

## **2. Chapter two: Literature Review**

### **2.1. Reading**

As with many other language-related concepts, the reading process is hard to define. Following Fischer (2004), the action of reading is dynamic and it is not fixed. Its definition has changed, and will continue to change, throughout history due to the fact that it evolves in parallel with human kind. In the beginning, reading was just seen as the capacity to obtain “visual information” (Fischer, 2004, p.12) from a text and trying to understand the most important meaning of it. Then, this concept developed to become only the understanding of a written text.

However, the definition has changed again and nowadays it is defined as “the ability to make sense of written or printed symbols” (Fischer, 2004, p. 11). In order to gather and accurately interpret the meaning of the text one must draw upon prior knowledge stored in our memory. Meanwhile, Wallace (1992) says that the process of reading is the action of communicating, that is to say, that both the reader and the writer exchange ideas through the written text.

### **2.2. Reading Comprehension**

As mentioned in chapter one, Rholetter (2014) defines specifically reading comprehension as “the process of making meaning of a text” (para. 1). On the other hand, to explain more specifically De Sousa’s (2012) statement mentioned in chapter one, Gámez and Lesaux (2015) describe some of the factors which affect and improve the comprehension process. These variables are the linguistic knowledge that a reader possesses, the new vocabulary of

a text, and the prior knowledge to construct new meaning along with the actions performed to keep in memory new information.

### **2.2.1. Literal and visual reading.**

In the process of reading, Fischer (2004) defines two different types. The first is literal or mediate reading, which is the moment when we first encounter the process of reading, namely when readers put “sound to sign” (p. 13). The second type is visual or immediate reading, namely when readers can read texts fluently and immediately assign meaning to the written symbols.

### **2.2.2. Bottom-up and top-down reading approaches.**

The two types of reading mentioned above represent two different approaches to comprehend a text: bottom-up and top-down. Fatemi, Vahedi, and Seyyedrezaie (2014) describe the bottom-up approach as the model where the main tool is the written text and where readers extract meaning using their knowledge of lexicon, punctuation and phonology. Paran (1996, cited in Fatemi, Vahedi and Seyyedrezaie, 2014), defines the top-down model as the approach where readers use their knowledge of the world to construct the meaning of a text.

### **2.2.3. The reader.**

Wallace (1992) mentions that because reading is an activity we do every day, we reach the point of taking it for granted. That is why the literacy world is divided in good and poor readers. It is important to mention that the reader is one of the most important elements of

the literacy process. As mentioned in chapter one, the reader interacts with the text and make sense of it by getting to know the writer's conceptions and ideas (Evans, 2011).

In general, readers are said to be proficient when they can recognize words, text structures, and topics, when they are aware of the diverse reading strategies used, and of their reading comprehension monitoring process (Pang, 2008). Anastasiou and Griva (2009) observed that poor readers used fewer strategies when reading and they were less aware of the ones they used. Poor readers were not aware of engaging in comprehension monitoring process either.

When talking about good reading, as Anderson (1991, p.19, as cited in Anastasiou and Griva, 2009) says, it is "not a matter of knowing what strategy to use, but the reader must also know how to use it successfully" (p. 284). It is then obvious that the description of a good reader is exactly the opposite from that of a poor reader. Good readers do monitor their understanding of texts, are aware of their strategy use, and know how to use them appropriately.

#### **2.2.4. Reading purpose.**

In her book, Reichl (2009) states that before reading, the reader should delimit and determine the purpose or purposes for reading that specific text. Each reader has different reasons for reading, thus their purposes will depend on what they believe these reasons are. The purpose is based on both individual and contextual factors. Some of these factors are: 1) the context in which one is reading, namely, whether it is for personal or academic purposes, 2) the reader's skills and competences which also affect the purpose, and 3) motivation. Reichl (2009) says that if we like the environment in which we are reading we

are more likely to follow the explicit purpose imposed by someone else (such as the teacher) or to construct our own purpose. Purposes can change in the course of the reading, so, they are not static but rather dynamic.

Grabe (2009) says that, when reading in an academic context, one can have different purposes for reading a text, and when one encounters different purposes, one gets involved in different types of reading. The classification that Grabe (2009) provides for reading purposes includes: 1) reading to search for information (scanning and skimming), 2) reading for quick understanding (skimming), 3) reading to learn, 4) reading to integrate information, 5) reading to evaluate, critique, and use information, and 6) reading for general comprehension. As just mentioned, readers can use two of the most well-known comprehension strategies: skimming and scanning. Skimming is the process where one reads more in less time. When we skim we only search for the main ideas of the text (Beale, 2013). Scanning is the tool used to find exclusively the information needed without having to read the entire text (Beale, 2013).

#### **2.2.5. Reading comprehension questions.**

It is quite difficult to assess comprehension. Pearson and Johnson (1978, as cited in Pearson, 2009) say that “comprehension (...) is a phenomenon that can only be observed indirectly” (p. 3). However, in an attempt to do so, Nuttall (2005, as cited in Ehara, 2008) developed different types of reading comprehension questions which were gathered together in a taxonomy. First, these questions were divided into lower-order and higher-order questions. The former refers to the identification of explicit information found in the

text, while the latter makes reference to the knowledge of the world combined with inferring information from between lines.

In the taxonomy, lower-order questions include one type of question, literal comprehension questions. Their answers can be retrieved directly from the written text. Then, higher-order questions include several types of questions. The first one is reorganization or reinterpretation questions. This type of question requires the reader to reformulate the literal information and write the answer in his/her own words. The second type of question is the inferential one; as the name states, the reader should retrieve the implied meaning of the text. Then, there are evaluative questions which are more personal and require a critique from the reader. The fourth type of question is the personal response. This seeks an individual opinion about a specific fact of the text. Finally, we have questions related to how writers say what they mean; this type of question is more concerned with the point of view that readers have concerning the way in which the writer expresses his/her own conceptions (Nuttall, 2005, as cited in Ehara, 2008).

Reading comprehension questions are regularly used for assessment in academic contexts. Ehara (2008) mentions that reading comprehension questions are used for several reasons and have different functions. The first function of the comprehension questions is to help students read in order to make sense of a text (Heilman, Blair, and Rupley, 1986; Nuttall, 2005, as cited in Ehara, 2008). In the second function, Grant (1987), Heilman, et al. (1989) and Nuttall (2005), as cited in Ehara (2008) say that comprehension questions will encourage students to read and find the requested information. Finally, a third function is to focus students' attention directly to the most relevant information needed from the text (Nuttall, 2005; Vacca, Vacca, and Gove, 1991, cited in Ehara, 2008).

### 2.3. Strategies vs. Skills

When comparing strategies and skills in literacy theory we can see that they are not the same, but they are related. The Lexico Publishing online dictionary (2015) defines *strategy* as “a plan, method, or series of maneuvers or stratagems for obtaining a specific goal or result.” In contrast, this same dictionary defines a *skill* as “the ability, coming from one’s knowledge, practice, aptitude, etc., to do something well.”

In reading theory, Duffy (2002, as cited in Gregory and Rozzelle-Nikas, 2005) describes a *strategy* as “a technique that readers learn to control in order to comprehend” (p. 92). Whereas that a *skill* is “something you do automatically, without thinking” (Duffy, 2003, as cited in Gregory and Rozzelle-Nikas, 2005, p. 92); the skill arises when the strategy is performed mechanically (Allen, 2002, as cited in Gregory and Rozzelle-Nikas, 2005).

This means that a strategy is the conscious use of tools to understand a text while a skill is the unconscious action of comprehending. Finally, this has to do with the argument provided by Gregory and Rozzelle-Nikas (2005) which states that “(...) readers learn and apply comprehension strategies in order to become skilled readers” (p. 92).

Grabe (2009) analyzes of the definitions that these two concepts evoke. First, he mentions that “a skill is a strategy that has become automatic” (Grabe, 2009, p. 221). Paris, Wasik, and Turner (1991, p. 611, as cited in Grabe, 2009) also say that “(...) Skills are applied to a text unconsciously for many reasons including expertise, repeated practice, compliance with directions, luck, and naïve use” (p. 221).

Simply put, the fact that a reader uses skills unconsciously does not mean that he/she is a good reader. Skills might be used by both good and poor readers. Grabe (2009) emphatically says that the common definition of 'strategies' does not clearly state the reading process of a fluent reader. He provides an explanation for the fact that not all strategies are used consciously; some of them are also used unconsciously. Good readers might apply many strategies unconsciously in their fluent reading process.

### **2.3.1. Reading comprehension strategies.**

In chapter one it was mentioned that a reading strategy is the restorative action used to overcome comprehension problems (Kolić-Vehovec and Bajšanski, 2007). They have also been defined as the "tactics that readers use to engage and comprehend text" (Paris, Wasik, and Turner, 1996, p. 610, as cited in Kolić-Vehovec and Bajšanski, 2007, p. 199). In general, some of the reading strategies that are used in comprehension are text inspection, identification of main ideas, integration of information across the text, use of prior knowledge and inferences, among other strategies. (Kolić-Vehovec and Bajšanski, 2007).

It has also been said that reading strategies are mental processes which help readers understand a text and create its meaning (Garner, 1987, as cited in Anastasiou and Griva, 2009). This means that comprehension strategies are cognitive procedures expressed either explicitly or implicitly when reading a text.

There are several reading strategies that good readers can use when making sense out of a text. O'Malley and Chamot (1990) provided a classification of reading strategies for text comprehension.

This classification of reading strategies includes three categories: cognitive strategies, metacognitive strategies, and social affective strategies. First, cognitive strategies are the ones that work immediately on incoming textual information and that help improve learning (O'Malley and Chamot, 1990). Cohen (1998) says that with cognitive strategies one can make sense of texts through the processes of identification, grouping, retention, storage, retrieval, rehearsal, and comprehension. Anastasiou and Griva (2009) give some examples of strategies included in this category: underlining, using titles, using dictionaries, writing down, guessing from the context, imagery, using prior knowledge, summarizing, using linguistic clues, using text markers, skipping the difficult parts, and repeating words or phrases.

The second major category includes metacognitive strategies. O'Malley and Chamot (1990) say that these strategies "are higher order executive skills that may entail planning for, monitoring or evaluating the success of a learning activity" (p. 44). Meanwhile, Cohen (1998) says that strategies included in this category permit readers to construct their own cognition in comprehension by planning, organizing, and evaluating their learning process. Again, Anastasiou and Griva (2009) say that some of the strategies included in this category are self-planning, self-monitoring, self-regulating, self-questioning, and self-reflecting.

Finally, social affective reading strategies comprise the third category. This category is large because it includes the interaction and relation with other strategies or the control over emotional factors (O'Malley and Chamot, 1990). Cohen (1998) also says that some of the strategies included in this category are strategies to control negative levels of anxiety, strategies of self-encouragement, and questions directed to others. As seen above,

this categorization can also be applied to learning in general. For this research project, mostly cognitive and metacognitive strategies for comprehension will be used.

### **2.3.2. Reading strategies inventory.**

Another very accurate classification of strategies was provided by Mokhtari and Reichard (2002), in their “Metacognitive Awareness of Reading Strategies Inventory.” This instrument includes three different categories of strategies. The first one is global strategies, which are defined as the strategies used for a global or general analysis of a text. The second category is problem-solving strategies, which are explained as the strategies to overcome obstacles in a difficult text. The third category is support strategies, which are described as the strategies used to assist in the reading process.

The strategies in Mokhtari and Reichard’s (2002) inventory are written as general statements inviting readers to reflect on their reading process. Their inventory includes thirteen global strategies: 1) ‘I have a purpose in mind when I read,’ 2) ‘I think about what I know to help me understand what I read,’ 3) ‘I preview the text to see what it’s about before reading it,’ 4) ‘I think about whether the content of the text fits my reading purpose,’ 5) ‘I skim the text first by noting characteristics like length and organization,’ 6) ‘I decide what to read closely and what to ignore,’ 7) ‘I use tables, figures, and pictures in text to increase my understanding,’ 8) ‘I use context clues to help me better understand what I’m reading,’ 9) ‘I use typographical aids like bold face and italics to identify key information,’ 10) ‘I critically analyze and evaluate the information presented in the text,’ 11) ‘I check my understanding when I come across conflicting information,’ 12) ‘I try to guess what the

material is about when I read,' and 13) 'I check to see if my guesses about the text are right or wrong.'

This inventory includes eight problem-solving strategies: 1) 'I read slowly but carefully to be sure I understand what I'm reading,' 2) 'I try to get back on track when I lose concentration,' 3) 'I adjust my reading speed according to what I'm reading,' 4) 'When text becomes difficult, I pay closer attention to what I'm reading,' 5) 'I stop from time to time and think about what I'm reading,' 6) 'I try to picture or visualize information to help remember what I read,' 7) 'When text becomes difficult, I re-read to increase my understanding,' and 8) 'I try to guess the meaning of unknown words or phrases.'

Finally, the inventory includes nine support strategies: 1) 'I take notes while reading to help me understand what I read,' 2) 'When text becomes difficult, I read aloud to help me understand what I read,' 3) 'I summarize what I read to reflect on important information in the text,' 4) 'I discuss what I read with others to check my understanding,' 5) 'I underline or circle information in the text to help me remember it,' 6) 'I use reference materials such as dictionaries to help me understand what I read,' 7) 'I paraphrase (restate ideas in my own words) to better understand what I read,' 8) 'I go back and forth in the text to find relationships among ideas in it,' and 9) 'I ask myself questions I like to have answered in the text.'

#### **2.4. Reading Comprehension Monitoring Process**

In the previous chapter, it was mentioned that comprehension monitoring is "an executive function, essential for competent reading, which directs the reader's cognitive processing as he strives to make sense of incoming information" (Wagoner, 1983, p. 328, as cited in

Kolić-Vehovec and Bajšanski, 2007, p. 198). To put it more simply, comprehension monitoring is the process in which good readers assess whether they understand the text they are reading (Kolić-Vehovec and Bajšanski, 2007). This process must be conscious and readers should be aware of its use. The comprehension monitoring process is one of the most important aspects of metacognition.

El-Koumy (2004, as cited in Jubran, Samawi, and Aalshoubaki, 2014) states that the monitoring process helps readers and students to recover any missing comprehension and to know how reading strategies can prevent the lack of understanding. Zimmerman (2004, as cited in Jubran, Samawi, and Aalshoubaki, 2014) says that the monitoring process also improves reading because readers can evaluate their strategy use and implement better procedures. An interesting argument that agrees with the above statements is Roth's (2008) who says that "comprehension monitoring is thus a critical process upon which successful reading comprehension depends" (p. 1).

## **2.5. Bilingualism**

Jakobson (1963, as cited in Da Silva and Signoret, 2010) considers bilingualism as the fundamental problem of linguistics. This is because bilingualism as a term and as a phenomenon has been very controversial. The term *bilingualism* itself is difficult to define. As Butler and Hakuta (2006) say "bilingualism is a complex psychological and socio-cultural linguistic behavior and has multi-dimensional aspects" (p. 114). These multi-dimensional aspects make it difficult to give a concrete definition and even to assess correctly a person who speaks two or more languages.

Baker (2006) made a classification of bilinguals according to many factors such as age of acquisition (simultaneous or sequential bilingualism), development (incipient, ascendant or recessive bilingualism), or choice of language (elective or circumstantial bilingualism). However, this is not an extensive classification and it does not provide much information about many characteristics of bilinguals. Klein (1984, as cited in Kolić-Vehovec and Bajšanski, 2007) defined two types of bilinguals: first, he defines bilinguals as those who learned both their L1 and their L2 before the age of three, while he defines those people who learned a second language after the age of three as second language learners.

Since there are many definitions for bilingualism, no definition can be considered fully accurate or fully wrong. Therefore, the present research study will provide its own definition of bilingualism starting from other known definitions. The first definition taken into consideration was that of Braun (1937, p. 115, as cited in Skutnabb-Kangas, 1981) who says that bilingualism was the “active, completely, equal mastery of two or more languages” (p.82). The second considered definition was from Mackey (1970, p. 555, as cited in Skutnabb-Kangas, 1981) who says that bilingualism was “the alternate use of two or more languages by the same individual” (p. 86). And the third definition taken into account was provided by Grosjean (2010) who says that “bilinguals are those who use two or more languages (or dialects) in their everyday lives” (p. 4).

Thus, this research study provides the following definition for bilingualism which meets the purposes of the present investigation. Bilingualism is the daily and dynamic use of an individual of a mother tongue and an additional language at a proficient level; not necessarily native-like. This definition includes ‘almost’ all the mastery of Braun (1937, p.

115, as cited in Skutnabb-Kangas, 1981), the alternation of use of languages by an individual of Mackey (1970, p. 555, as cited in Skutnabb-Kangas, 1981), and the everyday use of Grosjean (2010). Finally, it is worth saying that bilingualism offers a cognitive advantage (Da Silva and Signoret, 2010) and that it conduces to the development of metacognitive skills (Godijns, 1996, as cited in Da Silva and Signoret, 2010).

## **2.6. Reading in a Second Language**

Grabe (2009) explains that when an individual reads in his/her native language he/she makes use of certain neuronal connections which are considerably different in each language. That is why Grabe (2009) says again that the so called “linguistic distance” (p. 109) between any L1 (native language) and any L2 (second language) is a factor to take into consideration in bilingual reading progress. Moreover, when learning to read in an L2, readers may have certain problems that can be fixed with help from the L1 reading process (Grabe, 2009).

The Psycholinguistic Guessing Game Model, which is a reading model, argued that “reading is a universal process” (Grabe, 2009, p. 110). However, this claim is not completely true when we think of L2 reading. Talking about the components that are true about universal reading, Grabe (2009) mentions that they are part of the cognitive-processing mechanism. Some of these mechanisms are the recognition of words while reading, the phonological process, the syntactic information used to determine comprehension, the use of strategies and comprehension monitoring.

Grabe (2009) mentions that, when learning to read in an L2, readers will have to learn new processes of affixation that only belong to that L2 they know and which differ

from their native language. Then, Koda (2007, as cited in Grabe, 2009) mentions that there exists a transfer process from L1 reading to L2 reading. Odlin (1989, p.27, as cited in Talebi, 2013) defines this transfer as “the influence resulting from similarities and differences between the target language and any other language that has been previously (...) acquired” (p. 432).

Koda (2007, as cited in Grabe, 2009) explains that there are three important aspects involved in transfer: 1) L1 resources must be automatic in order to affect L2 reading; 2) transfer is dynamic and will not end when L2 reading is improved, as L1 resources will always be present; and 3) L1 transfer will continue to develop alongside L2 reading. When the L1 transfers to the L2 it is called ‘substratum transfer’ (Odlin, 1989, p. 169, as cited in Talebi, 2013, p. 432). However, this linguistic transfer does not only occur from the L1 to the L2, it can also go the other way and it is called ‘borrowing transfer’ (Odlin, 1989, p. 169, as cited in Talebi, 2013, p. 432) or ‘reverse transfer’ (Cook, 2003, as cited in Talebi, 2013, p. 432).

Bialystok (2001, as cited in Grabe, 2009) says that “transfer in L2 reading is facilitated by the extent to which two languages share similar properties at any linguistic level” (p. 125). For example, Koda (2007, as cited in Grabe, 2009) mentions that if the two languages have similar orthographic backgrounds word recognition in reading will be faster and more accurate. This is the reason why similarities between the L1 and the L2 will facilitate the transfer in reading (Grabe, 2009). However, this does not mean that if there are no great similarities between languages, the transfer will not occur.

Regarding the relationship between L1 and L2 reading, Koda (2007, as cited in Grabe, 2009) says that while L1 reading involves only the native language, the L2 involves two languages. When a bilingual person reads in his/her second language he/she will not only draw on the L2 but also on the L1. This agrees with Grabe's (2009) arguments which state that "L2 reading is an ability that combines L2 and L1 reading resources into a dual-language processing system" (p. 129), and that "L2 reading is not just someone learning to read in another language; rather, L2 reading is a case of learning to read with [two] languages" (p. 129).

Chapter three will provide a description of the participants, the materials, and the methods used in this research study, which will use many of the concepts presented and discussed in the current chapter. It will also include a brief summary of how data will be analyzed in chapter four.