Chapter Five: Discussion

For the desire to read, like all the other desires which distract our unhappy souls, is capable of analysis.

*Virginia Woolf (1923)*

5.1. Study A (The Relationship between Students’ Beliefs and Their Metacognition)

Discussion

5.1.1. Research Hypotheses

This study set out to investigate the relationship between learners’ metacognitive knowledge about reading and their beliefs about second language learning as well as reading in that language. The first two questions in Study A focused on whether differences in metacognitive knowledge about reading were related to differences in beliefs about reading and whether there were any patterns of intra-individual differences in the total sample. Two hypotheses were provided for this section of research:

- It was hypothesized that differences in beliefs about reading did not relate to differences in metacognitive knowledge about reading.

- It was hypothesized that there were no patterns of intra-individual differences in beliefs about reading and metacognitive knowledge.

The results obtained from this section have shown some of these relationships. In general, the correlations analyses supported the first hypothesis.
related to the first question. That is; it was found that differences in beliefs did not relate to differences in the metacognitive knowledge of the subjects. The second hypothesis, however was rejected showing that beliefs variables tended to positively correlate with one another which in turn suggested that the beliefs that learners brought with them about the nature of second language learning affected their perceptions about reading.

It is also important to note that not all of the correlational findings supported the current hypothesis. For instance, no significant correlations were found between metacognitive knowledge and beliefs variables. In fact, an examination of the mean responses to the three questionnaires suggested that the differences in beliefs did not account for the differences in the metacognitive knowledge. Simply put, it means that the variety in subjects’ metacognitive knowledge was not due to the differences found in their beliefs rather other probable factors which were beyond the scope of the current research such as the personality and learning style of the subjects could have affected the degree of their metacognitive knowledge. However, beliefs seemed to form part of the metacognitive knowledge of the learners meaning that they tended to reflect those beliefs in their metacognitive knowledge but to different degrees. In other words, learners’ beliefs affect their metacognitive knowledge about reading leading them to take different strategies to approach a reading task.

The second question and subsequently the hypothesis related to it examined the potential differences between the HM and LM group and predicted that there were no patterns of intra-individual differences between beliefs about reading and metacognitive knowledge. No significant differences were found between the HM and the LM groups’ performance on BALLI and BAR. Interestingly, the degree of metacognitive knowledge seemed to play no particular role in the type of beliefs that learners brought with them to the reading task. That is, some of the HM and LM subjects shared the same beliefs though the HM subjects were more aware of their thought processes in comparison to the LM ones. Therefore, the second hypothesis also received support meaning that
the two groups of HM and LM did not show any specific intra-individual patterns of beliefs but the greater their metacognitive knowledge about reading, the greater knowledge of strategies they demonstrated that would aid them in reading comprehension. In addition, HM subjects tended to monitor their comprehension more in contrast to the LM group who took a surface approach to their reading.

The findings of this section of the research, in fact, support the notion that metacognition includes not only learners' knowledge about reading and reading strategies, but also the beliefs that control the strategies taken as well as the beliefs they have about performing a particular reading task in an educational setting. The beliefs variables also seem to exert a reciprocal influence on one another and at the same time they interact with other cognitive, metacognitive, instructional and probably emotional variables to affect the reading performance.

However, these results are more suggestive than definitive, since this study is, in many ways, the first of its kind and also the predictive ability of these variables is low. Additional studies of metacognition and beliefs with different subjects from other subject areas are needed to verify the results obtained from this study. However, considering the host of factors that can influence reading performance, the relative influence of beliefs could be considered an important factor. Based on the purpose of the study, this research was limited to academic reading tasks; thus, subsequent research must follow with additional studies of the relationship between metacognitive awareness and reading behavior on a wider variety of reading tasks.

In general, the results obtained from this study seemed to be consistent with previous research findings. In examining learners' strategic reading performance, Lipson and Wixson (1991) suggested that what they did was not creating all-embracing laws, but rather they tried to gain an understanding of the possible constellations of conditions that may facilitate or inhibit performance. As the review of the literature revealed, three such constellations that can influence performance and were also found significant in the kind of impact they had on the reading performance were as follows:
a) Cognitive and metacognitive variables which are part of the learning strategies of learners and as research have shown comprehension can be influenced by metacognitive strategies (Walczyk, 1994) or domain-specific knowledge (Alexander and Judy, 1988).

b) Belief variables which have been shown to interact with the cognitive variables. In fact, several factors can affect the beliefs of the learners about the reading process. Home, community and school are some of the factors which can influence the beliefs of the learners. For example, some students, under the influence of the educational environment may view reading solely as a task to be performed in school (Palinscar and Klenk, 1992) and thus approach it in a particular way that pays off in the educational setting. This may lead to a view of reading that is irrelevant and may cause learners to lose their interest to pursue reading beyond the school requirement (Nichols, 1994).

c) Instructional variables which may interact with both of the abovementioned variables are considered the third constellation. The task demand required of the students can influence the extent to which they use certain cognitive resources in reading (Walczyk, 1993, 1994). Task demands, along with the goal orientation of the classroom, may also affect beliefs about the nature of reading and learning in school (Elliot and Dweck, 1988). Focusing primarily on basic skill development and achieving high grades may reinforce students’ perceptions that reading has no real purpose in and of itself. On the other hand, research has revealed that autonomy orientation in the classroom might have an influence on the opportunities through which students can experiment with and even internalize metacognitive strategies (Ames, 1992; Garner, 1992). Finally, the attributions modeled by the teacher can affect the students’ beliefs about control over academic outcomes influencing their willingness to use certain strategies to approach reading tasks (Pressley et al., 1994).

In fact, the differing conceptions of reading comprehension have guided reading comprehension research for years. They have also helped to explain the
difficulties faced in instructional practices. For instance, teachers in reading classes have always been prompting different types of comprehension processes through questioning and the facilitation of the interaction with text which sometimes conflicted with the views and beliefs of the learners about the way they should read.

Teachers ask questions often with two purposes in mind; they do it to either assess students' comprehension in which case it seems all right and may not create any serious problems. They also use questions during instruction and classroom activities, often as the basis for literary discussions to scaffold instruction (Pressley et al., 1998). Thus, what happens is that if classroom questioning is primarily at the literal level and students are not encouraged to interpret the text based on their prior knowledge, this can benefit only those learners with the conception that reading is a text-based activity and there is no need to activate any background knowledge as such. On the contrary, if the teacher encourages readers to bring their background knowledge to the text and engage in a dialog with the author, only those readers whose conception is consistent with such activities would benefit most leaving the other types of readers to feel lost and confused because they have no idea how to do it. In either cases, teachers are ignoring an important aspect of learners; their individuality with respect to their beliefs and conceptions about reading. This may result in a state of confusion in some readers who are not experienced or efficient enough to realize what is happening around them and therefore may fail to read properly or even develop a feeling of dislike toward the task. What these teachers do is asking questions more often than providing explicit instruction which is what some readers need.

Furthermore, in the literature, there is a growing body of evidence to indicate that teachers are also highly influenced by their beliefs, which in turn are closely linked to their values, their views of the world and their conceptions of their place within it. One comprehensive review of the literature on teachers' beliefs concluded that these had a greater influence than teachers' knowledge on
the way they planned their lessons, the kind of decision they made, and on their general classroom practice (Pajares, 1992). Beliefs were also found to be far more influential than knowledge in determining how individuals organize and define tasks and problems, and were better predictors of how teachers behaved in the classroom. The results of the present research supported the influence of beliefs on students’ decision to deal with a reading task; however, investigating the kind of influence that teachers’ beliefs can have on the nature of the task undertaken by individual learners was beyond the scope of this research.

With respect to metacognitive awareness, several studies have advocated metacognitive training with the goal of teaching individuals how to adapt their cognitive ability to promote more effective comprehension (Baker & Brown, 1984; Brown, Campione & Day, 1981; cited in Carrell, 1989). Casanave (1988) suggested that metacognitive instruction would be beneficial for second language reading as well: “In accordance with Baker and Brown (1984), I am assuming that in classroom settings, inefficient readers who enhance their awareness of the nature of reading and of their own reading strategies will ultimately be better readers than those who do not. Such awareness lies at the foundation of effective instruction in comprehension monitoring” (p. 11).

Furthermore, Carrell (1989) contended that the first step in “enhancing readers’ awareness is to find out what they are already aware of in terms of reading strategies” (p.128). Based on the results of the present study, subjects’ responses to the metacognitive questionnaire revealed that many subjects were not highly aware of the type of strategies they used in their reading, but in practice (study B) they demonstrated strategic reading performance. In other words, they used those reading strategies quite unconsciously without even being aware that they possessed such repertoire of strategies. Thus, the primary purpose of metacognitive awareness must be getting the students to understand the interactive nature of reading in the first place and also to know about the active role the reader plays in the reading task.
In relation to what mentioned earlier about the importance of taking into account the individuality of the learners, Chan (1996) further suggested that strategy training is necessary but it should be highly individual depending on “differences in short term memory, knowledge base, learning style, and student preferences” (p.125). The present study somehow has made such a contribution to our knowledge about the individuality of the learners. As indicated in this study, the beliefs of the learners were reflected in their metacognitive awareness and in one way or another affected their knowledge. Therefore, the perceptions and beliefs that learners bring with them to the reading task could also be taken into consideration when strategy instruction is being planned. What is certain is that teachers cannot change the perceptions of their learners about the task, but what they can do to facilitate their reading process is to help them become more aware of their own metacognition and learn how to use certain strategies that benefit them. Another benefit of metacognitive training is that it can help students with multiple conceptions about what it means to read to understand that reading for information is different from reading for enjoyment and that reading in school may be different from reading at home, and reading for tests may require certain different skills again.

In the same vein, Brown, Campione and Day (1981, cited in Carrell, 1989) contended that: “What we are advocating is an avoidance of blind training techniques and a serious attempt at informed, self-control training, that is, to provide novice learners with the information necessary for them to design effective plans of their own” (p.125). They further see the principal aim of metacognitive training as making the trainee more aware of the active nature of learning and the importance of individual role that learners play in the task. They believe that if learners can be made aware of “basic strategies for reading and remembering, simple rules of text construction, differing demands of a varieties of texts to which their information may be put, and the importance of activating any background knowledge which they may have,” they will surly become more effective learners. To this again, based on what the present study revealed, can be
added the self-awareness in terms of the beliefs the learners cherish and the
effect those beliefs have on their metacognitive knowledge. Such self-awareness
may be the prerequisite for self-regulation which is the learners ability to
orchestrate, monitor and check their own cognitive activities (ibid, p. 128).

Such requisite metacognitive training is still lacking in many second
language and foreign language reading classes; therefore, it seems necessary that
effective second and foreign language reading pedagogy needs to include in
Carrell’s (1989) words “not only training and practice in the use of task-specific
strategies (i.e., strategy training), instruction on orchestrating, overseeing and
monitoring these skills (i.e., self-regulation training), but more importantly,
information about the significance and outcome of these skills and the range of
their utility (i.e., awareness training)” (p. 129). She further added that in second
language reading program, students who receive instruction only in the skills or
strategies, “fail to use them intelligently and on their own volition because they
do not appreciate the reasons why such strategies are useful nor do they
understand where and when to use them” (p. 129). Thus, as Carrell contended,
adding awareness instruction or “knowledge about a strategy’s evaluation,
rationale, and utility” should greatly increase the positive and effective outcomes
of such instruction (p. 129). Thus, the metacognitive awareness which involves
both the conscious awareness and the conscious control of one’s learning needs
to be included in the curriculum which can help achieve an important type of
learning i.e., reading to learn.
5.2. Study B (The exploration of the reading strategies)

Discussion

5.2.1. Research Hypotheses

The purpose of this section of the study, as mentioned earlier, was to examine whether differences in metacognitive knowledge and beliefs of the subjects related to the differences in the strategic reading behavior of them. Three hypotheses were formed to try to understand the nature of the relationship:

- It was hypothesized that even if there existed some intra-individual differences in beliefs and metacognitive knowledge, they did not relate to strategic reading performance.

- It was hypothesized that there were not noteworthy differences in the range of reading strategy between advanced level L2 readers with high metacognitive knowledge and those with low metacognitive knowledge.

- It was hypothesized that L2 readers in general did not rely on one type of reading strategy and utilized both types of strategies, reader-driven and text-driven, interactively.

In general, the results suggested that there were no noteworthy differences in the type of processing strategies between the HM and LM groups; i.e., the subjects in the HM group and those in the LM group who participated in Study B performed almost similarly in terms of strategy use. However, they differed greatly with respect to comprehension monitoring suggesting that the subjects with higher metacognitive knowledge (HM) were able to better monitor their
comprehension and orchestrate their use of strategies in a way to facilitate their reading process.

Additionally, their performance on the think-aloud task and retrospective questions indicated that the subjects in both groups (HM/LM) demonstrated similar patterns of reading strategies which supported the first hypothesis in this part. In other words, all of the subjects tended to be primarily engaged in the text-driven strategies and very few traces of perspective-taking and some few cases of reader-driven strategies were found.

However, some of the subjects, mainly from the LM group showed a different pattern when their responses to the retrospective questions and MQ were compared to their strategic performance on the think-aloud task. This was explained earlier as relating to the lack of enough metacognitive awareness which caused subjects to use a certain strategy without being aware of it. That is, when being asked whether they used certain type of strategies while reading, they were sure they did not use them but actually they demonstrated those strategies when engaged in think-aloud reading task. In these subjects, in Baker and Brown’s (1980) words, their procedural knowledge (knowing how) preceded their declarative knowledge (knowing that) while the subjects in the HM group seemed to be quite different. In these subjects the declarative knowledge preceded the procedural knowledge and what made them even more different from the subjects in the LM group was their conditional knowledge (knowing when and where to apply certain strategies). It was this ability of the HM subjects that made them able to vary their reading behavior to the purpose more easily and effectively than the LM ones.

In other words, it appeared that when both groups were provided with a passage to just read, they were not very much different in terms of the strategies they used as well as their general performance. However, when it came to performing a specific task, the group that outperformed the other was the HM group. This can be explained in terms of the degree of metacognition which has been defined as “having knowledge (cognition) and having understanding,
control over and appropriate use of that knowledge" (Tei & Stewart, 1985). Thus, it involves both the conscious awareness and the conscious control of learning. In a summary of research on metacognition, Armbruster et al (1989) presented reading to learn from a metacognitive perspective as it related to four variables: texts, tasks, strategies, and learner characteristics.

With respect to the first variable, text, research has suggested that textual features influence comprehension and memory and that knowledge of text structure is critical for reading effectively. That is, for example, by detecting the organizational patterns or structures of texts, students can observe how authors arrange ideas and determine which kinds of structures are used to indicate and inter-relate ideas. Armbruster’s (1983) research suggested that younger and less mature readers did not concentrate on textual features because they were not aware of the impact of text structure on learning. Another area of research in the development of metacognition of text features was related to the recognition of inadequacies in prose.

Ambiguous words or confusions within a text affect cognitive processing resulting in better comprehension by those with adequate metacognitive knowledge. These readers know how to adjust their reading rate for anomalous texts and may return to an inconsistent sentence or passage several times, comparing what they know with what is written in the text. More fluent readers who seem to have a higher degree of metacognitive knowledge are more aware of text inconsistencies and can judge whether or not their comprehension is altered because of such inconsistencies.

Another variable pertains to the task that the reader is required to perform. For example, locating a specific detail in the text or answering some comprehension questions require a different process than that needed to write a critical analysis of the text. As with other aspects of metacognition, mature or immature readers differ with respect to their knowledge of, and ability to control task variables. The present study was consistent with the findings of previous research in this regard. As was evident from the results of this study, the HM
subjects were quite aware of the purpose of the task they were engaged in and were able to accurately predict their performance on the task.

An additional category of metacognitive knowledge involves knowing how to resolve comprehension failure. Merely being aware of one’s own comprehension or failure to understand is not enough. Learners must be able to self-regulate their reading process in order comprehend fully what they read. Research has indicated different categories of strategies namely “fix-up” strategies and studying strategies. “Fix-up” strategies are used to remedy comprehension failures and studying strategies are used to enhance storage and retrieval when comprehension failure is not necessarily an issue (Armbruster, 1983). Several strategies are discussed in the literature for improving comprehension and they are used mostly by more mature readers. These include rereading, forming a mental image, adjusting the rate of reading, searching the text to identify unknown words, and predicting the meaning that the text contains. Again, in the present research, the HM subjects demonstrated the use of these strategies more than the LM subjects.

In order to enhance text processing, learners need to be able to use studying strategies. Some common studying strategies include underlining, note-taking, outlining, summarizing and self-questioning. In the interviews that were held with the HM and LM subjects in this investigation, it was clear that the LM subjects were more willing to use the simple strategies such as underlining, and note-taking whereas the HM subjects were also able to deal with more complex ones such as self-questioning, outlining and summarizing. Therefore, it seems that promoting metacognition can make learning and reading experiences less demanding or daunting for those learners who face difficulty adjusting themselves to the demands of the classroom and the activities given. To do this, however, the teacher needs to base his/her decision on what serves the students best.

The last category of metacognition is the awareness of the learners of their own characteristics such as background knowledge, degree of interest, skills and
deficiencies and how these can affect learning. The reader needs to take this awareness and translate it into a change in reading behavior. According to the results of the present study, HM subjects tended to relate the information in the text to their previous knowledge more than the LM subjects who showed little tendency to do so.

Research has indicated that metacognitive awareness and the skills associated with it can be taught through appropriate instruction. What researchers such as Williams and Burner (2002) have discovered is that the most important factor to consider in learning a second language in general and reading instruction in particular is the individual differences of the learners in terms of their cognitive, metacognitive and affective variables. By considering the individualities of the learners, teachers can help them learn from their reading and not just learn to read. They can encourage learners to take an active role in reading in order to develop active, independent and effective learners and become lifelong readers who read to learn.

Some possibly important factors, such as the participants’ L1 reading abilities, personalities, motivation and their learning styles were beyond the scope of this study. In addition, in generalizing the results, care should be exercised since participants’ reading processes might have been interfered by the task of producing verbal protocols. However, despite all these limitations, the results obtained from this study provide in-depth information about the reading processes of some of the learners which is really difficult to obtain since it is an invisible process that goes on in the mind of the readers.

One of the interesting findings of this study was that subjects’ reliance on reader-driven, text-driven or perspective-taking strategies did not always resulted in better comprehension of the text. Instead, self-monitoring the comprehension process which was mostly done by the HM subjects played a key role in their comprehension adequacies. For instance, as indicated before, some of the subjects took a strategic action by relying on their background knowledge when
they were aware of their miscomprehension of a word, phrase or a sentence through activating their comprehension monitoring system.

In fact, comprehension monitoring was one of the advantages available more fully to HM group. This was especially apparent when the subjects from this group attempted several different strategies to work out the problematic part through a process of continuously predicting and confirming or rejecting their interpretations based on the new information presented in the text. In one case, one subject while reading the passage came across a word that was new to her and she started making a hypothesis about the meaning of that word based on the surrounding words and phrases. She did this through activating her newly formed knowledge that *iconoclastic* had something to do with an icon probably which was a reader-driven type of processing. She mentioned that in this long sentence, ‘This new class, town dwellers who carried on commercial activity of one kind or another... were less impressed by country notions of love and honor than the more conservative feudal landowners; realistic, iconoclastic; priding themselves on knowing life as it really is...’. “Iconoclastic may mean realistic because the word realistic comes before it and the phrase that follows it again refers to taking things as they are.” Then she tried to confirm her intelligent guess by reading the whole sentence again. She tried to self-monitor her comprehension by making a connection between the predicted meaning and new information. At this stage, she began to look for more clues to help her confirm her speculation and she added: “well, now I think this sentence here can clarify the meaning of this word further ‘and on refusing to look at it through the rose-colored spectacles of...’ “So it may also have something to do with having an idea which is different from the established beliefs”. She acknowledged her first error in her first hypothesis by reading more phrases or sentences that related to the word she did not know. This particular subject continued reading the other passage, making predictions and trying to confirm them as she proceeded and through her comprehension monitoring process, she was able to reconstruct the meaning which was presented in the text. In other words, comprehension monitoring enabled her to check
whether her comprehension was consistent with previous or subsequent information in the text so that she could have a more adequate understanding of a word in that text. She was also able to correct or take strategic action when she discovered that her first hypothesis did not fit into her understanding of the succeeding parts of the text.

This case particularly showed that continuous comprehension monitoring through predictions and confirming or rejecting them on the basis of the incoming or preceding information could help the reader to use any type of strategies effectively and appropriately to understand the text fully. This finding is in line with the previous research findings which state that when readers begin a literacy task, they bring to it an existing framework of knowledge to which the new information may be assimilated (Carpenter & Just, 1989). A metacognitive analysis of the task puts the reader in control of the situation; it encourages flexible and adaptive thinking, and if necessary modification of the reading process to fit the known purpose for reading (Tei & Stewart, 1983).

Additionally, since the three subsystems of reading (the visual processes used in decoding, the identification and recognition of words, and the understanding of words and text meaning) must be coordinated to be successfully implemented, thus students with inadequate metacognitive abilities may be unable to read, though they are able to master the subskills (Israel, 2005). In order to monitor comprehension, the students should have metacognitive control over their processing, knowing when comprehension failure occurs and taking the corrective strategies to correct the comprehension failure once it has been noticed.

The present research findings also supported Casanave’s (1988) argument that comprehension monitoring is important in order to take appropriate strategic actions in the reading process. The HM subjects used their metacognitive knowledge to actively self-monitor their comprehension on words, sentences and paragraphs in an ongoing process of constructing meaning throughout the text. Comprehension monitoring played an important role to link some strategies in an
interactive mode to successfully accomplish a reading task. For example, some of the subjects scanned the text first to find the information they wanted to answer the questions, and then later they employed their text-driven or reader-driven strategies when they recognized that they did not understand some important part of the text enough to answer those questions.

Another finding of this research which was consistent with previous studies in the literature was that LM subjects showed a greater tendency to focus on the lexical and structural aspects of the text instead of trying to focus on the organization of the text and consistencies in meaning. They were also unaware of some poor reading practices such as allowing their mind to wander and forget the meaning of a sentence as soon as it was read. In addition, they also used less self-questioning to monitor their comprehension.

In contrast, HM group were more in control of their reading and tried to match their reading to the structure of the text and were consequently able to recall and retain much of they read. They were also able to acknowledge different purposes for reading, to assess their own knowledge as it related to the task wanted of them, to monitor their own comprehension and to implement corrective strategies when they needed them.

Garner (1992) had also found similar results indicating that less skilled readers (the term she used to describe readers with low metacognitive knowledge) would most often detect lexical errors in text before they would find inconsistencies in meaning. She used an error detection procedure to find out the differences between poor and good readers. In her study too, poor readers demonstrated lesser use of self-questioning and other comprehension monitoring strategies to process the text.

Therefore, the findings suggest that low metacognitive readers (LM) need to be helped in their development of metacognitive abilities and strategy use. It occurs so many times that both HM and LM readers are aware of the same strategies but HM subjects use them more frequently and effectively than the LM subjects. Hansen and Hubbard (1984, cited in Collins,1994) also found that poor
readers want to learn strategies that they can apply on their own, and that they can, with practice learn to transfer these strategies to their reading tasks. Meloth (1990, cited in Collins, 1994) showed that poor readers who began with a minimal knowledge of cognition increased by 60% their declarative knowledge (their ability to discuss what they knew about reading), by 67% their procedural knowledge (their ability to use strategies effectively); and by 156% their conditional knowledge (their ability to know when and why a strategy will help). He found that this increased knowledge of cognition appears to contribute to a variety of comprehension abilities.

As a summary, though due to the exploratory nature of this study generalization of the results was difficult; two tentative conclusions might be drawn. First, the subjects in this study approached the passages in a more or less the same manner; i.e., most of the participants tended to be text-driven in their approach to reading which may suggest that the majority of the population of which these subjects were a sample have a tendency to approach their academic texts in a text-driven manner. Second, the patterns of differences in strategic responses often appeared to be related to differences in beliefs held by learners about reading. In certain areas, the high metacognitive group appeared to be different from the low metacognitive group. In fact, differences in the students’ metacognitive knowledge and beliefs may have influenced their strategic reading performances.

Clearly, the findings of this study require replication with a larger sample to validate the results obtained. However, they did suggest that the variability in the subjects’ performances was mainly due the type of conceptions that they had about the reading which in turn affected their metacognitive knowledge and their decision to approach the passages they were engaged in. Differences in the metacognitive knowledge, on the other hand, accounted for the efficiency and rate of reading which were more prominent in the HM group.
5.3. Implications for L2 and FL Reading Instruction

This part will present implications of the current findings for educational research in second and foreign language situations in terms of conceptualization and examination of beliefs and metacognitive knowledge as well as strategy instruction.

The current study has attempted to examine metacognitive awareness of the learners not only in terms of strategic knowledge and use, but as an active and personal constellation (Garner, 1992). The findings of the present study discussed in chapter four offer supporting evidence that individual differences, with respect to the beliefs that learners bring with them to the learning situation, play an important role in terms of their decisions to select a particular type of reading processing. Moreover, it was found that the metacognitive knowledge of the subjects also played a great role in the way they handled the reading passages and that comprehension monitoring rather than over-reliance on one type of strategy helped them to confirm or reject their initial hypothesis about different parts that created problems. It is, therefore, posited that such beliefs variables may differentiate between a learner’s thinking about reading and learning in general and the personal metacognitive processes that influence an individual’s strategic reading performance. In fact, their beliefs act as their personal context within which they internalize, use and transfer their strategic knowledge.

Although the study is not conclusive, it has some implications for classroom applications for both metacognitive assessment and instruction of strategic reading behavior. It should be noted, however, that the implications need to be seen as suggestive since the other factors that can affect the reading performance of the learners were not controlled and considered in this study.

5.3.1 Implications for the Inclusion of Beliefs in Reading Instruction

In reading instruction, whether for the purpose of research or practice, the teacher can benefit from the consideration of the beliefs of the learners to assess
their cognitive and metacognitive reading strategies. In other words, while examining learners’ basic reading skills (phonological and decoding), their reading comprehension and strategy use; it is also useful to include measurement of their beliefs about reading. The beliefs that were investigated in this study were limited to the learners’ conceptions about the reading task and the way they were formed and affected reading. Other types of beliefs such as learners’ beliefs about their control over reading and learning outcome can also help researchers and practitioners to make sense of students’ cognitive and metacognitive skills. The evidence from the current research and previous literature indicate that they play an important role in strategic reading performance. Such assessments may help teachers and practitioners to provide a more comprehensive evaluation of learners’ beliefs about their own thinking, reading, and learning and thus to devise useful means to help those in need.

The evidence from the current research can also provide precious information to guide teaching reading practices. What is evident from previous research as well as the present one, the direct teaching of specific strategies, no matter how well they are presented or how comprehensive they are, cannot ensure the transfer of metacognitive instruction. To do so, the strategies need to be modified to become consistent with the learners’ personal beliefs and cognitive reservoir. This has been even suggested by Vygotsky (1978) that proposed that when children read they transfer external information into internal codes during which they modify the original information. In the same vein, Garner (1992) also believed in the personal nature of internalization and transfer of reading strategies and suggested that for the internalization purpose to occur in reading, children need to be independent to experiment with the strategies which are in congruence with their personal beliefs and reservoir. Pressley and his contemporaries (Pressley et al., 1995) in their “transactional strategies instruction” also stressed flexibility in thinking and strategy use so that the students can think independently and create meaningful interpretations of the text on the basis of their personal beliefs and cognitive reservoir.
Additionally, research has suggested that instructional factors which influence learners' beliefs can in turn influence their ability to internalize or modify reading strategies. For example, Ames (1992) discovered that providing relevant tasks, correct evaluation and increased student autonomy had resulted in more efficient strategy use. By the same token, Schunk (1989; 1991) has found that explicit performance standards, specific goals, and adequate modeling increased self-efficacy for learning and increased the use of strategies as well. Therefore, the evidence from the present research and previous literature suggests that strategy instruction must not only concentrate on the metacognitive knowledge of the learners, but must also take their beliefs system into consideration as well to be able to facilitate transfer of strategic behavior.

One of the findings of the current investigation was the interaction between the beliefs of subjects, their metacognitive knowledge and their strategic reading performance which adds credibility to the existing literature. What subjects knew about the strategies which facilitated their reading comprehension were closely related to their metacognitive knowledge which was in turn influenced by their beliefs about reading and learning as well as their personal objectives for performing the task. Therefore, within a classroom context these variables have probably a reciprocal influence on one another and on other components of metacognitive knowledge as well. Because of this, they become an inextricable part of the reading instruction as well as any other learning situation meaning that any attempt to improve the strategic performance of the learners needs to simultaneously address the beliefs of the learners within which instruction becomes meaningful to those individual learners. Thus, in order to teach any learning skills, educators must become aware of their students' beliefs about learning and themselves as learners to be able to help them find the most appropriate strategies.
5.3.2. Implications for Metacognitive Teaching

As research has shown it is tenable to assume that metacognition, as both knowledge and regulation of cognition, is related to the process of developing proficiency in reading. Moreover, its significant implication for the learning and reading instruction is that considering the importance of metacognition, there is a need to alter the emphasis in both language learning and reading instruction from “learning to read” to “reading to learn” which is a process that may continue throughout the life of the learners. Reading instruction requires a move beyond accuracy to automaticity, to the development of strategies that facilitate an individual’s metacognitive awareness and self-regulation in the service of finding meaning in text.

Dickson et al., (1998) further supported the relation between metacognition and its role in the facilitation of reading comprehension. They found several areas of convergence: “a) metacognitive knowledge and self-regulation facilitate reading comprehension; b) metacognitive instruction facilitates reading comprehension; and c) motivational beliefs may mediate students’ use and benefit from metacognitive knowledge and self-regulation strategies” (p. 305). This lends support and credibility to the notion that metacognition is strongly associated with effective reading development and also supports the claim that it is teachable. This has initiated interest in what is now termed learner training in second and foreign language teaching which is concerned with ways of teaching learners explicitly the techniques of learning a language, and an awareness of how and when to use strategies to enable them to become self-directed. This should become one of the most important functions of teachers as educators.

Traditionally, curricula have tended to concentrate on imparting knowledge and skills and have neglected the teaching of how to learn. In language teaching, for example, the focus has often been on teaching the form of the target language by presenting pieces of the language in carefully graded steps,
at the cost of teaching students how to learn the language. Coles and Robinson (1991, p.91) argue that "schools should be less concerned with imparting information and more concerned with encouraging the kind of teaching which pays attention to the way children learn". Given the results of this study, such kind of lifelong learning can be achieved through careful analysis of the learners' beliefs and applying them to their learning how to use certain strategies which can help them become more autonomous and self-directed and thus benefit from any learning situations they find themselves in.

In concert with such perceptions, some reading instruction models have been developed that support metacognitive development. The first such reading model is called holistic reading instructional program which like Whole Language, represent an implicit approach to reading instruction that is primarily student-centered and based on socio-psycholinguistic theory of the language learning process (Goodman, 1994; Watson et al., 1984). As pertain to learning, they are characterized as constructive in nature, with an emphasis placed on the development of literacy. In this view, learners are not passive, but active agents (Anderson, 1984) forming concepts in an inductive manner about what they read by considering the whole not as fragments and pieces of language.

The second model, specific skills instruction programs are teacher-directed and explicit in nature. These direct instructional approaches assign a central role to teachers in explaining, modeling, and providing opportunities for practice with feedback. Characteristics of this methodology include classroom management styles that tend to minimize interruptive behavior. Teachers maintain a strong academic focus to intensively engage in learning activities; instructional activities are targeted to the group as a whole or in small groups; specific subject matter information is presented along with solution strategies; and procedural skills are presents as having specific sets of operations (Simmons et al., 1995).

The last mode is integrated instructional program which seems to accommodate the strengths as well as the real or perceived deficiencies
associated with the two previous programs. First, they avoid the restrictive nature of the teacher-centered skills instruction, thus avoiding turning off some students to reading in general while still providing the structures that other students require. Second, they acknowledge the problems associated with placing much of the responsibility of reading on the students themselves, yet provide opportunities for student choice and authentic reading experiences. In these cases the role of the teacher is important both as the director providing instruction and as a collaborator. In fact, what happens in such a reading classroom is that as soon as the students progress in their ability to read with comprehension, and also their ability to engage in metacognitive self-regulatory activities with the purpose of extracting meaning from the text, the role of the teacher changes. At the same time, students assume more responsibilities for their learning and comprehension monitoring and they invoke metacognitive self-regulatory strategies with increasing degrees of automaticity and then may begin to view both teachers and fellow students as collaborators and resources.

Simply put, this balanced instructional style is appealing in that it accommodates an interactive and compensatory account of learning which is reminiscent of Stanovich’s model of the reading process. It also acknowledges the value of metacognitive strategies and at the same time validates the necessity of the elemental skills such as decoding.

5.3.3. Implications for Reading Assessment

Another implication of this study can be in the area of assessment. It is clear that assessment informs instruction and one of the areas which really needs improvement in reading instruction is reading comprehension assessment. Every teacher is concerned to know how to teach and assess their students to the best of their ability. What teachers need to learn is that learning is not as natural a process as it may seem rather due to the individual differences of learners teaching and learning become a complicated process. Students, on the other hand
need to learn how to “think about thinking” and become more metacognitively aware of their learning and thinking processes.

An awareness of the importance of metacognition and beliefs in the reading outcomes of the students can inform comprehension assessment as well. For several decades this question has always boggled the mind of the educators that “can comprehension be better assessed?” In fact, the problem with comprehension assessment is that it does not always demonstrate the true ability of the reader or the factors that affect their final performance. Sadly, research in educational evaluation has not advanced as rapidly as the body of knowledge concerning instructional methodology. Most reading comprehension tests do not measure students’ metacognition. These tests measure students’ background experiences with a topic rather than their ability to initiate metacognitive processes independently.

To achieve such a purpose, the teachers need to know how the metacognitive components of reading comprehension can be measured and what they can do to advance the field of metacognitive assessment. Based on the results of the present research, it was evident that the metacognitive awareness of students played a significant role in the process of comprehension monitoring suggesting that an evaluation of readers’ awareness and knowledge of the mental processes engaged during reading can help educators devise better plans for guiding the less efficient readers.

The present study was consistent with previous research in showing that the number of readers with high metacognitive knowledge is very low in comparison to the readers with low metacognitive knowledge. This shows that such readers are a minority and therefore one of the most pressing needs of the educators is to make this minority population a majority. To date, no serious programs have been developed to promote metacognition, much less the assessment instrument to measure their success. There is certainly a need to identify the factors that contribute to metacognitive awareness growth of students.
This study further suggested that students took different strategies to comprehend the text which was in fact reflecting the conceptions and beliefs they held about reading. This may suggest that students of variant reading ability levels and of different conceptions require different instructional methods to build lifelong automatic use of metacognitive thinking. In fact, it is necessary to inform teachers that the goal of reading instruction should be to facilitate student independence in the construction of meaning and to achieve this goal, control by the student not the teacher over reading should be stressed.

Furthermore, teaching comprehension, in the last century, has been dominated by merely providing instruction to read and answer questions over what was read (Durkin, 1976, 1977). Certainly change is necessary now in the sense that students need to learn how to think metacognitively on their own. Instead of mere recitation of facts, responsive individual interaction with text must be emphasized in the classroom and in order to attain this goal, metacognitive assessment must become commonplace. The best place to start, according to the findings of the National Reading Panel (1999) and the Rand Reading Study Group (Sweet and Snow, 2002), is the elementary school years during which the metacognitive knowledge is formed. Thus, this is where the educators should start with and diagnose the depths of such competencies; otherwise at upper stages most of the learners have developed too many defense mechanisms to camouflage their weaknesses that identifying the true abilities of them becomes difficult. Their shame, their guilt and the history of their failure as a reader may further diminish their desire to make meaning from the text.

Thus, with the help of precise and effective assessment instruments, educators can tap students’ metacognitive thought processes while they are engaged in reading. By doing so, they can help readers to disarm their defense mechanisms. In other words, if students’ metacognition is developed, they will certainly read more effectively without feeling the need to develop any camouflages of their reading failure because they know how to deal with their reading problems instead of simply avoiding them. According to Block (2004)
and Pressley (2002) there are seven principles which could be followed to advance the assessment of comprehension beyond the text and relate them to the assessment of metacognition. By following these principles and using their knowledge and expertise, educators can develop reading comprehension tests which can tap the metacognitive knowledge of their students and accordingly take necessary actions to help them overcome their reading problems. These seven principles are as follows:

1. Assessments should support instruction. They should help students to assess themselves, with instruction being delivered to address individual needs after students' metacognitions have been assessed.

2. Assessments should extend beyond improving present tests to making new tests that are more conceptually valid.

3. Culture free tests should be avoided since "culture free assessments afford, at best, only a partial, perhaps distorted, understanding of a student's [meta]comprehension ability" (Tierney, 1998, p. 381).

4. Further comprehension tests must allow for different students to have different amounts of encouragement and support to measure the degrees that they are interrelating metacognitive processes. Some students have the potential to reveal their inner thoughts accurately while other do not and still others do not process meaning metacognitively as they read. Further tests are needed to tap into this metacognitive knowledge more directly.

5. Some things which are worth assessing cannot be evaluated except through student self-assessment (i.e., self-questioning, self-reports, and degrees of interpretation).
6. The interaction between speed, factual literal recall, vocabulary development, inference accuracy, and metacognitive depth must be assessed. Presently, few tests measure such interactions.

7. Assessment should be developmentally appropriate. They must contain sustained silent reading rather than “dipstick approaches” to assessment. Instead of measuring all of children’s ability in one day, metacognitive tests could continue for several days and be calculated through reading on a specific topic.

As an example, one of the most effective metacognitive assessments can be a test that allows students to recognize and use their metacognition to resolve inconsistencies that occur in a text. In this kind of test, students need to describe what needs to be fixed in the passage so that information makes sense in relation to the adjacent sentences. Clearly, those students who have difficulty in integrating inferences with literal comprehension will not perform well on this test. This can help teachers understand what types of information (literal or inferential) are not being processed metacognitively by individual students and help them resolve their problem.

5.3.4. Implications for Individual Differences

A significant implication of this study is related to the individuality of learners and how the individual differences of the students can affect the way they think and learn. As mentioned earlier in the discussion, the learners we encounter in the classroom can no longer be considered homogeneous even though they come from the same language and cultural backgrounds. Each of them brings a world of their own to the learning situation and unless these differences are accounted for in the classroom, the teaching job cannot achieve the desired objectives. Thus, merely teaching several reading strategies in the reading class is not sufficient to lead all the students to successfully use the newly taught strategies. Moreover, knowledge of certain strategies does not guarantee that learners can use them efficiently.
The data in the present study were consistent with Anderson's (1991) study which concluded that there was no single set of strategies that significantly contributed to success, based on two reading comprehension measures used. Success on a standardized reading comprehension test was related to the level of subjects' language proficiency, while success in reading textbook type materials was attributed to individual factors such as level of interest, motivation, learning style, and background knowledge of the learners. He argued that strategic reading involves knowing not only what strategy to use, but also how to apply strategies efficiently as well as how to combine them with other strategies which show the degree of the declarative, procedural and conditional knowledge of the learners.

He also mentioned that background knowledge on the topic and solid vocabulary base were factors that may influence the success of using strategies. Similarly, the present study revealed that the more aware the subjects were of their own metacognition, the better they regulated and used their reading strategies to fit the purpose for which they engaged in the text. In fact, teachers need to be aware of the great impact that the individuality of the learners may have on their success or failure in the reading classroom and therefore, try to pay more attention to this aspect while planning their courses. This could include encouraging and guiding the learners to depend upon their individual abilities and lead them to make the best out of those abilities.

Additionally, with respect to the influence of the individual differences of the learners, Sarig (1987) agreed with the contention that there is a high degree of individuality in the reading process. Sarig's study reported that personal reading strategies clearly showed the impact of individuality on the combination of reading strategies used by the subjects. While the results of the Sarig’s study showed that each reader had his/her own personal reading style which brought its own benefits and drawbacks in reading comprehension, nevertheless, it did not support the dichotomy between good and poor reading. He contended that success in reading could be attributed to the quality of the reader's unique use of combination of reading strategies rather than lack of certain strategies. The study
indicated that in both LI and L2 reading, subjects used a particular strategy which led to success and failure to almost the same extent, and that individual's unique use of combination of strategies was seen with almost the same degree in both languages. He concluded that there seemed to be a transfer from LI reading processes to L2.

5.3.5. Implications for Comprehension Monitoring

Furthermore, another important implication of this study could be related to the promotion of the comprehension monitoring in the reading classes. The verbal protocols collected from the participants in this study revealed how individual characteristics affected strategic reading behavior of the subjects. The findings showed that simply knowing a particular type of strategy did not guarantee students’ success in reading comprehension. For example, guessing the meaning of a word by studying the adjacent sentences helped a participant to understand a particular paragraph better, but was not effective for another participant in understanding a difficult sentence. Thus, the readers need to be familiar with their own strategy resources and decide which one is a more appropriate strategy to use depending on the type of text and the purpose or task of reading. If the readers are able to adjust their strategy use by confirming or rejecting their predictions through comprehension monitoring, the strategy can be more effective to resolve comprehension problems that may occur in the reading process. In the verbal protocol analysis, one of the subjects demonstrated how she resolved her reading problem which occurred after her initial inappropriate prediction of the meaning of a new word in a paragraph. By using the information in the adjacent sentences and phrases in the paragraph, she was able to use her cognitive ability to monitor whether her initial prediction was right or wrong and took appropriate action to comprehend the paragraph. These verbal reports were similar to what LI researchers have found (Phifer & Glover, 1982). Baker and Brown (1984) also attempted to explain the discrepancy between what students said they did and what they really did by presenting two kinds of
knowledge: declarative knowledge (knowing what), which is different from procedural knowledge (knowing how). In other words, knowledge that a particular strategy is useful does not mean that it is actually used.

L2/FL reading researchers such as Barnett (1988) also investigated the relationships among reading comprehension, strategy use and perceived strategy use. Barnett, in her study, concluded that FL readers who reported their use of reading strategies understood more than those who believed they did not use any strategies at all. Additionally, Carrell's research (1989b) examined the relationships between readers' metacognitive awareness of various types of reading strategies and their reading ability in both their L1 and L2. She concluded that in LI reading, more readers relied on the use of "local" or bottom-up reading strategies (focusing on grammatical structures, word-meaning, and text details) (p.127). As for foreign language reading, those with lower proficiency level benefitted more from the local reading strategies which increased their reading performance, while use of global strategies was not related to FL readers' better comprehension. Conversely, she found that higher level L2 participants' reading performance had a positive correlation with "global" or top-down reading strategies in which the use of background knowledge and the gist of the text and textual organization were used more often (p. 125).

However, as mentioned earlier, the results of this study implied that a particular strategy, whether it is text-driven or reader-driven does not always guarantee better comprehension. That is, for example, background knowledge does not always lead readers to successful comprehension. According to Carrell, instructions need to be devoted not only to teaching reading strategies, but also to helping students to learn how to self-monitor the appropriateness of their strategy use so that they end up in efficient comprehension depending on the type of text and the purpose of their reading.

In fact, by raising metacognitive awareness of L2/FL students they can enhance their comprehension monitoring abilities through practice and
internalization of those techniques. For example, Casanave (1988) contended that students should be asked to reflect on their understanding by answering appropriate questions which are inserted between paragraphs. The right questions asked may engage students to reflect back on what they have read, to think hard and try to relate their world knowledge to the text they read (p. 292). By reflecting on what they do in reading after each paragraph students may improve their metacognitive abilities so that they become more aware of where reading problems occur and what kind of strategies they need to apply to overcome those problems.

Another alternative could be “reciprocal” teaching developed from LI reading research (Palinscar & Brown, 1984). In this type of teaching, the teacher models how to form meaningful comprehension monitoring questions after each paragraph in a text which can act as instructional scaffolding (p. 169). Then, after students learned the techniques, they can gradually take the teacher's role to attempt to formulate similar questions themselves. Therefore, teachers, with systematic guidance and encouragement can lead students to develop their own ways of monitoring their comprehension.

Another useful way of teaching students how to monitor their comprehension is though teaching them how to think aloud while they read. Think-aloud protocols can be very effective in examining the reading processes of learners even though they are relatively unknown to many teachers. Teachers can become aware of the reading processes of the individual learners and then plan appropriate instruction to help them. Think-aloud techniques can also be useful for learners. When learners express verbally what they do during reading, they may become aware of the strategies they use, and therefore may be able to notice some weaknesses in their reading skills or some misinterpretations which occurred by applying a strategy inappropriately. Finding out about their weaknesses and sources of misinterpretations may provide opportunities for students to re-examine and even change their reading habits.
5.3.6. Implications for Teaching New Vocabulary in reading

Furthermore, another important implication of this study could be for reading classes to consider appropriate ways of dealing with the new vocabularies in the text. In other words, as the messages in a passage are carried from the author to the reader through words in a text, a lack of sufficient vocabulary knowledge may be one of the main sources of reading difficulty in L2/FL reading comprehension. As was seen in the present study, one of the challenges of the readers was to work out the meaning of the new vocabularies in the text for which they took different strategies depending on the nature of the task and their own individual features. Additionally, in the interviews held with the subjects, they mentioned vocabulary as an important component of reading and some mentioned that good vocabulary instruction in reading classes can help students to read more efficiently for comprehension.

Therefore, in order to reduce students’ anxiety about their weak vocabulary reservoir and help them facilitate their reading comprehension, teachers need to present the words that appear frequently in the texts they are using before the students read the text. Aebersold and Field (1997) suggested presenting “topic-specific” or “content-specific” vocabulary in pre-reading activities to help the students gain a general meaning of those words (p. 139). However, explaining and clarifying a word does not automatically lead the students to understand and use the word correctly in their reading because many types of knowledge are involved in word acquisition. According to Nation (1990), there are four categories of knowledge about a word: form (the word in print and its grammatical forms), position (the grammatical patterns and structures in which the word can be used), function (the types of situations in which the word may appear) and meaning (the various meanings and nuances of the word) (p. 29-32). Thus, though previewing and explaining the topic-specific words before reading may not sufficiently help students with their reading, it may raise their consciousness so that they can constantly monitor their understanding when they encounter words that were previously introduced in a text.
In addition, learning vocabulary in a meaningful reading context can help students engage in L2/FL reading more effectively and interactively since they can benefit from the contextual information. Hague (1987) suggested using three semantically-oriented vocabulary activities which were mainly used in L1 vocabulary learning. For example, students brainstorm the words which are related to the context of the text through a “semantic association technique”. Then the teacher and the students discuss the new words or categorize them based on concepts which are fundamental in getting the meaning in the text. While these activities are going on, students can compare the similarities or differences among words. Finally, students can engage in a technique called “semantic feature” in which they focus on the distinctions between closely related words and their use in the context of the text. As research has shown, working out words in context, through these types of activities, is more effective than relying on the dictionary (Gipe, 1979).

However, these activities can become more fruitful if the students compare their own vocabulary learning styles with those of other students and the activities presented. By doing this, they can realize how effective these semantically based learning techniques are and this recognition may lead them to self-monitor, without help from their teacher or the dictionary, the strategies they take when they encounter unknown words in a different text. Also, such exposure to a variety of semantically-based vocabulary learning activities may lead students to be aware of the significance of using contextual information. While students are able to clarify the meaning of an unknown word based on the context in which they are used, they can confirm or alter the predicted meaning of the word through self-monitoring.

5.3.7. Implications for Background Knowledge

Another area which requires ample attention in reading instruction is the activation of the required background knowledge. Based on the principles of scheme theory as well as the theories of the top-down or reader-driven models of
reading, the background knowledge of readers plays a crucial role in the success or failure of their comprehension. Furthermore, the verbal protocol task and retrospective questions which were used in the present study showed how activating the prior knowledge of the participants facilitated their comprehension. For example, in the passage where some literary terms were used subjects who were familiar with different literary classes in English literature could easily make sense of the text despite its lexical and structural density. Most of the subjects mentioned that the text was easy to follow and understand because of what they already knew about the topic. In fact, the availability of the background knowledge helped the subjects to compensate for some weak vocabulary and even structural knowledge.

There are several different ways of facilitating and activating students' background knowledge in reading classes. Carrell (1984b) argued that pre-reading activities can be beneficial, through which students activate their existing background knowledge as well as build new background knowledge which they need. These background knowledge-building activities may include not only discussions on the topic of the text, but also bringing cross-cultural aspects of the text into attention, if necessary. Research has indicated that developing cultural knowledge about a topic facilitates the L2 readers’ comprehension of the text. (Johnson, 1981; Floyd & Carrell, 1987)

Additionally, knowledge of text organization seems to allow students to see a bigger picture rather than merely focusing on the lower levels of a text such as word or sentence level. In effect, in addition to cultural and topic-specific schema, the reader's background knowledge of the text organization can be beneficial for understanding the overall message of a text without paying attention to the meaning of every word or sentence in it. Research has also demonstrated that in order to make students become familiar with L2/FL text structures and develop their ability to follow its structure, teachers need to show a number of text structure types to students so that they become familiar with different types of them. Then they can have students read a text with a
recognizable structure to discover the structure type, and analyze the author's intention in using that particular structure (Barnett, 1989). There are, however, other variations which can be used to help students monitor whether they can follow the structure, or to facilitate their understanding of the text. Asking questions with regard to structures is an example and also if the readers are able to activate their prior knowledge and monitor its appropriate use depending on the purpose of their reading and the strategies used to meet the purpose, background knowledge of rhetorical organization can also be used more effectively. One important point to bear in mind is that applying background knowledge appropriately is as important as activating or developing knowledge in reading. By using self-monitoring comprehension, either at the lower or higher levels, L2/FL readers could be able to constantly check whether the application of their prior knowledge is consistent with their understanding of other parts of the text in order to prevent over-reliance on their background knowledge.