and Bowey (1984) offer a psychological model of sentence comprehension to express the relationship between language processing and metalinguistic operations. The model is useful in providing the basis for classifying the various manifestations of metalinguistic awareness. Within it, four broad categories emerge: phonological awareness, word awareness, form awareness, and pragmatic awareness. The first two categories refer to the awareness of the subunits of spoken language (the phonemes and words). Form awareness covers the structural representation of the literal, or linguistic, meaning associated with an utterance. The last category, pragmatic awareness, refers to the relationships that are obtained from a set of propositions, among which literal and intended meanings can be counted.

Furthermore, Tunmer and Bowey (1984) talk about metalinguistic development during the period from 4 to 8 years of age as the ability to reflect upon and manipulate the structural features of spoken language. They refer to treating language itself as an object of thought, as opposed to using the language system to comprehend and produce sentences. Examples of such emerging metalinguistic abilities include discovering structural and lexical ambiguities, the understanding of linguistic jokes, segmentation of sentences into words and words into phonemes, separation of words from their referents, assessing the semantic and grammatical well-formedness rules, and detection of inconsistencies and communication failures.

Gombert (1992) provides a four-phase model for the development of children's metalinguistic knowledge. Phase one comprises the acquisition of a first set of linguistic skills. Children acquire and consolidate early language, whereby language use is implicit and unanalyzed. Phase two comes at the end of a child's fifth year with the acquisition of epi-linguistic control. Children organize the implicit language ability acquired in the initial phase, which results in greater functional control of the language. Language rules are applied, e.g., ungrammatical utterances are shaped to become grammatically correct. Phase three is characterized by the acquisition of metalinguis-

tic knowledge. During this phase, children become consciously aware of aspects of language, i.e., knowledge about the language (declarative knowledge) and knowledge about how to use the language (procedural knowledge). Phase four covers the automation of the above mentioned processes. At the age of six or seven years, meta-processes become automated, as opposed to being consciously controlled. However, meta-processes are readily available to the conscious mind when necessary. For instance, the use of grammatically correct language becomes automated until a child misuses or does not know a word, then they need to consciously draw on meta-processes to think about the language in use.

As Neaum (2017) points out, children develop metalinguistic awareness in their play and everyday interactions. More precisely, to trigger and develop metalinguistic awareness or metalinguistic knowledge, the interaction with children needs to have particular features to enable children to become consciously aware of language. It is vital to use the language for learning language, to draw their attention to language in concrete and meaningful ways. Children's attention should be drawn to the details of language in our interactions, i.e., to the particular words we use, the ways in which we use them, the rules that govern them, the constituent parts of words (phonemes and graphemes), and how we build up and break down words to read (segment and blend).

4. The role of metacognition and metalinguistics in developing reading skills

Metacognition and metalinguistic knowledge are perceived as skills that are developed and used in many facets of life. Besides others, these important internal mechanisms control other aspects during the process of reading comprehension (Kusiak 2013). As Neaum (2017) explains, both metalinguistic knowledge and metacognitive knowledge are necessary for building a mental model of the text that is an overall representation of the meaning. This leads to language comprehension during reading. Successful comprehension involves the construction of a clear, complete and integrated mental representation of the meaning of a text: a mental model (Oakhill et al. 2015). Building this mental model requires that children have metalinguistic knowledge: knowledge about the structure and properties of the language (Brooks & Kempe 2012). Zipke's (2008) study confirms this theory and highlights the importance of metalinguistics in language comprehension.

Tunmer and Bowey (1984) describe the role of metalinguistic ability in learning to read. As they put it, to learn to read, children must bring their knowledge of the spoken language to bear upon the written language. This requires the ability to deal explicitly with the structural features of the spoken language. The metalinguistic ability to reflect upon language seems to be an important prerequisite for being able to learn to read, since the child needs this ability to discover the properties of spoken language that are central to the correspondences between its written and spoken forms.

Moreover, Tunmer and Bowey (1984) state that the development of metalinguistic abilities in children is central to learning to read. From a metacognitive perspective, skilled reading involves four metalinguistic abilities: phonological awareness, word awareness, form awareness, and pragmatic awareness. The division is based on the understanding of reading as a set of independent

processes, and reading development as the acquisition of several component skills (Calfée 1977). These metalinguistic abilities play a crucial role in the reading acquisition process. As Tunmer et al. (1984) explain, the relative importance of the different types of metalinguistic ability varies according to the stage of development the child has reached and the particular subskills he has acquired in progressing from a beginner to a skilled reader.

More specifically, Tunmer and Bowey (1984) provide the sequential order of relative importance as the child traverses this scale. Their order is word awareness, phonological awareness, form awareness and pragmatic awareness. As the authors further clarify, the children's first task as they enter the reading acquisition process is to realize that one specific spoken word corresponds to one written word, which requires the metalinguistic ability to treat spoken words as objects of thought. Hence the first metalinguistic ability is *word awareness*. To facilitate the development of the child's word concept, word segmentation games may be helpful.

Word awareness is followed by *phonological awareness*. According to Tunmer and Bowey (1984), beginner readers also discover the systematic correspondences between the subunits of written and spoken words, i.e., the graphemes and phonemes, in order to decode words that they have not seen before. To break the orthographic code, the beginner reader must discover which phonemes correspond with which graphemes. This requires the ability to recognize the units of the written and spoken language. These correspondence rules must be discovered through the child's own self-monitoring metacognitive strategies.

Regarding *form awareness*, discovering the systematic correspondences between the subunits of written and spoken words necessitates the metalinguistic ability to segment spoken words into their constituent phonemic elements. At the same time, the child needs the metacognitive ability to detect the correspondences between these phonemic elements and the graphemic elements of written language.

Pragmatic ability is required to organize words into larger structural units. Children notice relationships among groups of sentences and the context in which they are embedded to fully understand what they read. Moreover, they need to integrate the sentences into larger structural representations, which also involves combining new information with old information.

However, as Tunmer and Bowey (1984) stress, the transition from one stage to another does not occur at once, instantly. Quite the opposite, there is a considerable overlap among the stages. As the child enters a new stage, they use their emerging metacognitive abilities to generate the strategies necessary to perform mental operations on the relevant structural features of spoken language. As soon as the particular subskill becomes automatized, the child moves on to the next stage.

From a reading perspective, not only metalinguistic abilities but also metacognition as a superordinate concept is important for developing reading skills. The first dimension of metacognitive ability, *knowledge of cognition* (Flavell 1978), involves the reader's knowledge about their own cognitive resources and the compatibility between the reader and the reading situation. Carrell et al. (2002) explain that if a reader understands what is needed to perform efficiently, then the steps can be taken to meet the demands of a reading situation more effectively. On the other hand, if the

reader is not aware of their own limitations as a reader or of the complexity of the task, then they cannot take preventative or corrective actions to anticipate or recover from problems. Conditional knowledge is a component of *knowledge of cognition* that refers to “knowing why”, and also includes the reader’s knowledge of whether a certain strategy is appropriate.

As Kusiak (2013) further asserts, metacognitive knowledge seems to be a ubiquitous factor of reading comprehension, related to phonological and syntactic aspects of language processing. Metacognitive knowledge about the structure and properties of language enables children to develop and use explicit strategies to shape, monitor and reflect on their reading (Brooks & Kempe 2012). It is dependent on the level of language proficiency (Butler 2002), i.e., lower-proficiency learners demonstrate different metacognitive knowledge when compared to higher-proficiency learners.

The second dimension of metacognitive ability, *regulation of cognition*, refers to planning, monitoring, testing, revising, and evaluating of the strategies employed during reading (Baker & Brown 1984). According to Carell (1987), these self-regulatory metacognitive skills are present in reading in the following aspects: (a) clarifying the purposes of reading, that is, understanding both the explicit and implicit task demands; (b) identifying the important aspects of a message; (c) focusing attention on the major content rather than trivia; (d) monitoring ongoing activities to determine whether comprehension is occurring; (e) engaging in self-questioning to determine whether goals are being achieved, and (f) taking corrective action when failures in comprehension are detected. As Carrell et al. (2002) see it, the key metacognitive factors, i.e., knowledge and regulation, are related to what readers know about their cognitive resources and their regulation. Furthermore, regulation in reading involves the awareness of and ability to detect contradictions in a text, knowledge of different strategies to use with different text types, and the ability to separate important information from unimportant information.

Tunmer and Bowey (1984) claim that out of cognitive skills, the one most directly involved in reading acquisition is metacognitive control. Skilled readers take an active role in the learning process, since the orthographic cipher of language needs to be learned, or rather discovered through monitoring the products of their own cognitive processes, as Gough and Hillinger (1979) assert.

5. Metacognition and metalinguistics as predictors of reading in a foreign language

Metacognition and metalinguistics in particular share a significant relationship with foreign language acquisition or bilingualism. Historically, it has been argued that the acquisition of more than one language in childhood promotes metalinguistic awareness (Vygotsky 1962). De Avila and Duncan (1979) were among the first to propose a possible link between fully fluent bilingualism and metacognitive development. They suggested that children growing up with more than one language acquire either simultaneously or sequentially two linguistic codes for symbolic manipulation within their environment. Consequently, their metacognitive awareness is increased more so than in monolingual children. This increase in metacognition, understood as the aware-

ness that languages have internally consistent systems, is further explained by Ben-Zeev (1977) as a kind of understanding which provides a way of separating two languages from each other.

According to Neaum (2017), the awareness that language has a structure, that it consists of words that have meaning, and that these words and meanings are chosen and can be discussed is an essential characteristic of the linguistic perspective of children who are multilingual. Children who move between languages are required to understand and use different words for the same thing, and different language structures to communicate and express meaning. As Bialystok (1988) implies, this code-switching between languages improves the awareness of aspects of the structure and properties of a language.

Ben-Zeev (1977) explains that as bilingual children develop a more analytic orientation to linguistic structures in order to separate two languages into functionally independent systems, they automatically acquire higher levels of metacognitive functioning, since cognitive control is necessary to perform metalinguistic operations.

These views are consistent with the research of Kirsner et al. (1980), which indicates that the two language systems of bilinguals are functionally independent. Similarly, Lambert (1981) reports that metalinguistic skills, such as flexibility in manipulating linguistic codes, auditory reorganization of language items and separations of words from their physical referents, are more evident in bilinguals than in monolinguals. Recent studies also affirm that bilingual children show improved metalinguistic awareness in contrast to their monolingual peers (Brooks and Kempe 2012). What is interesting is that metalinguistic knowledge was found to be a better predictor of EFL students' academic success than linguistic knowledge (Kusiak 2013). This finding stresses the role of metalinguistic knowledge in foreign language learning at the academic level.

Regarding reading, Kusiak (2013) implies that metacognition seems to play a similar role in both mother tongue and foreign/second language. In accordance, van Gelderen et al. (2004) consider metacognition a powerful predictor of both mother tongue and foreign/second language reading comprehension. As Koda (2005) further explains, metacognition functions as a control mechanism that regulates cognitive resources during comprehension and is present in a reader's dual-language development. As Tunmer et al. (1984) put it, fully fluent bilingualism results in increased metacognitive/metalinguistic abilities which, in turn, facilitate reading acquisition which, in turn, leads to higher levels of academic achievement.

Based on the three kinds of *metacognitive knowledge*, i.e., declarative knowledge, procedural knowledge and conditional knowledge, Carrell et al. (2002) provide a five-step instruction of a reading comprehension strategy. The first step is to explain what the strategy is, as a teacher describes critical features of the strategy or provides a description of the strategy. In the second step the teacher explains why a strategy should be learned. Explaining the purpose of the lesson and its potential benefits is seen here as a necessary step for moving from teacher control to student self-control of learning. The third step is to show how to use the strategy. The teacher breaks down the strategy, explains each component of the strategy, and shows the logical relationship among the components. The fourth step covers when and where the strategy should be used, e.g., different

strategies apply in a story or informational reading. The fifth step explains how to evaluate use of the strategy. The teacher shows how to evaluate the strategy used, including suggestions for fix-up strategies to resolve remaining problems.

These five steps provide a careful and complete teacher explanation of a reading comprehension strategy in both mother tongue and foreign/second language. Declarative knowledge is addressed through steps one and two, procedural knowledge is covered in step three, and conditional knowledge is addressed through steps four and five. To support this model of five-step instruction of reading strategies, the research in foreign language reading described by Carrell et al. (2002) reveals significant positive effects of the metacognitive strategy training when compared with the traditional approaches to instruction.

Actually, the relationship between metacognition, metalinguistics and reading in a foreign language is reciprocal. Olsen (1988 in Neaum 2017) stresses the importance of reading in developing children's metalinguistic awareness and metalinguistic knowledge. For example, reading and discussing story and picture books support children's metalinguistics, since these activities draw children's attention to words and language. Similar results can be achieved with activities like playing with language in the form of poems, rhymes, nonsense words, stories, riddle, jokes, puns, and puzzles. They all present excellent opportunities to alert children to language.

6. Promoting metacognitive reading strategies in the classroom

Metacognition and metalinguistics, understood as prerequisites for developed reading skills, are believed to support reading by helping learners to take control of their own process of learning to read. Thanks to developed metacognition and metalinguistics, the learners are able to monitor their reading processes. When selecting a reading task that would involve and motivate the reader, Clay (1993) suggests choosing a task not too difficult or too easy for the reader, as well as one related to the reader's interests. Once a proper reading task is selected, in order to promote metacognitive strategies, teachers should intentionally and systematically encourage learners to actively engage in specific metacognitive behaviors. Zimmerman (2002) provides a three-phase model of developing metacognitive awareness, which can be implemented in both the L1 and FL classroom environments. The model consists of 1) the *forethought* phase, which takes place before learning engagement, i.e., reading, 2) the *performance* phase, which takes place during reading, and 3) the *self-reflection* phase, which takes place at the end of the reading process.

Forethought phase. This phase incorporates the processes and behaviors that are introduced before reading takes place. Through the exercise of forethought, learners become aware of their own capabilities and are able to make a realistic estimate of task requirements and demands. The first phase includes the sub-processes of task analysis, goal-setting, and strategic planning. Teachers should lead learners to analyze a task and to set appropriate goals that provide a clear standard against which they can measure their own success (Guthrie et al. 2000). By analyzing a task, learners base decisions concerning the appropriate strategy to use on their perception of

the particular task demands. Moreover, based on the task analysis, learners use judgments of what may be required by a particular task to select, adapt, or even devise strategic approaches to achieve their reading goals.

Similarly, the types of goals that learners implement influence the selection of appropriate strategies employed while reading and, in turn, influence the type and quality of meanings developed from the text. Thus, teachers should assist learners with setting clear purposeful goals that would lead to selecting appropriate reading strategies. In addition to this, Horner and Shwery (2002) recommend setting short-term goals. By reaching them, learners experience a sense of self-efficacy and, subsequently, are more readily engaged in activities that they believe will help them attain future task goals.

Performance phase. During the performance phase teachers are expected to help learners maintain self-control via promoting self-instruction, attention focusing, task strategies, self-observation, self-recording, and self-experimentation. Poor readers especially need help with developing skills to monitor their own comprehension strategies and understanding (Lerner 1993 in Woolley 2011). For instance, when developing self-observation strategy, the teacher leads learners to self-record their personal events or self-experiment to discover the related causes and effects of these events. Zimmerman (2002) provides an example of such reading strategy training: imagine learners notice that they are experiencing problems in understanding a narrative text. Once they are aware of the problem, the teacher leads them to experiment by trying different strategies, e.g., by referring to an illustration, by looking at the chapter heading, by comparing similar events in their own experience, or by rereading sections of the text to gain more information. Thus, learners can self-monitor by tracking the efficiency of each of the strategies for their relative effectiveness and future use.

The teacher's role during reading is to guide readers by the types of questions they ask and by focusing readers' attention on relevant features so that an integrated understanding of the story can be constructed by the reader from the available text information (Alfassi 2004). Moreover, the teacher should provide readers with the repertoire of compensatory reading strategies when they experience difficulties while reading, such as rereading the significant details and sections of text, noting the initial letters and shape of a word (Walczyk & Griffith-Ross 2007), slowing reading rate, pausing, or reading aloud to enable them to recover meaning when it has been lost (Rapp & Kendeou 2007). The teacher should also be able to explain to learners when, how and why to use compensations. As Walczyk and Griffith-Ross (2007) assert, without explicit metacognitive training, struggling readers are unlikely to use a wide repertoire of strategies to compensate on their own.

Other metacognitive reading strategies learners should adapt are updating and revising what is already known or understood. While reading a text, the revision of readers' expectations they have constructed from earlier portions of the text help with successful comprehension of future story events. These revisions are most likely driven by automatic or conscious attentional effort. Teacher instructions can promote text comprehension by focusing readers' attention on particular elements within the text or highlighting some elements as being more prominent.

Self-reflection phase. Self-reflection strategies represent the essential aspects of metacognition. Within the after reading phase, the teacher should encourage learners to monitor their own progress and attribute their success to how much effort has been invested (Ames & Ames 1984). As Horner and Shwery (2002) add, in this phase, the teacher should provide learners with opportunities to be actively engaged in self-monitoring and to be shown how to evaluate and monitor their own learning.

Self-reflection and self-evaluation are two important strategies incorporated into the structure of many effective metacognitive instructional programs. Once the readers are encouraged to predict in the pre-reading phase, the teacher can model questions such as “What clues helped you predict?” and “What parts of your prediction were in the story?” in the self-reflection phase after reading. Thus, the readers are able to assess their own attempts at deriving meaning.

7. Conclusion

The aim of the paper was to outline the theoretical framework for the relationship of metacognition and metalinguistics, as well as to define their role in developing reading skills in a foreign language. We discussed in detail the core metalinguistic abilities: phonological awareness, word awareness, form awareness, and pragmatic awareness, which play a crucial role in the reading acquisition process.

Based on the premises outlined in the theoretical part of the paper, we further provided a suggestion for practical application of metacognitive strategies training in both L1 and FL/L2 reading environments. The theory indicates and subsequent practice proves that an effective approach to teaching the children with reading difficulties is based on developing metacognitive principles. Within this viewpoint, developing metacognitive reading strategies is of such paramount importance that teachers in both L1 and FL/L2 need to recognize it as a key focus in the goal of guiding their learners towards reading proficiency.

Specifically, we pointed out the necessity of teachers intentionally encouraging learners to actively engage in metacognitive behaviors such as task analysis, goal-setting, planning, self-control, self-monitoring, or self-evaluation. Self-regulated readers use metacognitive strategies to foster, monitor and regulate their own comprehension before, during and after reading. As Woolley (2011) asserts, when students are helped to self-regulate by using forethought, self-control, self-monitoring, and self-reflection, they develop positive self-beliefs. The use of an efficient metacognitive strategy thus contributes to success and, subsequently, this success increases efficacy and a positive self-concept.

References

- Alfassi, M. 2004. Reading to learn: Effects of combined strategy instruction on high school students. *The Journal of Educational Research* 97(4): 171–185.
- Ames, C. & Ames, R. 1984. Systems of student and teacher motivation: Toward a qualitative definition. *Journal of Educational Psychology* 76: 535–556.

- Baker, L. & Brown, A. L. 1984. Metacognitive skills and reading. In: D. P. Pearson (ed.), *Handbook of Reading Research*, 353–394. New York: Longman.
- Ben-Zeev, S. 1977. The influence of bilingualism on cognitive strategy and cognitive development. *Child Development* 48: 1009–1018.
- Bialystok, E. 1988. Levels of bilingualism and levels of linguistic awareness. *Developmental Psychology* 24(4): 560–567.
- Bialystok, E. 2001. *Bilingualism in Development: Language, Literacy and Cognition*. Cambridge: Cambridge University Press.
- Brooks, P. & Kempe, V. 2012. *Language Development*. London, UK: BPS Blackwell.
- Brown, A. L. 1987. Metacognition, executive control, self-regulation, and other more mysterious mechanisms. In: F. Weinart & R. Kluwe (eds.), *Metacognition, Motivation and Understanding*, 65–116. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Brown, A. L. & Palincsar, A. S. 1989. Guided, cooperative learning and individual knowledge acquisition. In: L. B. Resnick (ed.), *Knowing and Learning: Essays in Honor of Robert Glaser*, 393–451. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Brown, A. L. & J. S. DeLoache. 1978. Skills, plans and self-regulation. In: R. Siegler (ed.), *Children's Thinking: What Develops?* Hillsdale, NJ: Lawrence Erlbaum Associates.
- Butler, Y. G. 2002. Second language learners' theories on the use of English articles. *Studies in Second Language Acquisition* 24(03): 451–480.
- Calfee, R. C. 1977. Assessment of independent reading skills: Basic research and practical applications. In: Arthur S. Reber & Don L. Scarborough (eds.), *Toward a Psychology of Reading*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Carell, P. L. 1987. Content and Formal Schemata in ESL Reading. *TESOL Quarterly* 21(3): 461.
- Carrell, P. L., Gajdusek, L. & Wise, T. 2002. Metacognition and EFL/ESL reading. In Hope J. Hartman (ed.), *Metacognition in Learning and Instruction*. New York: Springer Science + Business Media.
- Cazden, C. B. 1975. Play with language and metalinguistic awareness: One dimension of language experience. In: C. B. Winsor (ed.). *Dimensions of Language Experience*. New York: Agathon Press.
- Clay, M. M. 1993. *An Observation Survey of Early Literacy Achievement*. Portsmouth: Heinemann Education.
- Cross, D. R. & Paris, S. G. 1988. Developmental and instructional analyses of children's metacognition and reading comprehension. *Journal of Educational Psychology* 80(2): 131–142.
- De Avila, E. A. & Duncan, S. E. 1979. Bilingualism and the metaset. *Journal of the National Association for Bilingual Education* 3: 1–20.
- Delclos, V. R. & Harrington, C. 1991. Effects of strategy monitoring and proactive instruction on children's problem-solving performance. *Journal of Educational Psychology* 83(1): 35–42.
- Donaldson, M. 1978. *Children's minds*. Glasgow: Collins.

- Flavell, J. H. 1978. Metacognitive development. In: J. M. Scandura & C. J. Brainerd (eds.), *Structural Process Models of Complex Human Behaviour*. The Netherlands: Sijthoff and Noordhoff.
- Flavell, J. H. 1981. Cognitive monitoring. In: P. W. Dickson (Ed.). *Children's Oral Communication Skills*. New York: Academic Press.
- Garner, R. 1987. *Metacognition and Reading Comprehension*. Norwood, NJ: Ablex Publishing Corporation.
- Gombert, J. E. 1992. *Metalinguistic Development*. Chicago: University of Chicago Press.
- Gough, P. B. & Hillinger, M. L. 1979. Learning to read: An unnatural act. *Bulletin of the Orton Society* 30(1): 179–196.
- Guthrie, J.T., Wigfield, A. & VonSecker, C. 2000. Effects of integrated instruction on motivation and strategy use in reading. *Journal of Educational Psychology* 92: 331–341.
- Hartman, H. J. (ed.) 2002. *Metacognition in Learning and Instruction*. New York: Springer Science + Business Media.
- Horner, S. & Shwery, C. S. 2002. Becoming an engaged, self-regulated reader. *Theory into Practice* 41(2): 102–109.
- Jacobs, J. E. & Paris, S. G. 1987. Children's metacognition about reading: Issues in definition, measurement, and instruction. *Educational Psychologist* 22: 255–278.
- Kirsner, K., Brown, H. L., Abrol, S., Chadha, N. K. & Sharma, N. K. 1980. Bilingualism and lexical representation. *Quarterly Journal of Experimental Psychology* 32: 585–594.
- Koda, K. 2005. *Insights into Second Language Reading. A Cross-Linguistic Approach*. Cambridge: Cambridge University Press.
- Kusiak, M. 2013. *Reading comprehension in Polish and English: Evidence from an Introspective Study*. Krakow: Jagiellonian University Press.
- Lambert, W. E. 1981. Bilingualism and language acquisition. *Annals of the New York Academy of Sciences* 379: 9–22.
- Lightsey, G. E. & Frye, B. J. 2004. Teaching Metalinguistic Skills To Enhance Early Reading Instruction. *Reading Horizons* 45: 27–37.
- Nagy, W. & Anderson, R. C. 1995. *Metalinguistic awareness and literacy acquisition in different languages*. Urbana, IL: Center for the Study of Reading.
- Neaum, S. 2017. *What Comes Before Phonics?* London, UK: Learning Matters, Ltd.
- Oakhill, J., Cain, K. & Elbro, C. 2015. *Understanding and Teaching Reading Comprehension: A Handbook*. New York: Routledge.
- O'Malley, M. J., Chamot, A. U., Stewner-Mazanares, G., Russo, R. P. & Kupper, L. 1985. Learning strategies applications with students of English as a second language. *TESOL Quarterly* 19: 285–296.
- Pratt, C. & Grieve, R. 1984. The development of metalinguistic awareness: An introduction. In: W. E. Tunmer, C. Pratt & M. L. Herriman (eds.), *Metalinguistic Awareness in Children. Theory, Research and Implications*. Berlin: Springer-Verlag.

- Pressley, M., Snyder, B. L. & Cariglia-Bull, T. 1987. How can good strategy use be taught to children? Evaluation of six alternative approaches. In: S. M. Cormier & J. D. Hagman (eds.), *Transfer of Learning: Contemporary Research and Application*, 81–120. Orlando, FL: Academic Press.
- Rapp, D. & Kendeou, P. 2007. Revising what readers know: Updating text representations during narrative comprehension. *Memory & Cognition* 35(8): 2019–2032.
- Schraw, G. 2002. Promoting general metacognitive awareness. In: Hope J. Hartman (ed.), *Metacognition in learning and instruction*. New York: Springer Science + Business Media.
- Schraw, G. & Moshman, D. 1995. Metacognitive theories. *Educational Psychological Review* 7: 351–371.
- Tunmer, W.E. & Bowey, J. A. 1984. Metalinguistic awareness and reading acquisition. In: W. E. Tunmer, C. Pratt & M. L. Herriman (eds.), *Metalinguistic Awareness in Children. Theory, Research and Implications*. Berlin: Springer-Verlag.
- Tunmer, W. E. & Herriman, M. L. 1984. The Development of Metalinguistic Awareness: A Conceptual Overview. *Springer Series in Language and Communication*. 12-35. doi: 10.1007/978-3-642-69113-3_2
- Tunmer, W. E., Pratt, C. & Herriman, M. L. (eds.). 1984. *Metalinguistic Awareness in Children. Theory, Research and Implications*. Berlin: Springer-Verlag.
- Turnbull, M. & Dailey-O’Cain, J. (eds.). 2009. *First Language Use in Second and Foreign Language Learning*. Salisbury, UK: MPG Books Group.
- van Gelderen, A., Schoonen, R., de Glopper, K. Hulstijn, J. Simis, A., Snellings, P. & Stevenson, M. 2004. Linguistic knowledge, processing speed and metacognitive knowledge in first- and second- language reading comprehension: A componential analysis. *Journal of Educational Psychology* 96(1): 19–30.
- Vygotsky, Lev S. 1962. *Thought and Language*. Cambridge, MA: M.I.T. Press.
- Walczyk, J. & Griffith-Ross, D. A. 2007. How important is reading skill fluency for comprehension? *The Reading Teacher* 60(6): 560–569.
- Whyatt, B. 2007. *The use of metalinguistic knowledge in the process of translation*. Report presented at Linguistic Meeting in Poznan.
- Woolley, G. 2011. *Reading Comprehension: Assisting Children with Learning Difficulties*. Brisbane: Springer Science + Business Media.
- Zimmerman, B. J. 2002. Becoming a self-regulated learner: An overview. *Theory Into Practice* 41(2): 64–70.
- Zipke, Marcy. 2008. Teaching metalinguistic awareness and reading comprehension with riddles. *The Reading Teacher* 62(2): 128–137.

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