

**Reading Strategies in L1 and L2 and Their
Influence on L2 Reading Comprehension
Ability (Iranian EAP Students)**

**A Thesis Submitted to the University of Hyderabad in Partial Fulfillment
of the Requirements for the Award of the Degree of**

**Doctor of Philosophy
In
English Language**

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May 2010**

“To my MOTHER and so many mothers”

who give and forgive,

the many things that

we get and forget and never

forget the things that we get.

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April 2010**

DECLARATION

This is to hereby declare that I, M. Rahim Bohlooli Niri, have carried out the research embodied in the present thesis entitled **“Reading Strategies in L1 and L2 and Their Influence on L2 Reading Comprehension Ability”** for the full period prescribed under Ph.D. ordinances of the university.

I declare to the best of my knowledge that no part of this thesis was earlier submitted for the award of any research degree to any other university.

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CHAPTER I

“Reading is to the mind what exercise is to the body.”

(Joseph Addison)

INTRODUCTION TO THE STUDY

1.0. Background

English for Academic Purposes (EAP) is an ever-growing branch of EFL instruction in Iran. The main objective of the EAP programs at Iranian universities is claimed to be filling the gap between the students' general English competence and their ability to read authentic discipline-specific texts. According to Sadeghy A.R. (2005) there is no clear-cut consensus yet whether English is a foreign language or an international one. However it is quite clear that it is considered important enough to be taught as a general subject at universities. All students at Iranian universities from engineering, medicine, and science to business and humanities have to pass general and specialized English courses as a requirement of their academic program. Let's take a look at the EAP program in Iran in terms of quality and accountability to see to what extent it has attained its goals. To do so we approach it from four different perspectives, that is, student, teacher, material, and methodology. These four headings are repeated in two parts: the first focuses on what exists now, and the second attempts to suggest some solution. It is quite evident that there are more variables involved to shape the outcome_ like environment, and educational policy_ but I believe that these four factors are enough to give us a clear picture of the present state of EAP in Iran.

A close look at what is going on in EFL classes in Iran will reveal that despite the introduction of new notions, methods, and strategies which have revitalized the field of second and foreign language teaching, Iranian teachers are still sticking to traditional approaches which concentrate on teaching components of language, i.e. grammar vocabulary,

and pronunciation (Shin, M. 1999:20). This way of teaching reading comprehension has not been able to train mature, effective readers. Thus, the present study intends to prepare EAP students to be more efficient readers by giving them practice in reading comprehension skills through instruction on reading strategies.

If we contrast the reading theories of pre 1960 that were developed during the period of behaviorism, with those of post 1965, it would be easier to conceptualize the question of reading. The pre-1960 period of behaviorism treated the printed words as the stimuli to which a reader should give an appropriate response, i.e., word recognition. Behaviorism viewed reading as a passive act of simply decoding the text, and the reader was just to decipher the meaning which resided in the text. During the behaviorism period, because the emphasis was directly on observable events, little attempt was made to explain what went on within the mind that allowed the readers to make sense of the printed page (Carrell, L.P. et al. 2002).

Goodman's (1967) revolution of reading opened up new horizons and thus the post – 1965 period of cognitive psychology began. Reading models developed from passive to active, interactive, and compensatory interactive ones; attention turned away from product and comprehension to the process of comprehending; rote learning gave place to cognitive, metacognitive and socio-affective learning; and finally mere linguistic focus on reading turned to a more demanding socio-psycholinguistic one. Thus after 1965, with the emergence of cognitive psychology the models began to show the role of the mind and memory in reading. Even during this current model, in which cognitive psychology dominates so much thinking about reading, we can see how thinking processes have influenced the models of human information processing.

Schema theory of as early as Bartlett (1932) and the following schema-theoretic focus on reading. Ortony and Rumelhart (1979-1980) and others shed new light on the reading models. Content schemas, the background knowledge relative to the content domain of a text,

as well as formal schema, the knowledge relative to the formal, rhetorical, and organizational structures of texts were highly insightful. Similarly Casanave (1988) introduced a third type of schema, the strategy schema, in an attempt to expand the view of schema theory and explain the interaction of the reader and the text. And thus Casanave's idea integrates the three types of schemata—content, formal, and strategy schema.

With reference to the purpose of the present study, it should be noted that in the past language teachers typically gave students very little assistance with reading other than teaching them grammar and vocabulary. But now the importance of reading has changed the approach adopted by many language teachers and researchers. Shin (1999) states that “traditional English language programs in Asian countries regard reading and writing as means of language study more than as means for obtaining information and communicating a ideas. Learners who are taught English in this way typically develop habits of reading English texts word by word, looking at reading as a way of learning new words and grammatical structure rather than as a way of accessing information” (p. 20). There are so many research studies conducted on reading and its different aspects. One part of this effort has been to find the ways through which readers could be helped to get more and more information from a text.

Parallel to Shin's (1999) ideas, a close look at what is going in EAP classes in Iran reveals that despite of introduction of many new methods in second and foreign language teaching, traditional language programs are taught by teachers. Learners who are taught English in this way will not be able readers in obtaining information and communicating ideas.

On the other hand, a consideration of Iranian EAP students' reading comprehension ability indicates that in spite of the fact that they study English during guidance school, high school, and even university, their reading comprehension ability is not satisfactory. In Iran

most EAP students have problems in reading English subjects. According to the present study one of the basic reasons is students' unfamiliarity with reading strategies in order to become more efficient readers. In fact most of them fail to learn to read adequately in English, and very frequently they seem to read with less understanding than we expect them to. So there is a large population who suffer from this problem. It seems that the methods used in teaching of Iranian EAP students have not been effective in developing the learners' capacity of using language outside the learning context.

According to Brown (1994) strategies can be defined as specific methods of approaching a problem or task, models of operation for achieving a particular end and planned designs for controlling and manipulating information. Also Brow et el. (1996) state that strategic efficiency in reading distinguishes good readers from poor readers. As indicated by Nolan, teaching students to become more strategic when they read increases their understanding of important information, as well as their motivation.

While some studies have been carried out on reading comprehension and the use of reading strategies, none of them have investigated the impact of selected reading strategies of good readers in L1 and L2. The present study is an attempt to shed some light on this issue and to show that the teaching of reading strategies to language learners will help them to assist their learning process. Teaching reading strategies, especially at the university level, will enable students to be familiar with the techniques for reading, and this familiarity would probably increase their success in comprehending texts.

1.1. Statement of the Problem

Learners of a second or foreign language may rarely find chances to communicate with native speakers orally, but they can read different texts in different subjects with varying degrees of detail and difficulty. In the contemporary world, scientific findings are written in

the form of printed pages. So, the need for reading and extracting information from these texts seems to be vital. As stated by Bernhardt (1991), the ability to read is the most stable and durable of the second language modalities. Rivers (1981) propounds that reading is the most important activity in any language class, not only as a source of information and a pleasurable activity, but also as a means of consolidating and extending one's knowledge of the language (p. 259). Strevens (1977) also emphasizes the great importance of reading to the learners for two reasons. The first one is that the reading skill provides the learners with access to great quantity of further experience of the language. The second one is presenting a window onto the normal means of continuing the learners' personal education and obtaining information by reading skill. As mentioned before the focus of this thesis is on reading for learning since EAP students usually read material for a learning purpose. Through reading, the learners would be able to develop a sufficient language base that enables them to produce the spoken or written messages which they are eager to communicate to others. Chastain (1988) believes that "without this knowledge, students are not likely to be successful in the typical language class in which all four language skills are stressed" (p. 218).

To recreate the writer's message, the application of a number of reading comprehension models seems to be essential for any reader. According to Aebersold, J.A. & Field, M.L. (2001) the concepts of top-down and bottom-up processing as strategic models of reading comprehension have always been the focus of researchers for many years. The top-down model includes skimming, scanning, activating background knowledge, predicting, identifying the author's main idea, finding clues, contextual guessing, and associating image which have specified this model/processing as "conceptually driven." Bottom-up processing, on the other hand, mainly stresses on literal comprehension, surface meaning, translation into L₁, the use of a dictionary, and being familiar with processes of word formation, because of which this model is considered a "data- driven" (Madden & Nebes 1980, Dubin & Bycina

1991, Carrell 1991, Stanovich 1980, Chastain 1988). For Hayash (1999), most students in an EFL setting are apt to focus on bottom-up processing particularly at an early stage of learning while the need for engaging in top-down processing is not viewed seriously by these learners.

Many researchers emphasize the efficiency of reading strategies for improving students' performance on comprehension. According to Brown (1994), more proficient readers find their own way, taking charge of their learning and use various types of strategies effectively whereas others do not use strategies effectively even though they are taught how to do so. Various other students in the area of reading strategies have found that younger and less proficient students use fewer strategies and use them less effectively in their reading comprehension (Garner 1987, Waxman & Padron 1987).

Furthermore, Block suggested that successful readers are those who are able to monitor their comprehension better than poor readers, that they are more aware of the strategies they use than are poor readers and that they use strategies more flexibly. Especially good readers adjust their strategies to the type of the text they are reading and to the purpose for which they are reading.

Recent researches on comprehension strategies have also shown that less proficient students use fewer strategies and use them less effectively in their reading comprehension. Students who monitor their reading comprehension, adjust their reading rules, consider their objectives, and so on, tend to be efficient readers.

From the findings of research in reading strategies, it becomes clear that there are indeed differences between successful or good readers and poor readers in terms of strategy use. There is also a strong relationship between reading strategies used by readers and proficiency level. Overall, successful readers or highly proficient readers, appear to be using a wide range of strategies. Moreover, these readers also appear to use strategies more frequently than less successful readers. These differences will be discussed in great detail chapter four.

In spite of the importance of reading skills, some language teachers neglect it in their reading process. For them reading means the natural transfer of the oral speech on printed pages. They also think that because the students have practiced the reading skill in their native language, it is not difficult in another language (Chastain, 1988). But now teachers know that the spoken and written forms of the language are different from each other qualitatively. Language teachers try to find the process involved in the reading of a written text, and help their students develop habits of reading and provide guidance for them.

The purpose of the present study was to investigate whether the instruction of reading strategies would improve reading comprehension more than instruction in the use of language forms and vocabulary in developing the reading comprehension ability of the Iranian EAP students at the intermediate level. The present study relies on Casanave's (1988) expanded view of schema theory, the strategy schema, Goodman's (1971) language transfer hypothesis, and Clarke's (1980) idea of "short-circuit" or language ceiling hypothesis in ESL or EFL reading.

1.2. Significance of the Problem

Before explaining the significant importance of the reading comprehension ability, it is necessary to mention that English is now considered by many researchers to be an international language (Mckay, 2002). In the expanding circle (Kachru, 1992) countries like Iran, where English is mainly used for academic purposes, EAP plays a highly important role. Additionally, in Iran, after Islamic revolution, in an effort to defy westernization of the country, there has been a strong tendency to teach a variety of English that can somehow be taught / learned as a value-free system. It is believed that in EAP, the teaching of language can be separate from the dominant culture attached to it. Therefore, EAP has increasingly expanded so that currently it forms a considerable part of the curricula for all academic fields

at university. Now I want to turn to the main point, i.e., the importance of reading comprehension.

Reading is probably the most commonly needed skill in EAP (English for Academic Purposes) worldwide, not only to obtain information but also as an enjoyable activity. Of course, reading should lead to comprehension; otherwise, it will not result in obtaining information. To read with comprehension, the reader should gather information through certain processes. In other words, comprehension calls for deriving meaning from the printed materials. To derive meaning from the passage, the reader should first extract the meaning of words, expressions, phrases, and sentences. According to Rivers (1981) “reading is the most important activity in any language class, not only as a source of information and a pleasure activity but also as a means of consolidating and extending one’s knowledge of language”. And finally as Joseph Addison stated “reading is to the mind what exercise is to the body” (p.1). Available at: <http://www.mindquestacademy.org.effectivereading/INTRO.html>.

In many parts of the world a reading knowledge of a foreign language is often important for academic studies and personal development. The overwhelming majority of societies and countries around the world are multilingual, and educated citizens are expected to function well in more than one language. L2 reading ability, particularly in English, which is a global language and also the language of science, technology and advanced research, is considered very important in the area of academic studies. Furthermore, many people in multilingual settings need to read in an L2 at reasonably high levels of proficiency to achieve personal, occupational and professional goals. In modern life, learning depends largely on one’s ability to interpret the printed page precisely and fully. In day-to-day life people encounter material for reading either in their first language or a foreign language. In such a scenario, knowledge of the language in which the material is written is imperative. Hence the ability to read for various purposes at different times in one’s life is paramount for every individual.

Furthermore along with the very important skills of managing time and making efficient notes at university is the task of reading. As students make the transition to university learning, changes in the way they should structure their time are apparent. For them at university there is much to do and they may quickly realize that they must take on the responsibility for structuring study and leisure times to be effective. With these points in mind we can conclude that as one enters university, reading takes on a central role as part of the approach to learning. It is very important to read independently and effectively to learn significant portions of a course of study. Here familiarity with reading strategies will play an active role in learning the different materials at university.

The importance of reading is now widely accepted. Reading is a basic skill through which students at a higher level can learn great quantities of authentic material for communicative purposes. They can also increase their knowledge and understanding of the culture of the speakers of the second language, its people, their ways of thinking, their literature, and their past and present civilizations (Rivers, 1981). The students can obtain all types of materials such as advertisement, newspaper, magazines, scientific and technical journals, and books written in the language they are learning and they can read them in the privacy of their home. Learning how to read increases the power of learning materials rapidly. It may be true enough that people learn to read by reading and that good readers are people who read a lot. Many ESL or EFL students need to be introduced to a variety of self-help strategies which can aid them with the purpose of learning new subjects by reading. Strategies instruction helps to improve comprehension as well as efficiency in reading. By using strategies, students will improve their reading ability and will be better readers. This learning through reading is often less understood by EAP students, particularly if memorization of texts is the key activity in the educational process. All of the above mentioned activities can be done by teaching appropriate reading strategies to students.

Researchers have suggested that teaching readers to use strategies should be a prime consideration in the reading classroom (Pressley & EL-Dinary, 1992). The significance of strategy training is that it equips students with problem-solving abilities which they can apply whenever they encounter reading difficulties. It promotes learner autonomy, and enables students to take responsibility for their own learning even when they are no longer in a formal classroom setting.

This study has particular relevance to the methodology of teaching English. Obviously, one of the developments in the methodology of English teaching has been an increased concern for the problems of learners in reading their own English book and higher educational materials. It is very common to come across EFL students who have passed elementary, intermediate, and advanced courses in English reading comprehension but are still unable to comprehend the total meaning of a text properly, even when they know all the words and sentences the text contains.

Therefore, it seems that a reconsideration of the methodology of teaching English reading comprehension in Iranian universities is indispensable.

1.3. Reading in EAP and L2 Classrooms

According to Dudley-Evan et al. (1998) EAP refers to any English teaching that relates to a study purpose. Students whose first language is not English may need help with both the language of academic disciplines and the specific 'study skills' required of them during their academic course. EAP has sometimes been seen as one movement within ESP. According to Dudley-Evan et al. (1998) there are four types of EAP situations:

1. An English speaking country, such as UK or U.S.A
2. An ESL situation where English is the formal language of education and is widely spoken such as Singapore, Philippines

3. A situation in which certain subjects such as medicine are formally taught in English while for other subjects and at other levels of education the national language is used, such as in Jordan in the Middle East.
4. A situation where all subject courses are taught in the national language, but English may be important for ancillary reasons such as my own country (Iran).

Therefore as students enter university, reading takes on a central role in their learning. When EAP students read a material it is for a purpose. Different reading strategies will be used based on the reading purposes. It should be mentioned that most of the students read for the purpose of learning and obtaining information. But most students in Iran (which is the population that my study focuses on) fail to learn to read adequately in English language because they are not familiar with reading strategies and moreover some of them need help both in language and reading strategies. The researcher hopes the results of the present study will help them to remove their reading problems (Grabe, W. & Stoller, F. 2002: p.12-3).

1.4. Research Questions and Hypotheses

The following research questions provide the focus for the study:

1. Is there a statistically significant difference between the reading comprehension ability of the EAP students who receive reading strategies instruction beforehand, and those who do not?
2. Is there any relationship between reading strategies instruction and the improvement of general English reading ability of successful readers?
3. Is there any relationship between reading strategies instruction and the improvement of general English reading ability of unsuccessful readers?

Based on the above research questions the following three null hypotheses are suggested:

1. Instruction in reading strategies has no significant impact on improving the general English reading ability of Iranian EAP students.
2. Teaching reading strategies to able/successful readers has no significant impact on their reading comprehension ability.
3. Instruction in reading strategies to poor/unsuccessful readers has no significant impact on their reading comprehension ability.

1.5. Definition of Important Terms

In this section I will attempt to explain the key concepts and theories underlying my study based on a review of the existing literature.

1.5.1. Reading

According to the Longman Dictionary (1992) reading is defined as perceiving a written text in order to understand its content. This can be done silently (**silent reading**), or by reading a written text aloud (**oral reading**).

From a psycholinguistic viewpoint, reading is a problem-solving activity involving the reader in the process of deriving and assigning meaning. Goodman (1967) defined reading as a psycholinguistic guessing game in which the reader reconstructs, as best as he/she can, the message encoded by a writer as a graphic display. According to him the act of meaning construction is an ongoing cyclical process of sampling from the input text, predicting, testing, confirming, or revising those predictions, and sampling further.

According to Mitchell (1982) reading can be defined loosely as the ability to make sense of written or printed symbols. Just and Carpenter (1987: p.31) define reading as “a complex cognitive skill, consisting of a collection of psychological processes that together produce an understanding of a text.”

According to Rumelhart (1980) and Bartlett (1932) comprehension of a text is an interactive process between the reader's background knowledge and the text. Parallel to this Rumelhart (1977) stated that reading involves the reader, the text, and interaction between reader and text. Finally Richard J.C. stated that reading is what happens when people look at a text and assign meaning to the written symbols in the text.

1.5.2. Reading Purposes

When people read, they read for a purpose. How we read and the strategies we use when reading are also determined by the purpose of reading. Reading purposes can be classified as follows:

- **Reading for survival:** Reading is necessary to perform daily tasks. For example, reading instructions in order to learn how an appliance works, or how to fill out a form; reading the dosage given on the label for medicines or signs on a road while driving.
- **Reading for pleasure:** We read a novel, a short story, or a newspaper article for entertainment; we also often need to read in order to solve a puzzle, or carry out some other activity which is pleasant and amusing.
- **Reading for learning:** Reading to learn typically occurs in academic and professional contexts in which a person needs to learn considerable amount of information from a text.

The focus of this thesis will be on reading for learning since EAP students usually read material for a learning purpose. It is obvious that all students may have different purposes in their reading; these will include:

- to obtain information
- to understand ideas or theories

- to discover an author's viewpoint
- to seek evidence for their own point of view and quote it in their essays

1.5.3. Reading Theories

Various researchers have tried to explain the process of reading through the use of theories and models. In fact many researchers attempt to create a general understanding of the reading comprehension process by means of a reasonable framework. So we often read about **general models of reading**. General models of reading serve useful purposes, most commonly by providing a metaphorical interpretation of the many processes involved in reading comprehension (cf. Grabe, 1999, 2000; Urquhart and Weir, 1998). Before classifying reading models it is useful to understand the characteristics of a good model. According to Carrell, P. Devine, J. and Eskey, D. (2002: p.24) a good model has some important characteristics. The most important of them are it can

1. summarize the past,
2. help us to understand the present, and
- 3- predict the future.

1.5.4. Types of Reading Theories

According to Aebersold, J.A. & Field, M.L. (2001: p.18) there are three main reading models.

1.5.4.1. Bottom-up Theory

This theory states that readers construct the text from the smallest units, for example from letters to words and from words to phrases and finally from phrases to sentences and so on. The process of constructing the text from these small units becomes so automatic that readers are not aware of how it operates. Decoding is an earlier term for this process.

1.5.4.2. Top-down Theory

This theory argues that readers bring a great deal of prior acquired knowledge, assumptions, beliefs, and questions to the text. They read the given text and continue to read until the text confirms their expectations. The top-down school of reading theory argues that readers fit the text knowledge (cultural, syntactic, linguistic, and historical) to the knowledge they already possess, and then check back when new or unexpected information appears. So, these models start with hypotheses and predictions and attempt to verify them by working down to the printed stimuli.

1.5.4.3. The Interactive School of Theorists

These researchers believe that both bottoms-up and top-down processes occur either alternately or at the same time. These theorists describe a process that moves both bottom-up and top-down, depending on the type of text as well as on the reader's background knowledge, language proficiency level, motivation, strategy use, and culturally shaped beliefs about reading. Reading teachers need to develop the ability to analyze bottom-up and top-down components of the reading process.

This study relies on Casanave's (1988) expanded view of schema theory, the strategy schema. According to Longman Dictionary (1992) schema is the underlying structure which accounts for the organization of a text or discourse. According to Rumelhart (1984), schema is a unit of knowledge or data structure for expressing the generic concepts stored in memory. There are three kinds of schemata: content schema, formal schema, and strategy schema.

Our understanding of schema theory today began with Bartlett's (1932) studies of memory. According to this theory the text doesn't carry the meaning by itself; rather it only provides directions for readers as to how they should retrieve or construct meaning from their

own previously acquired knowledge. This previously acquired knowledge according to Bartlett (1932), Adam & Collin (1979), and Rumelhart (1980) is called the reader's background knowledge or schema. According to this reading theory, comprehending a text is an interactive process between the reader's background knowledge and the text.

1.5.5. Factors that Affect the Process of Reading

While the various models try to explain and describe the reading process, the actual reading process may not exactly conform to any one reading model because reading is also influenced by several factors. Regarding the purpose of this study some of these factors are as follows:

- Language proficiency in the L2: The level of reading proficiency that a reader has in the L2 also appears to be a factor in the development of L2/F reading skills. Regarding the relationship between L1 and L2 reading, Goodman (1971) raised the **Linguistic Independence Hypothesis or Language Transfer Hypothesis**, which claims that L1 reading ability can transfer to L2 reading situation. Royer and Carlo (1991) conclude that there is a transfer of reading skills from the L1 to an L2 and that teaching reading skills in the native language may facilitate the transfer.
- Language proficiency in an L2/FL: L2 language proficiency is another strong factor in L2 reading. Clarke argued that weakness in L2 language competence can "short-circuit" reading performance. He believed that there must be a basic level of L2 proficiency for the reading of any text.

Casanave's (1988) expanded view of schema theory, the strategy schema, Goodman's (1971) language transfer hypothesis, and Clarke's idea of short-circuit or language ceiling hypothesis in ESL or EFL are the central focus in this study.

1.5.6. Reading Strategies

A strategy is the mental representation of actions and consequences of actions that guide a behavior toward a goal. In general, the reading strategies are operations or procedures performed by a reader to achieve the goal of comprehension (Kern 1989). According to Richard (1992) strategies can make learning more efficient and effective.

According to different authors, there are many classifications for reading strategies. For example Carrell et al. (1989) divided reading strategies as follows.

- **Global strategies:** These are strategies having to do with general understanding of the text.
- **Local strategies:** These are strategies having to do with understanding details of the text which require the reader to pay attention such as, sound-letter correspondence, word meaning, and sentence syntax.
- **Cognitive strategies:** In 1967 K. Goodman revolutionized the study of reading when he proposed that reading is a “psycholinguistic guessing game”. According to the definition presented by Goodman, reading is a process in which readers sample the text, make hypotheses, and so forth. Here the reader rather than the text is at the heart of the reading process.
- **Metacognitive strategies:** Metacognition is thinking about what one doing while reading is. It is simply defined as cognition about cognition or thinking about thinking.

For the purposes of my study, reading strategies instruction will be provided in three stages:

- a) Before reading (pre-reading)
- b) During reading (while reading)
- c) After reading (post reading)

1.5.7. Schema

According to Longman Dictionary (1992) schema is the underlying structure which accounts for the organization of a text or discourse. According to Rumelhart (1984), schema is a unit of knowledge or data structure for expressing the generic concepts stored in memory. There are three kinds of schemata:

1. Content schema: It refers to the background knowledge relative to the content domain of a given text.
2. Formal schema: It is the knowledge related to formal, rhetorical and organizational structure of texts.
3. Strategy schema: It is the background knowledge of a set of skills and strategies which direct a behavior toward a certain goal. Fluent, flexible, and appropriate use of these strategies is the characteristic of good readers whereas rigid or inappropriate use tends to characterize poor readers (Casanave, 1988).

1.5.8. Language Transfer Hypothesis (Linguistic Independence Hypothesis)

According to Grabe et al. (2002) transfer refers to the idea that L2 readers will use their L1 knowledge and experiences to help them to improve in their L2 reading. Regarding the reading process, transfer applies to a variety of language knowledge bases and cognitive abilities. Transfer can occur in many aspects of language for example with phonological knowledge, topical knowledge, general background knowledge, problem solving strategies and also inferencing skills. It is also desirable that they transfer prior experiences to L2 reading comprehension including academic tasks or EAP purposes. It should be mentioned that sometimes transfer supports reading tasks (positive transfer) but sometimes it interferes with successful task completion. This hypothesis has other names such as 'linguistic independence hypothesis' and also 'the reading universal hypothesis'.

According to Longman Dictionary (1992) transfer is defined in this way. “The carrying over of learned behavior from one situation to another.” There are two kinds of transfer. Positive transfer is learning in one situation which helps or facilitates learning in another later situation. According to Yamashita, J. (2002b) strategies transfer is considered one of the positive transfers. Negative transfer is learning in one situation which interferes with learning in another later situation.

1.5.9. Short-circuit Hypothesis

This refers to the notion of a foreign or second language threshold or language ceiling in which a limited control over language impedes the good reader’s system, and thus the transfer of reading abilities of L1 to L2 situation is short-circuited (Taillerfer, 1996).

In 1979 Clarke first introduced the notion of a foreign or second language threshold or limited control over the language which short-circuits transfer of reading abilities acquired in the native language to L2 reading. In line with Clarke, Alderson (1984) argued that poor foreign language reading is due to teaching strategies in the first language not being employed in the foreign language due to inadequate knowledge of the foreign language.

1.6. Strategy Training

In recent years, a great deal of research in L1 and L2 fields has been conducted on reading strategy training. Strategy training comes from the assumption that success in learning mainly depends on appropriate strategy use and that successful learners can improve their learning by being trained to use effective strategies (Dansereau, 1985; Weinstein & Underwood, 1985). Many studies have shown that reading strategies can be taught to students, and when taught, strategies help students to improve their reading ability. Training is the use

of learning strategies in order to improve a learner's effectiveness. A number of approaches to strategy training are used, and the most important of them are presented as follows.

- **Explicit training:** Learners are given information about the definition, value, and purpose of particular strategies, taught how to use them, and how to monitor their own use of the strategies. In the present study the selected strategies are taught in this way.
- **Embedded strategy training:** The strategies to be taught are not taught explicitly but are embedded in the regular content of an academic subject area, such as reading, math or science.
- **Combination strategy training:** Explicit strategy training is followed by embedded training.

In the present study the researcher extracted the strategies of able / successful readers of Iranian EAP students in L1 and L2 through a questionnaire and 14 reading strategies were chosen with respect to the students' obtained marks i.e., number of users. The questionnaire was modeled and modified out of the following resources: Auerbach and Paxton (1997); Kanar (1991); Anderson (1991); Carrell (1989); and O'Neil and Quazi (1981). The most important reading strategies including pre-reading, during-reading and post-reading strategies were included in the questionnaire and the students were asked to read the questionnaire very carefully and choose the best answers based on their experiences. The questionnaire consisted of 40 multiple-choice items in English language, and 20 multiple-choice items in their own language, i.e., Persian. The students received marks for good strategies, and no marks were obtained for poor reading habits. And thus the reading-strategies questionnaire could indicate the students' familiarity and/or unfamiliarity with reading strategies. Reading strategies were selected based on the number of students who indicated that they used in the questionnaire. The selected reading strategies in L1 and L2 were taught to students in one semester which is 15 sessions. The process of instruction and also the number of selected strategies with respect to their importance is presented as follows:

1. Giving the definition of the reading strategy
2. Providing texts for each strategy and related exercises from students' textbook

Since the selected reading strategies were in Persian and English languages and most of the selected reading strategies in Persian language were in fact the translation of English ones, the definitions of them were presented simultaneously. The Persian reading strategies that were different were also defined separately. The selected reading strategies are as presented in the following list.

Selected Reading Strategies

<i>Reading Strategies</i>	<i>No. of users</i>
1. How to use a dictionary	26
2. Scanning the article to locate particular information	22
3. Being familiar with affixation	21
4. Skimming for the general idea	21
5. 4. Previewing the text	21
6. Note – taking	20
7. Guessing the meaning of a word from the lexical, grammatical, and also the semantic relationship	20
8. Distinguishing main ideas from minor ideas	19
9. Knowing how to outline	17
10. Underlining and highlighting	17
11. Reviewing notes, glosses and text marking	17
12. Skipping unknown words	13
13. Guessing the meaning of unknown words through a knowledge of derivation, synonyms, antonyms, etc.	12
14. Connecting background knowledge to the information in the text	11
15. using the dictionary as a last resort	6
16. Activating background knowledge	5
17. Recognizing enumeration	5
18. Rereading the text to remedy comprehension failures	5
19. Continuing reading	5
20. Reading concluding paragraph, if present, very care fully	5

1.7. Definitions of the Selected Strategies

Explanations and definitions of reading strategies are taken from the following resources: Minoo,V. & Hossein,F. & Parviz,M. (1999); Richards,J.C. Plat,J. & Plat,H. (1992); Grabe,W. & Stoller, F.(2002); Carrell, et al. (2002); Aebersold,J.A. & Field,L.M. (2001).

1.7.1. Using a Dictionary

A dictionary is a book which contains information about words. It is one of the most frequently-used books by those who are interested in languages in general, and by those who are interested in English in particular. Dictionaries are used to help students to locate the meaning of words. Students should try to figure out meanings of words from the context in which they are used. To guess the meaning of words, understanding the structure of the word -stem, suffixes, prefixes- and knowing derivations can be helpful. If neither proves fruitful, the student is advised to consult a dictionary.

Dictionaries provide different types of information about a given word. These pieces of information include spelling, syllable division, pronunciation, part of speech, meaning, etymology, and the related words. To use a dictionary effectively, students should master certain skills. In the first session, these skills were taught to students.

Given below is an exercise used for such training.

Reading skills exercises

Look up each of the following words in a **dictionary** and copy its meaning, pronunciation, parts of speech, and etymology in the spaces provided in the following page.

Word	Meaning	Pronunciation	Parts of Speech	Etymology
Magazine				
Orange				
Shampoo				
Bazaar				
Algebra				
Samovar				
Pyjamas				
Outlaw				

1.7.2. Scanning

It is the ability to locate specific information or fact as rapidly as possible. Generally speaking, when a person scans for particular information the person knows what he/she is looking for before he/she begins (Royce 1977). A few different occasions in which scanning come handy to a reader are:

1. Looking for a friend's telephone number in the phone book
2. Looking for the timings of a particular program on a specific channel on T.V.
3. looking for a particular title in the library catalogue, or a word in an article or in a dictionary
4. Looking for a particular date, such as when someone was born

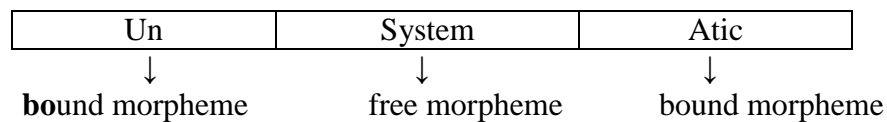
According to the Longman Dictionary **scanning** is a type of speed reading technique which is used when the reader wants to locate a particular piece of information without necessarily understanding the rest of a text or passage. For example, the reader may read through a chapter of a book as rapidly as possible in order to find out information about a particular date, such as when someone died.

Given below is an exercise used for such training.

Morphemes

A morpheme is the smallest meaningful unit of language. Words are formed from one or more morphemes. For example, the word “improvement” consists of three morphemes: “im”, “prove”, and “-ment”. We know that “prove” can be used by itself, but “im” or “ment” cannot be used by themselves; they should be attached to those morphemes that can be used alone. Therefore, morphemes are divided into two categories: free morphemes and bound morphemes. Free morphemes can have meanings in isolation and can stand by themselves. Bound morphemes, on the other hand, cannot stand by themselves. They have to be added to free morphemes to form new words.

Consider the word “unsystematic” which has three morphemes:



The word “system” is a free morpheme because it can be used in isolation. However, “un” and “atic” cannot stand alone. They are bound morphemes.

A. Read each statement carefully and decide whether it is true or false. Write “T” for true statements and “F” for false statements in the space provided.

-1. Words carry specific meanings in isolation.
-2. Words and free morphemes are exactly the same.
-3. Free morphemes can stand alone.
-4. Bound morphemes are not meaningful in isolation.
-5. A word may consist of different morphemes.
-6. Words often derive their exact meanings from the context in which they are used.

B. Circle a, b, c, or d whichever best completes each of the following items.

- 1. Words have different meanings when they are used..... .**
 - a. in isolation
 - b. in contexts
 - c. out of a sentence
 - d. out of a paragraph

2. **A morpheme is**
 - a. a specific unit of language
 - b. the smallest unit of language
 - c. a minimal meaningful unit of language
 - d. the most important unit of language

3. **Free morpheme can be.....**
 - a. a text
 - b. a word
 - c. a context
 - d. a paragraph

4. **A free morpheme is a morpheme that**
 - a. can stand by itself
 - b. cannot be used in isolation
 - c. can be composed of other free morphemes
 - d. cannot derive meaning from bound morphemes

5. **A bound morpheme is a morpheme that**
 - a. can be used by itself
 - b. can be meaningful in isolation
 - c. can be attached to a free morpheme
 - d. can be composed of other words

1.7.3. Being Familiar with Affixation

Words are formed in different ways. One of the methods of forming words is adding bound morphemes to the beginning or to the end of free morphemes. This type of word formation is called affixation. To understand affixation, one should become familiar with some terms such as base and affix. Base is the free morpheme in a word which carries the principal meaning. There are two kinds of bases. The first kind includes bases. These bases have meanings in isolation. The second kind includes bases which are added to bound bases or to the other free bases to make new words. An affix is a bound morpheme which is attached to the beginning or to the end of a base or a word to make new derivations. In English there are two kinds of affixes, namely prefixes and suffixes. Prefixes are attached to the beginning and suffixes are added to the end of the base. It is necessary to mention that there are different kinds of prefixes and suffixes. The prefixes are divided into groups relating

to negation, number, location and direction. Regarding suffixes, there are two kinds of suffixes: inflectional suffixes and derivational suffixes. The process of affixation and different categories of prefixes and suffixes were explained in details for experimental groups in the classroom.

Given below is an exercise used for such training.

Exercises: Underline the affixes in the following words.

- | | | | |
|------------------|-------|---------------|-------|
| 1. uncomfortable | ..... | 6. prefixes | ..... |
| 2. clarify | ..... | 7. unlawfully | ..... |
| 3. dishonest | ..... | 8. ensure | ..... |
| 4. prearranged | ..... | 9. properly | ..... |
| 5. information | ..... | 10. equipment | ..... |

1.7.4. Skimming

Skimming is defined as the ability to identify main ideas while very rapidly and selectively skipping over the reading material. It is a technique used to find out how a news story, magazine article, or text book chapter is organized and what it is about without having to read the entire selection (Royce 1977). In other words, skimming amounts to finding out the gist or summary of a particular text quickly. This skill is much more sophisticated than Scanning and here ideas rule over facts. Only when a student finds the theme-which is identified by skimming-of an article interesting, will he/she start reading it closely for pleasure.

Furthermore according to Longman Dictionary skimming or skim-reading is a type of rapid reading which is used when the reader wants to get the main idea or ideas from a passage. For example a reader may skim-read a chapter to find out if the writer approves or disapproves of something.

Given below is an exercise used for providing instruction in skimming.

Read the following paragraphs and then circle a,b,c, or d whichever best completes each item.

Paragraph one

Our teacher opened the book and read the lesson. I was surprised to see how well I understood it. All he said seemed too easy to me. I think, too, that I had never before listened to him so carefully and that he had never before explained everything with so much patience. It seemed almost as if the poor man wanted to give us all he knew before going away. It also seemed that he wanted to put all he knew into our heads in that one hour.

- a. our teacher opened the book
- b. the student studied very carefully
- c. the teacher explained the lesson
- d. the student listened very carefully

The central idea of the paragraph is.....

Paragraph two

When I was a boy of fourteen, I thought my father was very ignorant. I could hardly tolerate having the old man around. But when I got to be twenty-one, I was astonished that he had learned a lot in seven years and that he had become so young.

The central idea of the paragraph is

- a. the father was very ignorant
- b. the boy could not tolerate the father
- c. the boy had learned a lot during all those years
- d. the father had learned a lot during all those years

Paragraph three

Mohammad liked to spend his free time taking things apart to see what made them work. He had a collection of old clocks and watches and various automobile parts scattered around the basement. He was especially fond of taking old car engines apart.

Mohammad probably was

- a. careful
- b. nervous
- c. curious
- d. special

1.7.5. Previewing the Text

It is one of most important skill of pre-reading stage. In this skill students look at the title, pictures, caption under pictures, headings, bold-faced print and other graphics.

Previewing a text mentally prepares a student to receive information from reading material. For fiction, it involves looking at the cover and title, reading the blurbs on the back, considering the author and his/her style and predicting, in a general way, what the story may be about. For non-fiction, it includes discussion of the topic, review of prior knowledge, and the generation of possible questions that may be answered through reading.

During the preview stage, discussion for fiction should center on whether the students think the story will be realistic fiction or fantasy and why, who the characters may be and how they will interact, etc.

Discussion of non-fiction should center on what students already know about a topic, what they'd like to know, and the structure of the book or article (titles, subtitles, illustrations, charts, etc.) and what information may be included. Teachers raise the attention level of students as they approach informational text by activating their prior knowledge and setting the stage for them to receive and incorporate new information into their understanding.

Given below is an exercise used for such training.

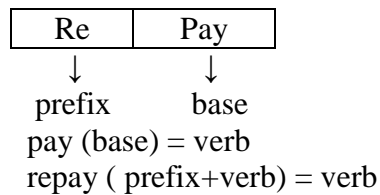
Read the following passage and answer the questions.

Prefixes

Prefixes are bound morphemes which come before the base. Although they are meaningful units, they cannot be used alone. They are attached to bases to give different meanings to the bases.

Prefixes do not often change the part of speech of the base; however, they change the meaning of the word they are attached to. For example, the word “unhappy” consists of the prefix “un-“and the base “happy”. The base “happy” is an adjective, and the word “unhappy” is also an adjective. Thus the part of speech has not been changed. The meaning of the word, however, is changed. The meaning of “unhappy” is just the opposite of “happy”.

As another example, the word “pay” is a verb and “repay” is also a verb. This means that the prefix “re-“has not changed the part of speech; it has only changed the meaning of the verb.



There is an exception to this rule; the prefixes “en-” , “em-”, and “im-” usually change adjectives or nouns into verbs.

Enlist	en + list (noun) = enlist (verb)
enlarge	en + large (adjective) = enlarge (verb)
embody	em + body (noun) = embody(verb)
ensure	en + sure(adjective) = ensure (verb)

There are different kinds of prefixes with different meanings. Due to the variety of prefixes, an attempt is made to divide the prefixes into groups referring to the same area of meaning. For example, prefixes are divided into groups relating to negation, number, and location and direction.

Comprehension Exercises

A. Read each statement carefully and decide whether it is true or false. Write “T” for true statements and “F” for false statements.

- 1. Prefixes come after the morphemes.
- 2. Prefixes do not usually change the part of speech.
- 3. Prefixes are attached to bases and change their meanings.
- 4. Prefixes are not meaningful in isolation.
- 5. The prefixes “en-”, “em-”, and “im-” usually change the part of speech.

B. Circle a, b, c, or d which best completes each of the following items.

1. Prefixes are those bound morphemes which

- a. come before the stem
- b. are attached to the end of the root
- c. are added to one part of a word
- d. from the stem of a word

2. Prefixes should be used

- a. in words
- b. after stems
- c. before bases
- d. in isolation

3. Prefixes are attached to

- a. bound morphemes
- b. suffixes
- c. other affixes
- d. bases

4. Prefixes are added to bases

- a. to give different meanings to the bases
- b. to change the stem of the words
- c. to form parts of a unit
- d. to change their parts of speech

5. The prefixes “en-”, “em-”, and “im-” change

- a. the part of speech of the word
- b. the different parts of the word
- c. the morphemes in the word
- d. the order of morphemes in the word

1.7.6. Note-taking

Note-taking is one of the most important activities in which most of the EAP students are involved while reading because of the following reasons:

1. It is difficult for students to remember at later times the whole content of what he/she has read. So, it is necessary for the student to take notes his/her reading material for later use.
2. Students often listen to lectures on different topics given by their professors. To remember the content of these lectures, the students have to take notes.

Given below is an exercise used for such training.

Read the following passage and answer the questions.

Meaning

Probably the most important piece of information provided in a dictionary is the meaning of words. Students should keep in mind that the meaning of a word depends, to a great extent, on the context in which it is used. Since there are almost always more than one meaning for a word, dictionaries usually present all the possible meanings of a word.

To be more familiar with a dictionary, students should read the introduction to their dictionaries very carefully. In the introduction, in addition to other pieces of information, the presentation of different meanings of a word is explained. Some dictionaries arrange the meanings of a word from the most frequently to the least- frequently used ones. Others order the meanings of a word used from early times to the present. Whatever the ordering may be, students are recommended to be careful about the meanings of a given word. When you look up a word in a dictionary, it would be a mistake to get the first meaning hastily and to leave the rest of the meanings unnoticed. It is quite possible that the first meaning in the dictionary is not the one you are looking for. So, students are recommended to check different meanings of a word to locate the specific meaning appropriate to the context in which the word is used.

Comprehension Exercise

Read each statement carefully and decide whether it is true or not. Use the notes that you have taken before.

- 1. A word may have more than one meaning.
- 2. Word meanings are arranged differently in different dictionaries.
- 3. The context in which a word is used plays the most important role in determining the meaning of the word.
- 4. The first meaning of a word presented in a dictionary does not always convey the meaning of the word in that particular context.

1.7.7. Guessing Meaning of the Unfamiliar Words through Context Clues

To most intermediate, middle, high school, and college teachers, teaching **context clues** means helping students consciously identify and apply strategies to figure out the meaning of unknown words through hints in the surrounding text. These hints include pictures, syntax, text format, grammatical constructions, mood or tone, and surrounding words that provide synonym, antonym, logic, or example clues. Many of these teachers would also label the structural analysis of the unknown word itself as a context clue. Using morphemes (meaningful word parts, such as Greek and Latinates), syllabication strategies, grammatical inflections, and parts of speech also can help students figure of the meaning of unknown words. Some teachers would also include using hints outside of the text, such as prior knowledge or story schema in their definition and application of context clue strategies.

Given below is an exercise used for providing instruction in guessing meaning of the unfamiliar words through context clues.

Read the following passage and guess the meaning of unfamiliar words.

Mother Teresa

Mother Teresa was born in Skopije in what is now Yugoslavia on August 27, 1910. Her Albanian father had a small farm. At the age of twelve, when she was a student at a Roman Catholic elementary school, she knew she had a duty a duty to help the poor. She decided to get training for **missionary work** and, a few years later, made India her choice. At the age of eighteen, she left home and joined an Irish community of **nuns** with a mission in Calcutta. After a few months' training in Dublin, she was sent to India and in 1928 she became a nun.

From 1929 to 1948 Mother Teresa taught at St. Mary's High School in Cacutta. The **suffering** and poverty she observed outside **the convent** walls made a deep impression on her. In 1946, she received permission from her superiors to leave the convent school and **devote** herself to working among the poor in the **slums** of Cacutta. Although she had no money, she

started an open-air school for homeless children. Soon voluntary helpers joined her, and **financial** support came from various church organizations, as well as from the city officials. In 1950, she was permitted to start her own religious community “The Missionaries of Charity.” Its task was to care for those persons no body was prepared to look after.

Exercise: answer to the following question.

Mother Teresa started the “The Missionaries of Charity” to..... .

- a. care for helpless people
- b. support church organizations
- c. bring voluntary helpers together
- d. collect money from the city officials

1.7.8. Distinguishing Main Ideas from Minor Ideas

A fact is a general statement that can be proved universally by experimentation, observation, or research (Royce 1977). For instance the statement “The present president of India is Mrs. Prathiba Patil” is indisputable because she is the president of India recognized by Indians and the world at large. So this assumes the status of a fact. Likewise the statement, “Human beings have only one heart” is a fact since it can be verified and proved universally.

An opinion is an individuals feeling, belief, or judgement about something (Royce, 1977). “Amitabh Bachchan is the greatest movie star” is a statement that has no base to be proven correct universally. It is only an opinion since there may be many people who do not feel the same and at the same time there could be many more people who do not even know who Amitabh Bachchan is.

A reader who knows the difference between fact and opinion will be able to catch the meaning intended by the author. In extensive reading, this knowledge helps the students understand the text effectively and quickly without any distortion in the meaning of the text. True/false questions aptly suit testing the skill of differentiating opinion from fact.

1.7.9. Knowing How to Outline

An outline, in fact, shows a system through which ideas are organized. Hence, outlines and the ability to understand outlines are considered necessary for efficient reading. For example consider the following list of words:

Iran	Shiraz
Africa	Europe
India	Sweden
Ardebil	Tehran
Asia	

Obviously Iran, India, and Sweden will be kept together. The other two groups will be Africa, Asia, Europe, and Shiraz, Ardebil, and Tehran. This classification is, in fact, an outline. Three of the items in the above mentioned list are **countries**, three of them are **continents**, and the last three are **cities**.

To make an outline, the following steps are suggested:

1. The reader should discover the most important idea, which is called the major idea. Look at the following list of words.

shirts	articles of clothing
coats	dresses
shoes	hats

The item which includes all of the other items is clearly **articles of clothing**. In order to figure out the main idea, one should think of exact words which include all of the words in the list.

2. The reader should try to discover how the author develops or subdivides his major idea. This will provide the major headings of the outline. For example sometimes he will enumerate; he will talk about some reasons, or certain methods, or particular uses.

3. The reader should find out how the author has developed his major ideas and which ideas he has emphasized most.

Given below is an exercise used for such training.

Exercises: Observe the following topics.

Sports

Names

Metals

Measurements of length

instruments

animals

furniture

men's clothing

Consider the topics given in the list above. Select the best topic from the list that includes all the words in each of the following groups. Write that topic in the space provided.

1.

- a. Pants
- b. Shirts
- c. Man's jacket
- d. sweatshirt

2.

- a. Lion
- b. Tiger
- c. Cow
- d. Wolf

3.

- a. Hammer
- b. Screwdriver
- c. Hand
- d. Saw

4.

- a. Inch
- b. Foot
- c. Yard
- d. Kilometer

5.

- a. Amir
- b. David
- c. Bruce
- d. Tom

6.

- a. Copper
- b. Gold
- c. Platinum
- d. Silver

7.

- a. Bed
- b. Chair
- c. Sofa
- d. Desk

8.

- a. Swimming
- b. Wrestling
- c. Hockey
- d. Soccer

1.7.10. Underlining or Highlighting

(In reading) making the most important and key words or sections in a passage with the use of a colored pen or may underline it, making them easier to identify or remember when studying or reviewing.

Letting students as they read underline or highlight words they do not know allows teachers to find out the words their students do not know. This procedure also leaves a record of all the once unknown words for students to re-read later. It is an added advantage for teachers that it allows them to see how far into a book students have read, and whether the book is either too easy or too hard.

Selective highlighting/underlining is also used to help students organize what they have read by selecting what is important. This strategy teaches students to highlight/underline only the key words, phrases, vocabulary, and ideas that are central to understanding the reading.

1.7.11. Review Notes, Glosses, and Text Marking

Reviewing notes, glosses, and text marking is one of the activities in which most college students are involved after passing several days, weeks, months or even years. When one reads a passage, an article, or a text, it will be difficult for him/her to remember at later times the whole context of what he/she has read. Therefore, it is necessary for the student to take notes of his/her reading for later use. By later use we mean the review of notes when they are needed.

Given below is an exercise used for such training.

Read the following passage and take appropriate notes.

The ancient Greek Olympic Games lasted five days and included four different athletic contests. First, there was the “stadion” (from which we get the word stadium). This was a foot race covering a distance of about 607 ft. Second, there was the “pentathlon,” a contest in

which each contestant had to excel in five different events: foot races, jumping, wrestling, throwing the discus, and throwing the javelin. Third there was boxing. In this contest, the boxers fought with bare fists, and the match continued until one or the other was knocked out or admitted defeat. The final event included horse racing, both races with four-horse chariots and the races with the contestants riding bareback.

1.7.12. Skipping Unknown Words

Interest in the relationship between vocabulary and reading comprehension has a long history in the research of L2/FL reading. Observing the performance of FL/L2 readers, confronted with unknown vocabulary, researchers have noted the important role of vocabulary as a predictor of overall reading ability (Nation, 1990; Grabe, 1991). In fact, second/foreign language readers often cite "lack of adequate vocabulary as one of the obstacles to text comprehension" (Levine & Reves, 1990). In certain contexts, a sentence or even an entire paragraph might become incomprehensible because of the occurrence of even a small number of unknown vocabulary items. (Alderson, 1984; Koda 1989; Barnett, 1988; Coady 1991). Researchers and teachers alike argue that the best way to handle the unfamiliar words in the text is by drawing inferences from the rest of the text. If neither of the methods of guessing the meaning of words proves fruitful, the student is advised to ignore the word and skip from unknown word. Sometimes you can skip an unfamiliar word and continue your reading until finding it, think about what you understand. Then, using the context, go back and reread to try to determine the word. According to Hosenfeld (1984), readiness to guess from context is what distinguishes a good reader from a bad one.

Furthermore some researchers suggested that there is a need for multiple ways of handling unfamiliar words in the context. They can use a dictionary, they can try and guess the meaning of the unknown word, or they can choose to disregard/skip the unknown word if

they do not feel any breakdown in text comprehension. With respect to this strategy the following justifications for skipping the unknown word were the most frequently listed:

1. the unknown word is one among a number of descriptive words: e.g. the word "unacknowledged", (in the phrase "unacknowledged, unwelcome and unjustified means");
2. the unknown word is part of an of-phrase: if the meaning of the word naming the whole is clear, the word naming the [-11-] part can be skipped: e.g., the word "essence" in the phrase "essence of liberalism";
3. the unknown word is an adverbial, which provides only additional information: e.g. the word "merely" in the sentence: "They succeeded in enforcing cohesion by merely rational arguments"; and
4. the unknown word begins with a capital letter and thus was identified as the name of a place, a person or a group: e.g., "The Anabaptists repudiated all law."

Give below is an exercise used for providing instruction in skipping unknown words.

Read the following passage and skip unknown words if any.

Word Etymology

It is sometimes helpful to have information about the history and origin of words, which is called etymology. Word etymology is not only interesting but also helpful in remembering the meaning of words. For example, when readers find out that the word "skill" was spelled "skil" in Middle English, and it is originally a French word meaning distinction, they may remember the meaning of the word more easily. The history of the word is indicated by some abbreviations. For instance, "OE", means that the word was used in Old English. "ME" refers to Middle English, and "Fr." Indicates that the word is borrowed from the French language.

Choose the best answers.

1. Word etymology is helpful of words.

- a. to understand the spelling
- b. to guess the pronunciation
- c. to remember the meaning
- d. to determine the history

2. In a dictionary, the history of a word is represented through

- a. meanings
- b. explanations
- c. abbreviations
- d. descriptions

3. When there is an “OE” in front of a word in a dictionary, it means that the word

old English.

- a. was used in
- b. has come from
- c. was non-existent in
- d. has changed from

1.7.13. Guessing the Meaning of Unknown Words through Knowledge of Derivations, Synonyms, Antonyms, etc.

Dictionaries are used help students to locate the meanings of words. In most cases, one should try to figure to out the meanings of words from the context in which they are used. To guess the meanings of words, understanding the structure of the word–stem, suffixes, prefixes- and knowing derivations can be helpful. Suppose the word “submarine”. If the student knows that the meaning of “sub-” is under, in this case he/she will guess the meaning of “submarine” easily. He/She will suppose the meaning of the word as something which locates under the water.

In this section the following explanations of guessing the meaning of unknown words were the most frequently listed:

1. Based on Context: e.g. the meaning of the word "persist" was guessed as "continued" with the help of the words "down to the present day" and "for many ages to come":

"In changing forms the conflict persisted down to the present day and no doubt will persist for many ages to come."

2. Based on Word-structure: e.g. the meaning of the words "invariably" or "unwelcome" was guessed with the help of the prefixes "in" and "un".
3. Relying on Discourse markers: e.g. the meaning of the word "advocated" was guessed with the help of the connectives "either-or": "Disciplinarians have advocated some system of dogma, either old or new."
4. With the help of background knowledge or common sense: e.g. the meaning of the word "private" was interpreted as "not public" in the sentence: "This was the first private research laboratory in the U.S."

1.7.14. Connecting Background Knowledge to the Information in the Text

Students are constantly confronted with new information, particularly once they progress to the upper elementary grades and transition from "learning to read" to "reading to learn" (Chall, 1983). To read to learn effectively, students need to integrate new material into their existing knowledge base, construct new understanding, and adapt existing conceptions and beliefs as needed. Thus as you teach content areas to ELLs of diverse backgrounds, you may find that they struggle to grasp the content, and that they approach the content from very different perspectives. Drawing on your students' background knowledge and experiences, can be an effective way to bridge those gaps and to make the content more accessible. Therefore think about your prior knowledge, about the subject and the kind of material you are reading . Think about the similarities between them. If some questions arise for you about the topic or the kind of book, you may need to ask someone for help. For drawing on your students' background knowledge you should activate them by using some strategies.

Strategies to activate your prior knowledge

Brainstorming :

- Examine the title of the selectin you are about to read
- List all the information that comes to mind about this title
- Use these pieces of information to recall and understand the material

Group discussions:

Group discussions in and out of class will help you to discover what you bring, what your fellow students bring, as well as shared experiances. If you find they have new background information, ask for more information.

It shoud be mentioned that there are more strategies in activating background knowledge but regarding the subjects of the present study the two mentioned strategies are sufficient to activate EAP students background knowledge.

Read the following passage and connect your background knowledge to the information in the text.

Another class of suffixes are derivational suffixes. When theses suffixes are added to free bases, they form new derivations with different grammatical functions. It should be noted that unlike inflectional suffixes, derivational suffixes change the part of speech of the words. One of the derivational suffixes is “-ly”. When it is added to an adjective like “quick”, a new derivation, “quickly” which is an adverb is formed. The number of derivational suffixes is far more than the number of inflectional suffixes. They have also more varied functions. For example, they can change an adjective into an adverb, a noun into a verb or an adjective, a verb into a noun,etc.

Read each statement carefully and decide whether it is true or false.

-1. When derivational suffixes are attached to free bases, new derivations are made.
- 2. Derivational suffixes change the grammatical function of bases.
- 3. Derivational suffixes do not change the form and the meaning of bases.
- 4. Derivational and inflectional suffixes have the same function.

1.8. Summary of the Chapters of the Dissertation

In this section the key concepts included in different chapters of the present dissertation are explained briefly. Before starting the summary, it is better to state that the purpose of the present study is to investigate the relationship between successful readers' strategies in L1 and L2, and the impact of instruction of such strategies on L2 reading comprehension ability.

This study also aims at finding an answer to the question of reading problem versus language problem, first raised by Alderson (1984) and then by Carrell (1991).

In chapter one background and theoretical framework underlying the project was offered. It was mentioned that reading opens new horizons in front of our eyes and expands our understanding. It gives us an insight into the diversity of the people, their customs, their lifestyles, etc. It also helps us stay in touch with contemporary writers as well as those far from the days of ours and makes us sensitive to global issues. Through reading we have access to the ever-extending treasure of human knowledge. Furthermore it was stated that reading increases chance of academic success. That is to say, there is a strong correlation between reading proficiency and academic success. Without proper reading skills, students will surely struggle in all subject areas.

Then the purpose of the present study in terms of research questions and hypotheses of the study along with definition of important terms, reading purposes, reading theories, reading strategies, schema, language transfer, and short-circuit hypotheses, and finally strategy training were introduced.

In the rest of this study, chapter II will cover a review of the relevant literature for the study where different kinds of reading theories and their history along with kinds of reading strategies, reading problems including Language Transfer hypothesis (Goodman, 1971), short-circuit or Language Ceiling hypothesis (Clarke, 1979; Alderson, 1984) will be briefly discussed followed by a comprehensive survey of reading strategies and issues in EAP environment. Types of reading is the last section of chapter II which leads us toward chapter III. Here it is necessary to state that the focus of this study will be on reading for learning since EAP students usually read material for a learning purpose. It is obvious that all students may have different purposes in their reading; these will include:

- to obtain information
- to understand ideas or theories
- to discover an author's viewpoint
- to seek evidence for their own point of view and quote it in their essays

Chapter three concentrates on the practical side of the present study and starts with restatement of the questions and hypotheses of the study followed by an explanation on the type of data collected and variables of the study. Key words are explained and instruments used or developed in this project are introduced. Description of the pilot study, subjects, design of the study, the procedures, and summary of data analysis of the study comprise the final section of chapter three.

Chapter IV starts with restatement of the questions and hypotheses once more along with some vital questions that the researcher is trying to find out the answers for them. The students' obtained scores were subjected to a test of statistical significance, i.e. an analysis of variance (ANOVA), which indicates a significant difference among the four means to determine whether the reading comprehension ability of the subjects will be

improved by strategies instruction or not. Also using the statistical software of SPSS, the data collected during the experiment is analyzed by calculating ANOVA and t.tests. Extensive use of tables has made comparisons easy and thus it has become easy to made inferences based on the results.

Chapter V (conclusion) starts with a summary of the whole research. Then it presents the findings of the study and it concludes with the findings of the study. Discussions regarding the findings of the study, implications and suggestions for further research are final sections of this chapter.

Chapter II

REVIEW OF LITERATURE

2.0. Introduction

According to Carrell, L. P. et al. (2002, pp. 22-25) if we contrast the reading models that were developed during the pre-1960 period of behaviourism with those developed during the post-1965 period of cognitive psychology, we can find components in newer models not found in the pre-1960 models. Thus by comparing the models we can understand the question of reading better. The pre-1960 period of behaviourism treated the printed words as the stimuli to which a reader should render an appropriate response i.e., word recognition. Behaviourism viewed reading as a passive act of simply decoding the text, and the reader was just to decipher the meaning which resided in the text. During the behaviourism period, because the emphasis was directly on observable events, little attempt was made to explain what went on in the absence of the mind that allowed the human to make sense of the printed page. After 1965, with the emergence of cognitive psychology the models began to show the role of the mind and memory in reading. Even during this current model, in which cognitive psychology dominates so much thinking about reading, we can see how thinking processes have influenced the models of human information processing. For example, the models of reading in the 1970s tended to be linear information processing models, while the later models tended to be interactive models. Thus, as we try to evaluate the models of reading of the last three decades, we must do so in terms of the information available (Carrell et al. 2002: p.25).

During the 1960s and early 1970s a number of scholars developed more or less formal models of reading process. Hockberg (1970), Mackworth (1972), Leven and Kaplan (1970)

all considered the factors that processes of skilled reading must account for. In 1969 Ruddell developed a system of communication model of reading that was different from predecessors.

In 1967, K. Goodman revolutionized the study of reading when he proposed that reading is a “psycholinguistic guessing game,” and following his theories a considerable amount of research has greatly increased our understanding of the reading process. Goodman hypothesized that efficient readers do not laboriously read word-for-word rather they utilize the redundancy of language and their knowledge of semantic, syntactic, and discourse contains inherent in the language.

According to Carrell et al. (2002: p. 23) there are some differences between Goodman’s model and other models. Its most distinctive characteristic is its procedural preference for allowing the reader to depend on existing syntactic and semantic knowledge structures, so that reliance on the graphic display and existing knowledge about the sounds associated with graphemes can be minimized. Another difference between Goodman’s model and other models is in the use of the term “decoding”. Goodman used the term decoding to describe how either the graphemic input or a phonemic input gets translated into a meaning code. He also used the term “recoding” to explain the process of translating graphemes into phonemes. Therefore decoding can be either direct, that is, graphemes to meaning or mediated i.e., graphemes to phonemes to meaning. Finally the unique aspect of Goodman’s model is its impact on the conception of reading instruction, particularly early instruction.

Like Goodman, Frank Smith (1971) is careful to distinguish between mediated (through recoding to sound) and immediate meaning recognition (print to meaning). Also, like Goodman, his account of reading exhibits a procedural preference for reliance on language factors instead of graphic information. Smith’s model of reading is similar to Goodman’s model to a great extent. Perhaps the greatest contribution of Smith’s work is to explain how the redundancy inherent at all levels of language provides the reader with high degree of

flexibility in marshalling resources to create a meaning for available at hand. With the publication of Gouph's (1972) model of reading, the impact of the information processing approach to studying mental processes is observable in reading field. The appearance of LaBerge and Samuel's (1974) model emphasizing automaticity of component processes and Rumelhart's interactive model (1977) emphasizing flexible processing and multiple information sources, depending upon contextual circumstances, provided convincing evidence that the information processing perspective was here to stay within the reading field (Carrell, P. et al. 2002: p. 24).

Also according to Carrell et al. (2002: p. 24) since the publication of Rumelhart's model, there have been other efforts some of which are mentioned here. Carver (1977) has introduced a model that harks back to that of Gouph (because of its unidirectional emphasis from letters to sounds to meaning) and to Holmes and Singer (because Carver more than any other recent model builder, has emphasized the empirical evaluation of all aspects of his model). Stanovich (1980) has developed an interesting twist to Rumelhart's model. Most recently, Just and Carpenter (1980) have introduced a model of reading which is based on studies of eye movements

SECTION 1

2.1. Reading Theories

With the brief history mentioned above, I now turn to explaining and describing some of the models that are mentioned above. Before explaining the different kinds of reading models, it is necessary to mention the characteristics of good models. According to Carrell, P. Devine, J. and Eskey, D. (2002: p.24) a good model has some important characteristics.

The most important of them are:

- 1- It can summarize the past.

2- It can help us to understand the present, and

3- It can predict the future.

Furthermore according to Aebersold, J.A. & Field, M.L. (2001: p.18) there are three main reading models.

- **Bottom-up theory** states that the readers construct the text from the smallest units, for example from letters to words and from words to phrases and finally from phrases to sentences and so on. The process of constructing the text from those small units becomes so automatic that readers are not aware of how it operates. Decoding is an earlier term for this process.

- **Top-down theory** argues that readers bring a great deal of prior acquired knowledge, assumptions, beliefs, and questions to the text. They read the given text and continue to read until the text confirms their expectations. The top-down school of reading theory argues that readers fit the text knowledge (cultural, syntactic, linguistic, historical) they already possess, then check back when new or unexpected information appears. So, these models start with hypotheses and predictions and attempt to verify them by working down to the printed stimuli.

- **The interactive school** of theorists - which believes that both bottom-up and top-down processes occur, either alternately or at the same time. These theorists describe a process that moves both bottom-up and top-down, depending on the type of text as well as on the reader's background knowledge, language proficiency level, motivation, strategy use, and culturally shaped beliefs about the reading.

Reading teachers need to develop the ability to analyze bottom-up and top-down components of the reading process.

Similarly Grabe et al. (2002: p.31) state that the reading models are divided according to a) metaphorical models of reading, and b) specific models of reading. General models of

reading serve useful purposes, most commonly by providing a metaphorical interpretation of the many processes involved in reading comprehension (cf. Grabe 1999, 2000; Urquhart and Weir 1998). Other models are more specific in nature, trying to interpret the results of much research.

Metaphorical models of reading are:

1. Bottom-up models
2. Top-down models
3. Interactive models

and specific models of reading are:

1. Psycholinguistic Guessing Game Model
2. Interactive Compensatory Model
3. Word Recognition Models
4. Simple View of Reading Model

Now according to above mentioned models I'm going to explain some of the models related to reading.

Grabe et al. (2002: p.34) explains the specific models of reading in this way. The psycholinguistic guessing game model of reading (Goodman, 1986, 1996) is well known among linguists. These models describe reading comprehension as an interactive process of (a) hypothesising (b) sampling and (c) confirming information based on background knowledge, expectations about the text and context information from the text.

The interactive compensatory model (Stanovich, 1980, 1986, 2000) argues that (a) readers develop efficient reading processes, (b) less-automatic processes interact regularly, (c) automatic processes operate relatively independently and (d) reading difficulties lead to increased interaction and comprehension, even among processes that would otherwise be more automatic.

Another source of model building is word recognition models. Now, these models are based on connectionist theories of how the mind organises information. The key point is that these models are fundamentally bottom-up in orientation, and they account for a considerable amount of what we currently know about word recognition processes under time constraints.

The simple view of reading model (Hoover and Gough, 1990) argues that reading comprehension is composed of a combination of word recognition abilities. The central idea is that when decoding- skill measure and a comprehension-skill are multiplied, the resulting score is an accurate measure of reading comprehension.

2.1.1. Goodman's Model

In his model, Goodman (1968) states that in the process of reading, the reader samples the graphemic, phonological, syntactic, and semantic cues in the text; predicts or hypothesizes what the text is about, tests those predictions, and then confirms or disconfirms the hypotheses. The reader uses word knowledge and previous experiences with the language to make a hypothesis and thereby construct meaning by applying his store of knowledge to the text. Goodman also argues that these processes in which the information is dealt with and meaning is continuously constructed can be represented as a series of ongoing cycles_ optical, perceptual, syntactic and semantic. As the reader moves through these cycles, he employs five processes and at the same time the mind acts as an organ of information processing. It decides what tasks it must be handling, what information is available, what strategies it must use, which input channels to use, where to seek information. According to Goodman (1975) the brain employs five processes in reading and they are as follows:

1. Recognition-initiation: The brain should recognize a graphic display in the visual field as written and initiate reading.

2. Prediction: The brain is always predicting when it searches for order in sensory inputs.

3. Confirmation: Once the brain predicts, it must also confirm or disconfirm that prediction according to the information that is available.

4. Correction: If the brain's prediction are rejected or disconfirmed, it will reprocess the information.

5: Termination: The brain terminates the reading when the reading task is completed, but termination may occur for other reasons, for example if the meaning is already known, or the story is uninteresting or the reader finds it inappropriate for the particular purpose (Carrell, P. 2002: p.16).

According to Carrell et al. (pp. 14-16) these processes have an intrinsic sequence. Prediction precedes confirmation which precedes correction. Yet the same information may be used to confirm prior prediction and to make a new one. In this process the reader does not use all the information available to him, rather he picks and chooses from the available information only enough to select and predict a language structure which is decidable. Here, reading is not any sense a precise perceptual process.

Uses and limitations. Goodman's model is based on the premise that there is a single reading process. Since it deals with how language and thought are interactive, it is psycholinguistic. Since reading is a unitary process, it follows several key premises: the model deals with reading in the context of written language. It focuses on the proficient reader, but it is applicable to all stages of development. It has been built through the study of English reading, but it must be applicable to reading in all languages and all orthographies (Carrell, P. et al. 2002: p.20).

According to Mitchell (1982: p. 130) this model has several shortcomings. The main problem is that, for all its boxes and arrows, it doesn't specify much about the reading process. It doesn't show how the different non-visual sources of information are drawn upon and used to modulate the information of the perceptual image, and it does not say any

thing about how the system deals with the problems of graphic cues which are repeated in successive –fixation at the word recognition stage. It lists some of information resources that might be used to make a ‘tentative choice’ about the identity of the word, but it doesn’t spell out how the extra information is used to facilitate the choice. Nor does it have any thing to say about the relative importance of the contributions from the different sources. For example, are all of the sources used equally or is one source more important than the other? Is the reader’s reliance on different sources fixed or does it change when he tackles different kinds of reading material or when he changes his reading strategy? If he couldn’t make an appropriate choice and tries again what can he do to improve his success on the second attempt?

A similar shortcoming is clear in the later stages of the model. For example, before checking that the new word is compatible with the prior context, it is necessary for the reader to separate and interpret the part of the sentence analysed to date, but Goodman’s model doesn’t give any direction to it. The lack of precision at different stages of this model means that it is difficult to determine the claims of this model about the process of reading. However, the model is very explicit in one respect. It claims that reading is a predictive process; that the reader samples from the point ‘just to confirm his guess of what’s coming’ (Mitchell, 1982:pp.130-131).

2.1.2. Rumelhart’s Model

Information processing models tend to be linear and to have a series of non-interactive processing stages. Each stage in a non-interactive model does its work independently and passes its production to the next higher stage. According to Rumelhart, linear models which pass along in one direction only and which do not permit the information contained in a higher stage to influence the processing of a lower stage contains a serious deficiency. These deficiencies will be mentioned here.

In Rumelhart's model information from syntactic, semantic, lexical, and orthographic sources converge upon the pattern synthesizer. These knowledge sources provide input simultaneously and there must be a mechanism that can accept these sources of information, keep the information, and redirect them when it is necessary. This mechanism which accomplishes these duties is called the message centre. About the mechanism of information processing and message centre Rumelhart states (1977: p. 589-590):

“The message centre keeps a running list of hypotheses about the nature of the input string. Each knowledge source constantly scans the message centre for the appearance of hypotheses relevant to its own sphere of knowledge. Whenever such a hypothesis enters the message centre, the knowledge source in question evaluates the hypothesis in light of its own specialized knowledge. As a result of its analysis, the hypothesis may be confirmed, disconfirmed and removed from the message centre, or new hypothesis can be added to the message centre. This procedure continues until some decision can be reached. At that point the most probable hypothesis is determined to be the right one” (Carrell, 2002: pp.27-30).

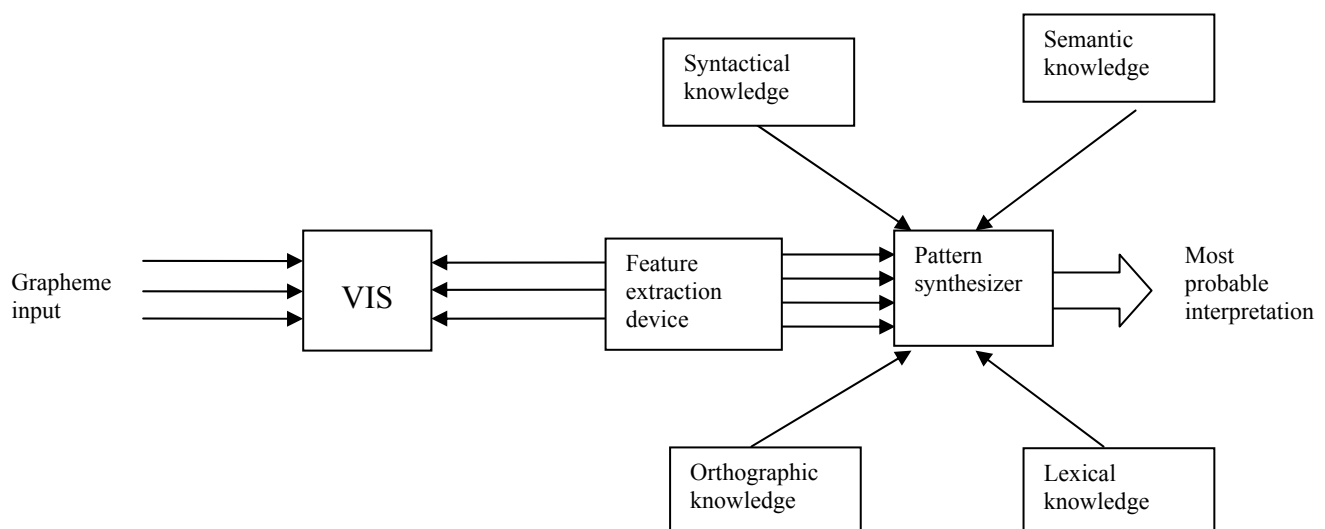


Figure 1: The Rumelhart (1977) interactive model of reading

Deficiencies in Rumelhart's Model. According to Carrell, P. et al. (2002: pp.27-29) in linear models like Rumelhart's model, they have difficulty with some occurrences while reading. However an interactive model, where the higher stages of information influence the lower stages of processing, can account for those well-known occurrences in reading. What each of the well known occurrences share in common is that they can be explained with a model which permits the information found in a higher processing stage to influence the analysis of a lower stage. Regarding deficiencies of this model some problems have been observed: the first observation is that more letters can be understood in a given unit of time if they spell a word than if the same letters are used in a non-word. For example, more letters are apprehended in a word like **alligator** than in a letter string **rllaagtio**. The second observation relates to syntactic effects on word perception. When an error is made in word recognition, there is a strong tendency for the word substitution to maintain the same part of speech as the word for which it was substituted (Kolers 1970; Weber 1970). The third type of observation relates to the fact that semantic knowledge influences word perception. For example when a pair of words are semantically related, as in **bread-butter** or **doctor-nurse**, than if they are semantically unrelated as in **bread and doctor** or **nurse and butter**, in the former one the decision can be made faster. The fourth observation is that perception of a given word syntax depends on the context in which the word is located. For example compare the following bold-typed words in this sentence. "They are **eating apples**." It is not clear whether the sentence is describing the act of consuming apples or if it is describing a type of apple, that is, eating apples as opposed to cooking apples. If we precede the sentence in the following manner, the meaning will be obvious for us. "What are the children eating? They are eating apples." Now it is clear that the first context leads to a decision indicating that we are describing the act of children **consuming a fruit**, while the second context is describing a type of apple.

The final observation offered by Rumelhart relates to the fact that our interpretation of what we read depends on the context in which a text segment is located. For example, in the sentence “The statistician was certain the difference was significance since all the figures on the right-hand side of the table were larger than any of those on the left.” our interpretation of the “figures” is that of numerals, while in the sentence “the craftsman charged more for the carvings on the right since all the figures on the right-hand side of the table were larger than any of those on the left” the term relates to a word or ceramic figure. Thus the context that words are located in is very important to guess the appropriate meaning (Carrell, P. et al. 2002: 27-30).

Similarly Mitchell, D.C. (1982: p. 136) believes that while Rumelhart’s model is more accurate than earlier models of reading, there are some other aspects of this model that are not handled in sufficient detail for it to be considered a comprehensive model of reading. It says nothing about the bases on which the various kinds of hypotheses are generated and it doesn’t determine the relative importance of the contribution from each knowledge source. It doesn’t show how the influence of each source differs with the reader’s strategy and with the reading conditions. It offers little about the control of eye movements, the use of a phonological route and other back-up strategies in word recognition and problems in comprehension beyond the level of sentences. Some of these limitations are acknowledged by Rumelhart in his presentation of the model.

2.1.3. Stanovich’s Model

This model is an interactive compensatory one; interactive in the sense that any stage_ regardless of its position in the system may communicate with any other stage, and it is compensatory in the sense that any reader may rely on other knowledge sources when a particular knowledge source temporarily falters or even fails.

Stanovich (1980) criticizes strictly bottom-up or top-down reading models and states: “Interactive models of reading appear to provide a more accurate conceptualization of reading performance than do strictly top-down or bottom-up models. When combined with an assumption of compensatory processing (that a deficit in any particular process will result in a greater reliance on other knowledge sources, regardless of their level in the processing hierarchy), interactive models provide a better account of the existing data on the use of orthographic structure and sentence context by good and poor readers” (Stanovich, 1980: p.32). According to Stanovich, the earlier bottom-up reading models had a tendency to depict the information flow in a series of discrete stages with each stage transforming the input and then passing the recorded information on to the next higher stage. Because the sequence of processing proceeds from the incoming data to higher level encodings, the bottom-up model is also called a data driven model.

Top-down models on the other hand view reading as being stimulus analysis. These models start with hypotheses and predictions, and attempt to verify them by working down to the printed stimuli (Carrell, 1998: p.31).

Anyway, bottom-up or top-down models are unidirectional and not interactive. The combination of both is what Stanovich suggests, for the reading process requires integration of these two. Thus Stanovich put together the two views, i.e., bottom-up and top-down reading processing. The result is called an “interactive” model of the process of reading.

According to top-down models, the role of readers was considered to be quite active: they predict meaning as they read, they take in large chunks of text at a time, they do not attend to separate letters, rather they match what they already know with the meaning they derive from the text. In this view, reading is more a matter of reconstructing meaning using only partly the graphophonic, syntactic, and semantic system of the language. More salient to successful reading is being able to guess what the author will say next by confirming

predictions related to one's past experience and knowledge of the language. Inevitably this model took on the nick name of "top-down reading" since it stresses comprehension of larger units of meaning. In short, these models start with hypotheses and predictions, and attempt to verify them by working down to the printed stimuli. It is necessary to say that the two processes, i.e., bottom-up and top-down are combination of these two is Stanovich's suggestions.

According to Carrell, P. (2002: p. 32) an important shortcoming of bottom-up models is lack of feedback, in that no mechanism is provided to allow for processing which occurs later in the system. Because of the lack of feedback in early bottom-up models, it was difficult to account for sentence-context effects and the role of prior knowledge of text topic as facilitating variables in word recognition and comprehension. Samuels (1977) revised the LaBerge and Samuels (1974) model just for this reason.

2.1.4. Coady's Model

In his psycholinguistic model Coady (1979) suggests that in the reading process the reader's background knowledge interacts with conceptual abilities as well as process strategies more or less successfully, to produce comprehension. The interaction between conceptual abilities and process strategies is shown in the following figure.

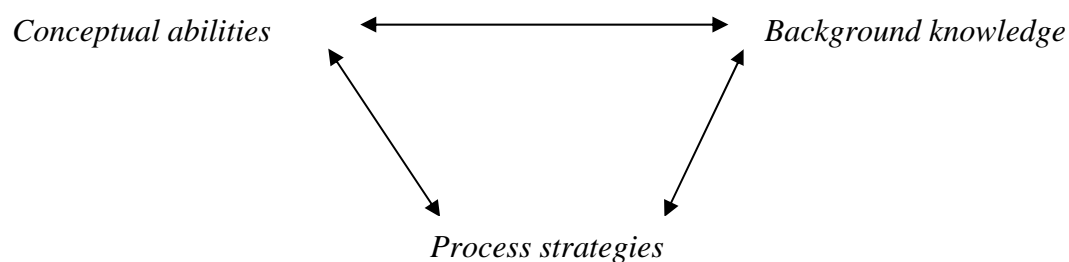


Figure 2 Coady's (1979) Model of the ESL Reader

By **conceptual ability** he means general intellectual capacity and by **processing strategies** he means different subcomponents of reading ability including many processing skills, and referring to background knowledge he means the reader's schema or previously acquired knowledge about any conceptual framework. Furthermore Coady says little more about the role of background knowledge other than to observe it. Coady stated that: "background knowledge becomes an important variable when we notice, as many have, that students with a Western background of some kind learn English faster, on the average, than those without such a background" (Coady, 1979: 7).

He also suggests that background knowledge may compensate for certain syntactic shortcomings. Background knowledge is the most neglected factor in ESL or EFL reading. Although Coady's psycholinguistic model of reading is considered as an interaction of factors, it fails to underline the role of background knowledge. Recent research shows that what the reader brings to the reading task is more pervasive than the general psycholinguistic model suggests. Clarke and Silberstein (1977: p.136-137) suggest that:

"More information is contributed by the reader than by the print on the page. That is, readers understand what they read because they are able to take the stimulus beyond its graphic representation and assign it membership to an appropriate group of concepts already stored in their memories..... The reader brings to the task a formidable amount of information and ideas, attitudes and beliefs. This knowledge coupled with the ability to make Linguistic predictions, determines the expectations the reader will develop as he reads. Skill in reading depends on the efficient interaction between linguistic knowledge and knowledge of the world" (Carrell, et al.2002: pp.74-76).

2.1.5. Perfetti's Model

According to this model reading should be defined more narrowly in **comparison** with other models including interactive or otherwise. For Perfetti, reading comprehension should

not be equated with thinking and its concomitant general problem solving strategies, but can be equated more narrowly with specific processes of reading. In this model the core of Perfetti's verbal efficiency model is composed of processes of lexical access, proposition integration, and text model building with lexical access receiving primary emphasis. Perfetti maintains that "lexical access is important in reading because it is the central recurring reading process." He cites result of studies of eye movement during the reading process to support his conclusions. Using these processes specific to reading Perfetti is able to explain a wide range of variation in reading ability. For this reason, his approach, must like Stanovich's may be more adaptable to issues in second language reading (Carrel, 1998: pp.62-63).

2.1.6. Talor & Talor's Model

According to Carrell, P. et al. (2002: p. 62) Talor and Talor's bilateral cooperation model combines aspects of Stanovich's interactive-compensatory and Rumelhart's interactive-activation models, along with a range of neurolinguistic research. This model builds parallel processing strategies in different levels of text information. The manner of working of the parallel processing strategies are done both with slow and rapid mechanisms according to the needs of readers and the difficulties which result by either the task or the text. A very brief summary of this model indicates the distinctness of this model. The originators of this model maintains that the bilateral cooperative model postulates two tracks of processes that complement one another at each of several stages in understanding text. The processes of one track are fast and global and attempt to find similarities between their inputs and familiar patterns. The processes of the other are slow and analytic and sort their inputs into elements in an attempt to find differences.

2.1.7. LaBerge and Samuels's Automatic- processing Model

According to Carrell, P. et al. (2002: p. 62) it was initially a bottom-up processing approach. The reader in this model may go back and forth between higher and lower levels of processing when it is necessary. There is no place for conscious processing capacities because the original one was made on the basis of automatic processing of words. In automatic processing there is cognitive space for thinking about the meaning of printed pages. Thus they claim that fluent readers recognize many words automatically.

According to Mitchel, D.C. (1982: p.135) this model is in fact a theory about the relationship between attention and subprocess of reading and is not considered a comprehensive model of reading. Reading is considered as a process which activates the internal codes corresponding to letters, spelling, and patterns, visual and phonological representation of words and so on. In this reading process successive codes can be activated with or without the reader's attention. It makes little effort to specify what is entailed in activating the different types of code and it doesn't attempt to spell out the conditions under which different possible direct and indirect routes to the lexicon are used. For example, it doesn't specify the situations in which a word is identified directly, using featural information, or indirectly, after prior identification of the constituent letters and/or spelling patterns and/or phonological representation. Recently in its present type (1974) the model says very little about comprehension and nothing about the control of eye movement.

A central claim of the model is that while fluent readers can carry out certain operations without using their own attention, this is the outcome of considerable practice. It is suggested that the processing of letters and words is not automatic at the early stages of learning to read. It also suggested that attention might be used in different ways in different kinds of reading tasks. For example, in rapid reading processing in the visual system might receive no special

attention, leaving the reader to concentrate on the meaning of the message. On the other hand, for slower reading because of difficult or poorly printed text, attention might be directed more to the processes entailed in identifying letters, spelling, patterns and other low-level units.

Since the present model doesn't attempt to explain a comprehensive aspect of the reading process, it will not be considered here in detail. However, it is better to talk about the flexibility of this model because it is a desirable aspect of any realistic explanation of reading. Thus in the LaBerge and Samuels (1974) theory of reading there is no place for attention or conscious processing capacities because the original model made a strong argument for automatic processing of words.

2.1.8. Gouph's Model

This model was presented by Gouph (1972). Gouph's model is actually a model of oral reading rather than fluent silent reading, but it seems that the two types of reading i.e., oral reading and silent reading have several sub-processes in common.

According to Gouph's model visual information is recorded in the icon until the reader finds other visual information. This information is used as raw material for the purpose of recognizing the order of letters in the display. This recognition process is thought to operate serially from left to right across the display and in the course of operation the device responsible for the identification process (the scanner) is believed to consult pattern recognition routines held in long-term memory.

The string of letters read from the display is put in Character Register and fast operated on by a mechanism named decoder which maps the character onto a string of 'systematic phonemes'-hypothetical entities that are related to speech systematically but are capable of being set up much more rapidly than speech itself. The Decoder is thought to use a code book

of grapheme-to-phoneme correspondence rules. The final product of the process is stored in a form of similar to a tape recording for a very short time.

The phonemic representation, supplemented by reference to the lexicon, is used to distinguish the order of words in the sentence and these words are kept in Primary Memory until the sentence can be understood and placed in another stable storage termed **TPWSGWTAU**. After the sentences are understood they go to this stable place. The comprehension device makes use of syntactic and semantic rules in the course of understanding the sentence. This device is called “**Merlin**” to emphasize that it had wonderful and magical properties. The rest part of the model was designed to account for oral reading and consists of stages involved in producing the vocal response in oral reading. Gouph’s model, like Goodman’s, contains several weaknesses but unlike Goodman, Gouph has recognized many of these limitations. (For further information see Mitchell, D.C.: The process of reading).

Weaknesses of Gouph’s Model. According to Mitchell, D.C. (1982: p. 133) this model has several weaknesses and they are as follows:

First, as with Goodman’s model, there is no provision for dealing with letters that are encompassed in more than one fixation. If the model were interpreted literally, duplication of this kind would lead to great confusion. Secondly it pays no attention to the problem of integrating sentences and proposition although this operation clearly plays an important role in the comprehension process. Thirdly, the model says little about the control of eye movements. The only suggestion that is suitable is the observation that difficulties in parsing might cause fixations to be prolonged and they might eventually lead to regressive eye movements, and even these proposals are not represented in the flow diagram of the model. The model doesn’t consider the possibility that eye movements may be influenced by other

aspects of processing and it says nothing about how normal forward movement might be guided. Fourthly, the model is vague about the way in which the reading process is influenced by prior context. It is quite clear that Gough assumes that the processes up to and including lexical search are not influenced in any way by prior context, and after some discussion of lexical ambiguity he concludes that he has found no evidence that disambiguation takes place until after lexical search.

In addition to these problems, there are some aspects of the model that have proved to be incorrect in the light of subsequent research. For example, now it is clear that the phonemic route to the lexicon is not the only one that is available to the reader. In fact, it is doubtful whether this route is ever used by a fluent reader except when he comes across an unfamiliar word. Similarly, there is no string evidence that the individual letters of a word are identified during reading, and even if they are it is very doubtful that they are processed in a serial left-to-right fashion.

Despite these difficulties Gough's model has helped research on reading a lot. It has played a part in stimulating a large body of research. The reason for this is to some extent due to bold and unambiguous statement of the model. Gough was prepared to speculate about a number of issues in the absence of firm evidence and he was prepared to risk being proved wrong (Mitchell, 1982: pp. 133-134). Gough's model is presented in the next page in figure 3.

Figure 3 Gough's model of reading

2.1.9. The Schema Theory Model

According to Rumelhart (1984), schema is a unit of knowledge or data structure for expressing the general concepts stored in memory and according to Longman Dictionary (1992) schema is the underlying structure which accounts for the organization of a text or discourse. Our understanding of schema theory today began with Bartlett's (1932) studies of

memory. The term schema in Bartlett's book **Remembering** (1932: p. 201) refers to "an active organization of past reactions, or past **experience**." Although Bartlett used the phrases like "mental set," "active organization," and "general impression" a lot, he never made clear their meaning. Bartlett's ideas were similar to Gestal psychology, and even he described his own research on memory for pictorial material that was similar to Wulf's. Thus according to Bartlett (1932) the role of previously acquired knowledge in language comprehension has been formalized as schema theory. According to this theory the text doesn't carry the meaning by itself, but it shows the directions for readers as to how they should find and bring back meaning from their own background knowledge or previously acquired knowledge. As I mentioned earlier this previously acquired knowledge is called the reader's background knowledge or schema (Bartlett, 1932; Adam & Collins, 1979; Rumelhart, 1980). According to schema theory, comprehending a text or every reading material is an interactive process between the reader's background knowledge stored in memory and the text. If a reader able to relate the components of reading materials to his/her own background knowledge better s/he will be considered an efficient reader. Thus one's ability to combine these two resources of information to arrive at the meaning of a text is very important. Since my research proposal is somehow related to schema theory, it is necessary to explain different types of schema (Carrell, et al. pp.38-41).

There are two types of schema. The first one is content schema and it is the background knowledge that a reader brings to a text and the other one which is the knowledge relative to the formal, rhetorical, and organizational structures of different types of texts is called "formal" schema. Casanave (1988) developed the schema- theoretic view of reading and introduced a third type of schema, the strategy schema. This was a complement for previously hypothesized formal and content schemata.

According to the schema theory there are two information resources: the information from the outside world and information stored in memory. The analysis of the sensory information coming in from outside is known as bottom-up processing or data-driven processing because it relies on the data received via sense. Schemata are hierarchically organized, from most general at the top and most specific at the bottom. The information already stored in the memory in the form of prior knowledge or reader's background knowledge influences our expectations and helps us to interpret the current input. This influence of prior knowledge is known as top-down or conceptual-driven processing. Schema operates in a top-down direction to help us interpret the bottom-up flow of information from the world.

An important aspect of these two schemata is that both should be occurring at all levels simultaneously (Rumelhart, 1980). Top-down processing helps in assimilation of the incoming data for making sense of them. As mentioned before, schema operates in a top-down direction to help us to interpret and making the meaning of a particular text clear from the bottom-up flow of information from the world. It is very useful to make a distinction between formal and content schemata in understanding the role of background knowledge in reading comprehension (Carrell, P. 2002: p.76-80).

SECTION 2

2.2. Reading Strategies

2.2.1. Reading at University

At the university, reading takes on a central role as part of the approach to learning. Reading is probably the most generally needed skill in EAP worldwide, and in many parts of the world a reading knowledge of a foreign language is often important to academic studies and personal development. In modern life, learning largely depends on one's ability to

interpret the printed page precisely and fully. Yet despite this significance, it is common experience that most students fail to learn to read adequately in the foreign language, and very frequently they seem to read with less understanding than we expect them to read. It is very important to read independently and effectively to learn important parts of a course of study. Unfortunately, too many students read passively, failing to construct accurate comprehension with the guidance of a purpose or goal for reading. But to avoid these ill feelings about reading, it is necessary to invest a little time to develop more active reading strategies. When a strategy for reading is used for the first time, it may feel awkward for a period of time. However, it is clear that an active approach to reading will likely be more productive and interesting. Now I want to name some of the most important strategies and active reading will be explained later in this chapter. Before enumerating reading strategies it is necessary to start from academic reading namely EAP.

EAP. According to Dudley-Evans et al. (1998: pp. 34-35) English for academic purposes refers to any English teaching that relates to a study purpose. Students whose first language is not English may need help with both the language of academic disciplines and the specific ‘study skills’ required of them during their academic course. EAP has sometimes been seen as one movement within ESP. They also suggested that there are four different types of situation and that teachers need to look very carefully at accounts of courses and materials before deciding whether they are relevant to their own situation. The four types of situation are:

1. An English-speaking country , such as UK or USA
2. An ESL situation where English is the formal language of education and is widely spoken, for example in south-east Asian countries such as Singapore, Philippine , and in African countries like Zimbabwe, and Nigeria

3. A situation in which certain subjects, such as medicine, engineering or science, are formally taught in English, while for other subjects and at other levels of education the national language is used, such as some of Middle East countries like Jordan.
4. A situation where all subject courses are taught in the national language, but English may be important for ancillary reasons for example my own country is located in this part.

According to Jordan, R.R. (1997: pp.143-144) reading as a skill is normally linked with writing. This is a basic characteristic of the target academic situation in which students are typically reading books and journals, noting, summarising, paraphrasing, and then writing essays, etc. In practical material for reading, the relationship with writing is normally included. Although the focus may be on different reading strategies and comprehension practice, the resultant exercise usually involves writing (a part from some multiple-choice questions and yes/no, true/false format).

Reading for EAP is a multifaceted subject. However, there is a chief aspect which can be the starting point for other considerations. When EAP students read a material, it is for a **purpose**. It is obvious that all students may have different purposes in their reading; these will include:

- to obtain information (facts, data, etc.)
- to understand ideas or theories, etc.
- to discover authors' viewpoints
- to seek evidence for their own point of view and quote it in writing their essays

In the process of reading, students will be concerned with the subject-content of what they read and the language in which it is stated. Both aspects involve comprehension, though of different kinds. Different reading strategies and skills will be used based on the reading purpose. Jordan, R.R. mentions some effective reading skills and also emphasizes the SQ3R method for intensive reading. These skills will be presented later in this chapter. But in this

part some of the main strategies, skills, and sub-skills used in reading are presented.

According to Jordan (1997) they are as follows:

- predicting
- skimming (reading quickly for the main idea or gist)
- scanning (reading quickly for a specific piece of information)
- distinguishing between:
 - factual and non-factual information (fact from opinion)
 - important and less important items
 - relevant and irrelevant information
 - explicit and implicit information
 - ideas and examples and opinions
- drawing inferences and conclusions
- deducing unknown words
- understanding graphic presentation (data, diagram, etc.)
- understanding text organisation and linguistic/semantic aspects, for example:
 - relationships between and within sentences(cohesion and coherence)
 - recognising discourse/semantic markers and their function

All of them play a part and role in comprehension. (Fuller accounts are given by Munby 1978; Grellet 1981 and Nuttal 1996). The skills listed above are frequently taken as the basic for practice material in textbooks.

A lot of researchers and research efforts have tried to identify a table of reading skills and determine their relationships with one another. However it is generally agreed that, if individual skills exist, they worked together, and are in close relationships.

Most people accept that we can identify special strategies which readers can use in reading of difficult texts. The best way to acquire these strategies is simply to read and read. According to Richard Steele “reading is to the mind what exercise is to the body.” There is evidence that strategy training or skills teaching helps (see Kern, 1989; Pressly et al. 1989;

Novan; and Willanis 1993). What we can safely claim is that certain kind of practice are helpful and seem to help students to read more effectively. Clearly reading is important through practice, so strategies of practice occupy central role. The strategies to be covered are diverse. Both strategies of reading effectively and the strategies needed for tackling texts that are difficult in one way or another (Nuttall, C.1996: p.40).

The current emphasis of research in second language reading has begun to focus among other things on readers' strategies. These strategies are of interest for what they reveal about the way readers manage their interaction with written text, and how these strategies are related to text comprehension.

Since 1970s there has been no shortage of reading and L2 learning theories advocating teaching students to use a variety of reading strategies in order to read better (Aspator 1984; Cohen 1984; and Block 1986). These strategies start from the traditionally recognized reading skill of skimming and scanning, contextual guessing, skipping unknown words, tolerating ambiguity, reading for meaning, critical reading, and making inferences, to more recently recognized strategies such as building and activating background knowledge (Zvetina,1987), recognizing text structure (Block 1988), metacognitive awareness (Carrell,1989), comprehension monitoring (Casanave, 1988), writing one's way into reading (Zamel, 1992), and most important of reading as a cognitive process (Richard, R. and Julian, B. 2000).

The above mentioned strategies according to some shifts in theories relating to reading can be divided into the following categories:

- The traditional view
- The metacognitive view
- The cognitive view

2.2.2. The Traditional View

Dole et al. (1991) believe that in traditional view of reading, inexperienced readers acquire a set of hierarchically ordered sub-skills that enable him or her to build toward comprehension ability. Being familiar with these skills, readers are considered experts who comprehend what they read.

Parallel to this Nunan (1991) states that reading in this view is basically a matter of decoding a series of written symbols into their aural equivalents in the quest for making sense of the text. He referred to this process “bottom-up” view of reading.

2.2.3. The Cognitive View

In 1967 K. Goodman revolutionized the study of reading when he proposed that reading is a “psycholinguistic guessing game,” and following his theories a considerable amount of research has greatly increased our understanding of reading process (Carrell, et al. 2002). According to the definition presented by Goodman, reading is a process in which readers sample the text, make hypotheses, confirm or reject them, make new hypotheses, and so forth. Here the reader rather than the text is at the heart of the reading process.

The schema theory of reading also fits within the cognitively based view of reading. Rumelhart has described schemata as “building blocks of cognition” which are used in interpreting the sensory data (data-driven processing), in retrieving information from memory, in organizing goals and subgoals, in allocating resources, and in guiding the flow of the processing system. According to Rumelhart (1977) if our schemata are incomplete and can’t recognize the incoming data from the text we will have problems in understanding the printed pages (Vaezi, S. 2001).

2.2.4. The Metacognitive View

According to Block (1992), there is no more debate on whether reading is a bottom-up, language-based process or a top-down, knowledge-based process. The influence of background knowledge or schema is also accepted. Research has also tried to define the control readers execute on their ability to understand a text. Block (1992) has referred this control as metacognition. Metacognition is thinking about what one is doing while reading. Kein et al. (1991) stated that strategic readers attempt the following while reading.

- Identifying the purpose of the reading before reading
- Identifying the form or type of the text before reading
- Identifying the topic sentence and supported sentences
- Projecting the author's purpose for writing the text
- Choosing, scanning, or reading it in detail
- Making continuous predictions about what will occur next, based on information obtained earlier, prior knowledge, and conclusions obtained within the previous stages.

Moreover the readers write a summary of what happened in the story, including characters, plot, and important events. Carrying out the previous steps requires the reader to be able to classify sequence, establish whole-part relationships, compare and contrast, determine cause affect, summarize, hypothesize, and predict, infer, and conclude (Vaezi, S. 2002).

2.3. Reading Skills

Generally the reading strategies are operations or procedures performed by a reader to achieve the goal of comprehension (Kern, 1989). Strategies can make learning more efficient and effective (Richards, 1992).

Furthermore the Oxford Learner's Dictionary of Current English defines 'skill' (noun) as the 'ability to do something expertly and well'. This ability can be the capacity of a bowler to bowl accurately in cricket, of a potter to make good earthenware, of a goldsmith to deftly prepare gold ornaments and so on. Every field of human activity has its own set of standards based on the skills of each individual. A person excels in his profession or area of activity when he/she does the work concerned skilfully.

When it comes to reading in Second Language, the above definition is applicable to some extent. Reading, when regarded as a skill, is the ability to decode the exact sense conveyed by the writer in the form of printed letters and words. It comprises different subskills, which when put together make the larger skill called 'reading'. As these subskills have a distinct feature individually, they thereby become skills worth noticing. The subskills of reading assist in comprehending a given reading more effectively. Only when all these subskills are perfectly performed and well coordinated, the larger skill called reading happens successfully.

In the present study, nearly all the subskills of reading comprehension are enumerated. These subskills including skimming, scanning, outlining, paraphrasing, summarizing, note-taking, finding the central idea, distinguishing facts from opinion, inferring, and recognizing intent, attitude and bias of the author, and making critical judgements are only a selected few among various subskills of reading comprehension. As reading is a unique and complex psycholinguistic activity, these subskills and the likes assume importance and hence need to be practiced. The teacher should be aware of these skills for improving the reading efficiency of students. They are necessary conditions for being efficient readers.

These reading comprehension skills are defined and described in the following paragraphs in terms of their relevance and applicability to extensive reading habits. They are paramount to extensive reading and explicitly aim at it. Moreover these skills according to

the students' textbook "Reading Through Reading General English for University Students" (Farhady et al. 1999: pp. 373-417) are considered important techniques for efficient reading and are of immense use to arrive at the intended meaning of the author of an article.

The above mentioned strategies are mentioned in other parts of this study and here again some of them are explained in detail with respect to students' textbook. The following strategies were mentioned in students' textbook in unit four which is about reading comprehension.

2.3.1. Skimming

Skimming is defined as the ability to identify main ideas while very rapidly and selectively skipping over the reading material. It is a technique used to find out how a news story, magazine article, or text book chapter is organized and what it is about without having to read the entire selection (Royce 1977). In other words, skimming amounts to finding out the gist or summary of a particular text quickly. This skill is much more sophisticated than Scanning and here ideas rule over facts. Only when a student finds the theme- which is identified by skimming- of an article interesting, will he/she start reading it closely for pleasure.

Skimming as a skill is better utilized when a student has to read a lengthy reading, or a detailed description of something to find out its gist. Thus it becomes an effective tool especially in extensive reading by saving the readers from boredom and loss of concentration that may be caused by extra details and description. More often students who lack the habit of reading and those who do not read on a regular basis tend to develop a negative/wrong opinion about reading. They think that they have to understand each and every word of a text to understand it fully. So they never come to know how to skim a message. This prevents them from increasing their reading speed and in turn hampers their reading later on. If a

student reads a little and manages to understand only something out of it he/she feels discouraged to read any further.

To overcome this handicap, a student should be taught how to skim. As discussed earlier, skimming helps in understanding the main ideas of a reading in a short time. This has many advantages. The skill of skimming comes in handy to students when they want to know the central idea or subject of a reading. If they find the subject interesting they may start reading it closely later on.

While skimming an article, students need not understand all the words they come across. Students may make intelligent guesses of their meanings using the context. Even then if they fail to understand some words, they may simply ignore them and continue with their reading without getting bogged down by the unfamiliar words. Moreover, all that the students need to do is to read the first sentence of all the paragraphs of the article. In a few cases, reading the first and last paragraphs would make the student understand what an article is about.

The bottom line is that the knowledge/skill of skimming equips the students with an important tool that helps them to read more in a short span and at the same time get the gist of a text. It also builds up the confidence of students to read more.

Furthermore according to the writers of students' textbook of "Reading through Reading," a reader may have different purposes for reading of a paragraph. Accordingly there are three main purposes for reading a paragraph: 1) A paragraph can be read for its central or main idea; this is called skimming. 2) It might be read for specific information; this is called scanning. 3) And it might be read for details and complete understanding; this is called reading for exact information.

2.3.2. Scanning

It is the ability to locate specific information or fact as rapidly as possible. Generally speaking when a person scans for particular information the person knows what he/she is

looking for before he/she begins (Royce 1977). A few different occasions in which scanning comes handy to a reader are: while/when looking for a friend's telephone number in the phone book, looking for the timings of a particular programme on a specific channel on T.V. looking for a particular title in the library catalogue, or a word in an article or in a dictionary.

This skill is useful because it saves time in locating a specific piece of information from a particular source and is widely employed while reading. Asking the student to find out the paragraph number to which a piece of information belongs for example can test the skill of scanning. The information could be a number, name of a place, person, etc. The skill of scanning is tested using the question types like multiple choice and true/false. Furthermore according to these authors scanning is a type of speed reading technique used to locate specific information, such as birth date, temperature range, location, etc. According to them in order for a reader to do scanning efficiently and skilfully, the following procedures are suggested.

1. The reader should first look at the title of the paragraph to see whether the specific information is included in the passage or not. It is possible that the specific information be indicated in the title of the paragraph. If not, the reader should search for the specific information within the paragraph.
2. The reader should look through the lines. Without reading them, he should look for the specific information he wants.
3. Then the reader should identify and comprehend the specific information.

2.3.3. Outlining

The ideas within text are usually organized systematically. It will be easier to understand the ideas presented in a text if the reader can figure out how the ideas are organized. It is an outline that helps the reader in this respect. An outline, in fact, shows a system through which

ideas are organized. Hence, outlines and the ability outlines are considered necessary for efficient reading.

2.3.4. Paraphrasing

One way to make sure that one has understood a passage is to have him explain the content of the passage in his own words. Of course, explaining a passage, is different from memorizing it. To memorize a passage, one has to repeat the exact words of a passage by heart. To paraphrase, however, the reader explains the passage not only by using the exact words and sentences of the passage in his own words. In other words, a paraphrase is a restatement, of a passage in another form. Therefore, the purpose of paraphrasing is to express the idea of a writer in one's own words. Some guidelines in paraphrasing should be taken into account.

2.3.5. Summarizing

Another technique for efficient reading is summarizing. The only difference is, however, that in summarizing one uses the exact words of the passage. This does not mean that summarizing is the same as memorizing. In memorizing, every word in the passage is repeated by heart, while in summarizing only important points are listed and explained. I should mention that for me as a teacher, summarizing the new material is the best way of learning new materials. In summarizing all unimportant points should be ignored and we should attach great importance to important and useful points.

2.3.6. Note-taking

In EAP reading note-taking is one of the activities in which most college students are involved while reading. When one reads a passage, an article or a text, it will be difficult for him/her to remember at later times the whole content of what he/she has read. Therefore it is

necessary for the student to take notes of his/her reading material for later use. Furthermore, students are often to listen to lectures of their professors. To remember of these lectures, it is necessary for students to take notes. Here students should have classes to learn about how to take good notes.

2.3.7. Finding Main/ Central Idea

Though this skill has some parallels with skimming, it is not exactly the same as skimming. Instead it has different functions from that of skimming. Generally in most well written texts, the description revolves around a single subject/theme/topic. Each paragraph could speak about a supporting detail or an example that by itself adds meaning and information to the main theme. Knowing these details is sometimes as important as knowing the main theme of the text. Hence finding the central idea of an entire text is quite different from finding the sub-themes present in different paragraphs of the given text. Unlike in skimming, while finding the central idea in a text, a reader has to closely read entire paragraphs without skipping sentences.

2.3.8. Differentiation Fact from Opinion

Before understanding the difference between fact and opinion one should know their definitions. The definitions themselves make the difference between them very clear and that helps a reader to arrive at the correct meaning as intended by the author.

A fact is a general statement that can be proved universally by experimentation, observation, or research (Royce 1977). For instance the statement “The present president of India is Mrs. Prathiba Patil” is indisputable because she is the president of India recognized by Indians and the world at large. So this assumes the status of a fact. Likewise the statement, “Human beings have only one heart” is a fact since it can be verified and proved universally.

An opinion is an individual's feeling, belief, or judgement about something (Royce, 1977). "Amitabh Bachchan is the greatest movie star" is a statement that has no base to be proven correct universally. It is only an opinion since there may be many people who do not feel the same and at the same time there could be many more people who do not even know who Amitabh Bachchan is.

A reader who knows the difference between fact and opinion will be able to catch the meaning intended by the author. In extensive reading, this knowledge helps the students understand the text effectively and quickly without any distortion in the meaning of the text. True/false questions aptly suit testing the skill of differentiating opinion from fact.

2.3.9. Inferring

Inferring is the ability to deduce an implied meaning other than that explicitly stated in a given text. This is also a higher order skill which requires prior knowledge of the theme/subject dealt with in a text, general understanding of his/her surroundings and familiarity with the text on the part of the reader. It is a widely used reading comprehension skill in extensive reading. The skill of inferring results from good reasoning abilities.

Inference is a skill many people employ at every stage of their life. But not all the time are these inferences correct. For instance we may infer from a large diamond necklace a woman wore in a marriage function that she is probably wealthy. This inference can either be proved correct or wrong. Whereas, while reading numerous factors like the information already presented in the text and the reader's prior knowledge about the subject help the reader in inferring something out of something. True/false and multiple choice question types can be used to test the use of this skill.

It is necessary to say that the mentioned strategies i.e. skimming, scanning, outlining, paraphrasing, summarizing, note-taking, finding the central idea, differentiating fact from

opinion, and inferring are during reading and post-reading strategies and very important for Iranian EAP students in their general English reading courses.

Furthermore in addition to strategies of skimming, scanning, outlining, paraphrasing, summarizing, and note-taking that are explicitly mentioned in the students' textbook, there is an emphasis on speed of reading in order to understand the material as quickly as possible. As mentioned in the students' textbook reading should result in comprehension, and comprehension should be along with speed. In order for the readers to read with both comprehension and speed, they should know the following stages.

1. word-recognition speed
2. word-comprehension speed
3. sentence-comprehension speed
4. paragraph-comprehension speed
5. text- comprehension speed

Tierney and Pearson (1985) make the following recommendation to language teachers:

1. Be sure to find out students' previous knowledge of the topic or text genre before beginning to read
2. Encourage rereading
3. Give students more opportunities to evaluate their own ideas, and reasons for reading influence what they understand
4. Spend more time helping students develop strategies before they read
5. Help students develop story maps for stories before they read
6. Encourage students to consider why and to whom an author is writing
7. Develop links between what students read and what they write

According to Aebersold, J.A. & Field, M.L. (2001) both teachers and researchers have tried to identify the mental activities that readers use in order to construct meaning from a

text (see N.J. Anderson et al. 1991; Devine 1988a; Hosenfeld et al. 1981). These activities are generally referred as **reading strategies** or sometimes they are called **reading skills**. They stated that what the able readers do consciously or unconsciously enable them to comprehend the text well. Good readers use from the following strategies.

- Recognize words quickly
- Use text features (subheadings, transition, etc.)
- Use title(s) to infer what information might follow
- Use word knowledge
- analyze unfamiliar words
- Identify the grammatical functions of words
- Read for meaning, concentrate on constructing meaning
- Guess about the meaning of the text
- Evaluate guesses and try new guesses if necessary
- Monitor comprehension
- Keep the purpose for reading the text in mind
- Adjust strategies to the purpose for reading
- Identify or infer main ideas
- Understand the relationships between the parts of a text
- Distinguish main ideas from minor ideas
- Tolerate ambiguity in a text (at least temporarily)
- Paraphrase
- Use context to build meaning and aid comprehension
- Continue reading even when successful, at least for a while

(Anderson et al. 1991; Barnett 1989; Clarke 1979)

This list is not complete. It will be increased in future by doing more research. Furthermore, it is not clear which strategies are most important, which interrelate with each other, and who may be most likely to use a given strategy.

According to Langan (1992) there are seven reading strategies increase the understanding of what one reads. These strategies are as follows:

- Recognize definitions and examples;
- Recognize enumeration;
- Recognizing heading and subheading;
- Recognizing signal words;
- recognizing main ideas in paragraphs and short selections;
- Knowing how to outline; and
- Knowing how to summarize.

Definitions are often among the most important ideas in the selection. Most definitions are abstract and usually followed by one or more examples that help clarify their meaning.

Enumerations are key to important ideas. They are list of items that may actually be numbered in the text more often. The list of items is signalled by such words as “first of all, second, finally, etc.”

Signal words help the reader to follow the direction of a writer’s thought. They are like signpost on the road that guides the traveller.

Outlining is another strategy that will improve reading comprehension. Outlining is an organizational skill that develops the learner’s ability to think in a clear and logical manner.

Hosenfeld et al. (1981) identify twenty good reading strategies. The skilled reader (1) reads for meaning, (2) skips unknown words or guesses based on the context, (3) uses the

context of prior and subsequent material, (4) identifies the grammatical structures,(5) evaluates the validity of the guesses, (6) makes predictions based on the titles, (7) continues to read, (8) recognize cognates, (9) make interpretations based on his/her knowledge of the world, (10) analyze unknown words, (11) reads expecting the materials to be meaningful, (12) reads for meaning rather than language, (13) is willing to guess, (14) uses illustration, (15) makes use of glosses,(16) look up the meaning of words only as a last resort, (17) gets the correct meaning when looking up words, (18) skips unimportant words, (19) follows through on predictions, (20) utilizes context clues.

Grellet (1999) discusses useful reading practice techniques. One is to have student work their way through comprehension problems by inferring the meaning through word formation and context. They should also learn to pick out the important words that form the core of each sentence, and they need to be aware of the use of referent and connecting words to establish relationships in and among sentences and paragraphs. Another is to practice timed reading to improve reading speed. A third is to learn to use scanning and skimming techniques to preview reading material, predict what the selection is about, and develop expectation about content of the text.

Furthermore according to this author (1999: pp. 23-24) note taking and summarizing are two important reading techniques. Note-taking is necessary to remember what one reads or listen to and as essential technique for review of materials in future. Keep in mind that only take a note from key ideas and leave out unessential information. In summary writing also avoid unessential details and only write the important parts by your own words. It is necessary to mention that a summary is usually written in one's own words and it doesn't necessarily imply outlining the structure of the passage.

Similarly according to Grellet (1999: p.4) the main ways of reading are as follows:

- Skimming: quickly running one's eye over text to get the gist of it.

- Scanning: quickly going through a text to find a particular piece of information.
- Extensive reading: reading longer texts, usually for one's own pleasure. This fluency activity, mainly involving global understanding.
- Intensive reading: reading shorter texts, to extract specific information. This is more an accuracy activity involving reading for detail.

Furthermore according to Grellet, F. (1999: pp.4-5) reading involves a variety of skills.

The main ones are listed below.

- Recognizing the script of a language
- Deducing the meaning and use of unfamiliar lexical items
- Understanding explicitly stated information
- Understanding information when not explicitly stated
- Understanding conceptual meaning
- Understanding the communicative value (function) of sentences and utterances
- Understanding relations within the sentence
- Understanding relations between the parts of a text through lexical cohesion devices
- Understanding cohesion between parts of a text through grammatical cohesion devices
- Interpreting text by going outside it
- Recognizing indicators in discourse
- Identifying the main point or important information in a piece of discourse
- Distinguishing the main idea from supporting details
- Extracting salient points to summarize (the text, an idea, etc.)
- Selective extraction of relevant points from a text
- Basic reference skills
- Skimming

- Scanning to locate specifically required information
- Transcoding information to diagrammatic display

He believed that in order to develop these skills, several types of exercises can be used. These question-types can have two different functions.

1. To clarify the organisation of the passage. The question can be about:

- the function of the passage
- the general organisation (e.g. argumentative)
- the rhetorical organisation (e.g. contrast, comparison)
- the cohesive devices (e.g. link-words)
- the interasential relations (derivation, morphology , hyponymy)

2. To clarify the contents of the passage

- plain fact (direct reference)
- implied fact (inference)
- deduced meaning (supposition)
- evaluation

Grellet (pp. 14-18) also mentioned some techniques that students are familiar with in their own native language, Since my research topic is concerned with two languages, it is necessary to retrain them because some students have differently in applying them to a second language. These reading techniques are:

2.3.10. Sensitizing

The aim of this section is to provide exercises that will develop the strategies that students need to cope with unfamiliar words and complex or apparently obscure sentences.

2.3.10.1. Inference. Its means making use of syntactic, logical and cultural clues to discover the meaning of unknown elements. If these elements are words, then word-formation and derivation will play an important role.

2.3.10.2. Understanding Relations within the Sentence. Sometimes students are unable to get an immediate grasp of sentence structures. This will be a definite handicap in the case of texts with relatives, embedded clauses and complex structures. Thus, it is important to train the students, as early as possible, to look first for the 'core' of the sentence (subject + verb). In order to do that, the learners can be asked to divide passages into sense groups and underline, box, or recognize in some other way the important elements of each sentence in a passage.

2.3.10.3. Linking Sentence and Ideas. Another area in which it is essential to prepare the student is in recognizing the different devices used to create textual cohesion and more particularly the use of reference and link-words.

2.3.11. Improving Reading Speed

Students who read too slowly will easily get discouraged. They will also tend to stumble on unfamiliar words and fail to grasp the general meaning of the message. Therefore it is necessary to train them to increase their reading speed.

2.3.12. From Skimming to Scanning

One of the most important points that we should keep in mind when teaching reading comprehension is that there is no one type of reading. There are several types of reading according to one's reasons for reading. The student must not waste their time by reading all parts, so in order to avoid this they can use from the following techniques:

2.3.12.1. Predicting. By using of grammatical, logical, and cultural clues students can predict what will happen next.

2.3.12.2. Previewing. It is very specific reading technique which involves using the table of contents, the appendix, the preface, and the chapter and paragraph headings in order to find out where the required information is likely to be.

2.3.12.3. Anticipation. When student predict something and have questions, they will look for to their answers in reading text. In this part our predictions will be confirmed or corrected.

According to Carrell et al. (1989) reading strategies are divided as follows:

- **Global strategies.** Those strategies having to do with general understanding of the text. The reader is required to activate his/her background knowledge, understanding the text gist, remember the text, and recognize the textual information.

- **Local strategies.** Those strategies having to do with understanding details of the text which require the reader to pay attention such as, sound-letter, word meaning and sentence syntax.

- **Cognitive strategies.** Skills that involve manipulating or transformation of the language in some direct way, e.g. through reasoning, analysis, formal practice with structures and sounds and so on. For example, cognitive strategies which learners may use to assist them in reading comprehension activities including:

1. Repeating key words or phrases silently or aloud
2. Summarizing to make sure that the important informative ideas will be remembered.

- **Metacognitive strategies.** Behaviours used for arranging, planning, and evaluating one's learning. Those "**beyond the cognition**" strategies are used to provide executive control (thinking about mental process in reading monitoring process) over the learning process.

We can define metacognition as cognition about cognition or thinking about thinking. As early as 1970 Flavell defined this term as "knowledge that takes its object or regulates any aspect of cognitive behaviour" (1978: p.8). Two dimensions of metacognitive ability are generally recognized (1) knowledge of cognition, and (2) regulation of cognition. The first

aspect of metacognition, knowledge about cognition, includes three components which have been referred “declarative”, “procedural, and “conditional” (Paris, Lipson, Wixson, 1983).

- **Declarative knowledge** .It is propositional knowledge referring to “knowing what.” A learner may know the definition of reading skill, for instance s/he may know the meaning of skimming and scanning. Knowing the meaning of reading strategies is very important.

- **Procedural knowledge**. It is information about “knowing how” to do different actions, for example knowledge about “how to write a summary, and how to skim and scan” (Winograd and Have: p. 134).

- **Conditional knowledge**. It refers to “knowing why” and is composed of learners’ or readers’ understanding about when acquire and use a strategy and the exact time of using of that strategy. Conditional knowledge is necessary if a reader is to know whether a certain strategy is suitable or not, and whether or not it is working effectively for that learner. The second aspect of metacognition refers to the planning, monitoring, testing, revising, and evaluating of the strategies employed during reading. (Baker & Brown: 1984) Thus in reading, the two metacognitive factors, knowledge of cognition and regulation of cognition are concerned with what readers know about their cognitive resources and their executive control of these resources.

The metacognitive strategies and the like mentioned so far have been cited in many research studies and of course with different degree of emphasis. For example Hewitt (1995) argues for summarizing, questioning, clarifying, and predicting, Sola (1996) outlining, Barnett (1989) pre-reading, during-reading, post-reading and follow up activities; (Carrell, 1987) activating schema or background knowledge and interactive reading.

All the strategies mentioned before start from traditionally recognized of skimming and scanning, contextual guessing, skipping unknown words, tolerating ambiguity, reading for meaning, critical meaning and making inferences to more recently recognized strategies such

as building and activating background knowledge (Zvetina, 1987), recognizing text structure (Block, 1988), comprehension monitoring (Casanave, 1988).

Grabe and Stoller offer the following reading strategies. These strategies are called common strategies used by skilled readers.

- Specifying a purpose for reading
- Planning what to do / what steps take
- Previewing the text
- Predicting the content of the text
- Checking predictions
- Posing questions about the text
- Finding answers to posed questions
- Connecting text to background knowledge
- Summarizing information
- Making inferences
- Connecting one part of the text to another
- Paying attention to text structure
- Rereading
- Guessing the meaning of a new word from context
- Using discourse markers to see relationships
- Checking comprehension
- Identifying difficulties
- Taking steps to repair faulty comprehension
- Critique the author
- Critique the text
- Judging how well objectives were met

- Reflecting on what has been learned from the text

Grabe and Stoller (2002) say that strategies and skills are different from each other. For them skills represent linguistic processing abilities that are relatively automatic in their use and their combinations for example word recognition and syntactic processing are considered skills. **Strategies** are often defined as a set of abilities under conscious control of the reader, though this common definition is not likely to be true. In fact many abilities that are normally considered as strategies are relatively automatic in their use by fluent readers, for example skipping unknown words while reading and rereading for more clear meaning. Thus there is no sharp distinction between skills and strategies. Sometimes skills may have been learned as strategies but have become completely automatised (e.g. mentally summarizing a newspaper story to tell a friend).

Narayana, K. R. (1973: p.21) in his book named reading comprehension at the college level stated that according to Fry “It is very difficult to define reading comprehension. Reduced to its simplest elements, we might say that comprehension is a part of the communication process of getting the thought that were in the author’s mind into the reader’s mind” (p. 21). Also according to him Macmillan’s definition is more precise and helpful. He defines comprehension as “understanding what is written within, between, and beyond the lines—in other words, intelligent interpretation” Narayana, 1973: p.21) and it concludes:

- a. Reading to get the main idea;
- b. Reading to get the important details;
- c- Reading to answer specific questions;
- d. Reading to follow the logical sequence and development of the idea;
- e. Reading to apply what is read;
- f. Reading for deductions and implications; and
- g. Reading to evaluate.

According to Oommen et al. (1972: pp. 12-13) skimming and scanning have been described as process of reading and looking. The reading process is similar to accelerated reading. When the reading stops and looking starts, the process can best be described as “floating”, e.g. moving back and forth and downward of the same time, in a fair rapid manner.

In scanning, you are trying to find specific words, numbers, names or ideas, or attempting to answer specific questions. In scanning the first step is to determine what you are looking for. Second step is to anticipate the manner of stating the information for example if you are looking for a name, place, or title, capital letters will provide a visual clue. When you start looking for needed information, use the “floating” approach until you find what you are looking for. Then read as much as you need to answer your question.

2.3.13. Skimming- an Organisational Approach: According to Oommen et al. there are three kinds of skimming:

2.3.13.1. Preview, usually followed by a second skimming or a thorough reading, and it is used at the time of buying and selecting a book, in surveying a chapter before reading, and finally in finding appropriate material for use in research. etc.

2.3.13.2. Overview, which is usually an end itself, serves to give the reader an over-all impression, a feeling for the general nature of the content, main ideas, etc.

2.3.13.3. Review, following a previous reading, is used when the reader goes back over material to study for a test or to prepare a report. Reviewing helps every reader to refresh his or her own minds to make clear the structure, better remember the material. Thus skimming and scanning and also eye movement are considered good reading strategies.

According to Harison, C. (2004: p.97), Michael Pressly (2000) argued that we now have a clear idea of what strategies need to be developed, partly because these strategies are used by good readers and partly because different studies have shown that if these strategies are

well taught to poor readers they will improve their reading comprehension ability. Pressly recommends the following strategies:

- Teach decoding, with an emphasis on morphology
- Teach the use of context cues and monitoring meaning
- Teach vocabulary
- Encourage extensive reading
- Encourage students to ask their own “why” questions of a text
- Teach self-regulated comprehension strategies, e.g.
 - prior knowledge activation ;
 - question generation ;
 - construction of mental images during reading ;
 - summarization
- analyse into story grammar components
- Encourage reciprocal teaching
- Teacher modelling of strategies+scaffolding for independence

To become a better or an efficient reader the reading strategies are divided into three groups:

A) Before reading (pre-reading)

B) During reading (while reading)

C) After reading (post-reading)

2.3.14. Before Reading

Here students are prepared to read and comprehend the selected article. Because comprehension is determined partly by a student’s own background knowledge of the topic of the article, a brainstorming activity is taken up in this phase. As a part of this activity, the teacher asks a series of probing questions designed to elicit information from the students. “The nature of these probing questions can lead students to mention terms/ideas that will be

included in or inferred from the article to be read” (Stoller 1994: p. 3). For example, a general English reading article titled “using a dictionary” generates many probing questions on the exiting topic, a dictionary. The probing questions sometimes are personal; in order to make the students more involved in answering the questions. This exercise mainly serves two purposes. On one hand, it activates students’ already existing background knowledge, and on the other, it provides students with new information about the topic that helps them comprehend the article better. Furthermore, this activity increases students’ concentration, stimulates curiosity, furthers imagination, fosters motivation, as well as gives students a sense of purpose and a reason for reading (Hess 1991). Bringing the background knowledge to the conscious level helps students make sense of the topic of an article to be read (Stoller 1994).

In the pre-reading phase the teacher should make the students to examine the pictures, study the lay out of the reading, preview its title, subtitles, illustrations, etc. to predict something about the article. If the topic of the selected is unfamiliar to the students and the teacher feels the topic of an article will be of interest to the students, he/she can give a short introduction about the article to orientate the students towards the article. The following parts can be considered by student in before-reading stage.

2.3.14.1. Set a Purpose for Reading. Think if you will be reading to find out what happens in the story or to learn specific information.

2.3.14.2. Preview the Text. Look at the title, pictures, captions under pictures, headings, bold-faced print and other graphics.

2.3.14.3. Activate Background Knowledge. Think about what you know about the reading text before reading of it.

2.3.14.4. Predict. Predict what may happen in the story, what words may be used, or what information the text might contain.

2.3.15. During Reading

A lot of reading theory is involved in this phase and the teacher should be thoroughly informed about this. Most of the Iranian EAP students' problems are located in this phase. The cardinal principle of theory on reading emphasises 'meaning' over 'structure'. But reading in second language is mainly done to acquire language and hence the focus is laid on 'structure'. So, in practice, one may consider that the theory on reading opposes the more common method of reading for learning the language. Instead, the theory further states that focus on the 'meaning' at the initial level slowly promotes the readers to focus on 'structure'. It is precisely for this reason the teacher is exhorted to encourage students to concentrate on 'meaning' alone.

Hence a good amount of practice in concentrating on 'meaning' while reading helps the reader to read a little more than he/she usually does otherwise. Whereas the focus on 'structure' acts as a stumbling block for the student and thus hampers his/her reading speed, thereby making the whole attempt futile. It is for the same reason that the reader is expected to give minimum time for students to go through the article. Apart from that, the teacher should not allow any discussion during the reading of the article by the students.

With the background knowledge about the topic already activated or enforced in the pre-reading phase, the students now quickly glance through the article gathering as much information as possible. This kind of reading makes the students better readers. Gradually the students automatically pick up the structure and go on to make use of it in speech and writing.

The teacher makes the students number the paragraphs in the article for convenience sake. This is followed by a few questions meant to test the comprehension of the students. These questions are framed in such a way that they test various reading comprehension skills thereby making the students develop those skills. With sufficient practice the students may master the reading comprehension skills, which in turn promote their understanding of a text

and thus make them better readers. A good reader automatically becomes a good learner of the language.

All that the teacher should do in this phase is to allot for the students a minimum amount of time to read the article once and give them a few instructions before reading. The teacher should instruct the students not to read word by word and get stuck in understanding the meaning of each and every word. As reading the article follows answering questions, the teacher familiarizes the students with the question types used in a particular exercise just before reading the article. This is intended to make students comfortable with the question types and not waste time on figuring them out while answering them.

Generally speaking the following points are a brief summary of during-reading activities.

2.3.15.1. Cross-check. Check one cue with another. Ask yourself, “Does this word look right, sound right, and make sense?”

2.3.15.2. Reread. When you doubt or problems occur, come to the beginning and read it again.

2.3.15.3. Predict and Confirm. Ask yourself, “What word do I expect to see?” “What do I think will happen next?” “Did that make sense?” or “Can I find the answers to my questions about this topic?” In this phase you can arrive at your predictions that you make it before.

2.3.15.4. Skip, Read on, and Go Back. Sometimes you can skip an unfamiliar word and continue your reading until finding it, think about what you understand. Then, using the context, go back and reread to try to determine the word.

2.3.15.5. Connect Background Knowledge to the Information in the Text. Think about your prior knowledge, about the subject and the kind of material you are reading. Think about the similarities between them. If some questions arise for you about the topic or the kind of book, you may need to ask some one for help.

2.3.15.6. Think About Explicit and Implicit Information. Think about what information is given directly. Also think about what you know from reading that is not directly stated in

words such as how a character's actions show feelings or why things may have happened based on the clues the author gave.

2.3.15.7. Stop and Review. If you are reading a longer text, stop and think about what has happened in the story so far or what information has been given.

2.3.16. After Reading

Here, the teacher gives out the correct answers to the questions in the exercise and then takes up a detailed discussion on correct and incorrect answers. The students are asked the reason for the choice of their answers to the questions thus actively involving them in the discussion. This phase is similar to the 'Pre-Reading Phase' in terms of equal participation of students and teacher. Questions on recognizing author's intent and attitude, inferring, making critical judgements require much more attention and explanation on the part of the teacher. The key here is that no clear-cut guidelines can be given to teachers in advance to conduct a discussion in a certain/predetermined fashion, because their role depends on how the students respond. Only when students come up with different answers other than the correct answer option, can the teacher explain to them the correct answer option. So, the onus lies on the teacher to be pro-active, make the students the articles well and develop their reading comprehension skills covertly/indirectly.

Besides this, unfamiliar vocabulary and idioms are explained in/using the context by the teacher. It is recommended that the teacher borrow sentences from the article to provide the much need context. The teacher should ask the students to observe the different shades of meaning of a particular word in various contexts. New words become part of the reader's active vocabulary only on encountering them frequently and this signifies the importance of extensive reading.

It is necessary for readers that take into account the following guidelines in post-reading.

2.3.16.1. Retell and Summarize. Tell some one or write what happened in the story, including characters, plot, and important events. If you read a notification piece, review what information was presented.

2.3.16.2. Use a Graphic Organizer. Use a story map, biography wheels, Ven diagram, or other possible way to show what was included in what you read. In this case there may be a need to consult and check with your teacher for suggestion.

2.3.16.3. Draw Conclusion. Think about your predictions you made before and during reading. Look back and think about what you have read. Consider the relationship of your prior knowledge and the reading material. Think about if you have come to your questions answer, and do you have more **questions** about the subject?

2.3.16.4. Reread. Reread the text or a section of the text to help you understand better.

2.3.16.5. Discuss and Respond. Talk with someone about what you have read. Ask each other question. Look back at the book to defend your opinions.

2.3.16.6. Write to Support Understanding. Write about what you have read, telling what it made you think of or what you learned.

Available at: http://fcps.k12.va.us/Newin_tonforestES/pages/

Nuttall, C. (1996: p. 129) discusses that the **SQ3R** reading method is considered most important skill in reading comprehension .He believes that work in any language, in any subject, benefits from this strategy for private study reading . It consists of five steps: Survey (S), Question (Q), Read (R), Recite (R), and Review (R). This method originally belongs to Robinson (1964).

- **Survey.** Skim and scan introduction, headings, subheadings, topic sentences, summary, etc. to get an overview of the reading task.
- **Question.** Turn headings into questions to direct your thinking. Keep in mind that it is the reader who asks the questions; this is intended to make you think about purpose-what do you

want to get out of the text. Also remember that it involves prediction: what help do you expect the text to supply?

● **Read.** Search for answers to your questions and select main ideas. In this phase considering the following points are important:

- Look for answers to the questions you first raised
- Reread captions under pictures graphs, etc.
- Note all the underlined, italicized, bold-printed words or phrases
- Study graphic aids
- Reduce your speed for difficult passages
- Stop and reread parts which are not clear

● **Recite.** To ensure your recall of the material, make sure you can recite key ideas and important details. Speaking aloud the answers to your questions, to fix them in your mind and write them down are the aim of this part.

● **Review.** It is essential to review the ideas that you have read so you can continue to think about them. Think about what you have learnt and organize them in your mind, consider its implications for other things you know, evaluate its importance and so on. The aim is to integrate it into your previous knowledge and experience. This stage may take place later in order to provide reinforcement and revision as well.

This reading method is for use especially when the teacher has provided no guidance; it makes the students to be responsible for guiding themselves. With able students, this method increases active involvement, but even weaker and younger readers have improved by using this approach (Nuttall, 1996: p. 129).

Furthermore according to him (1996) students should acquire strategies for dealing with the lexical item that make comprehension difficult. According to him these strategies are called word attack skills. These strategies are discussed in three items: 1. the interpretation of structural clues, 2. inference from context, and 3. the use of the dictionary.

1.1. Structural clues: grammatical function. By observing the grammatical function or part of speech of a word in a sentence, we can say whether it is a noun, verb, adjective, etc. This tells us the kind of meaning to look for and is thus a first step on the road to understanding. Knowing the grammatical function of a word pave the way for clear meaning.

1.2. Structural clues: morphology. The morphology structure of a word may offer valuable clues to its meaning, so it is useful to learn something about it. For being familiar with these clues, the students should study affixations i.e. the adding of suffixes and prefixes to the end and beginning of a word. They should also be familiar with how compound words are built. You can start making students aware of affixes when they face the simple ones such as unhappy, teacher, Abnormal, etc. Thus teaching of the process of affixation is to be lead better comprehension. So prefixes and suffixes can be taught as structural clues related to morphology as word attack skills in classrooms.

2. Inference from the context. Inferring meaning is a skill that we all have in our L1. Most of our L1 vocabulary is learnt by using this approach. We often see the spoken words on printed pages and understand them and sometimes we assimilate their meanings. Later, when we met in books words that we haven't previously met in the spoken language, we sometimes used dictionary. The best readers don't need to use from this strategy, because their vocabulary is sufficient for their purpose. But for unable readers, conscious use of inference is invaluable: by using it they come to the meaning. It may not be completely accurate, but enough to their purpose. Most students are not aware that they can understand new words without being told their meaning. So the first thing is to say that it is possible. After that, you can create a positive attitude (If I try I can do that) in stead of negative one such as "Help! Where is the dictionary?"

3. Using a dictionary: If the mentioned clues were not fruitful, students are advised to use a dictionary. Here students should be familiar with how to use a dictionary, and the kinds of information that a dictionary can provide to them. Dictionaries provide different types of information about a given word. These pieces of information include spelling, syllable division, pronunciation, parts of speech, meaning, etymology, and usage labels. To use a dictionary easily and effectively, students should be familiar with certain skills. Dictionaries are different, so students need to be familiar with the kind of information offered by their own. As far as reading is concerned, semantic information is very important. Probably the most important piece of information provided in a dictionary is the meaning of the words. Students and readers should keep in mind that the meaning of a word depends, to a great extent, on the context in which it is used. Since there are almost always more than one meaning for a word, dictionaries usually present all the possible meanings of a word. Some dictionaries arrange the meanings of a word from the most-frequently to the least-frequently used ones. Others order the meaning of a word used from early times to the present. Whatever the ordering may be, students are recommended to be careful about the meanings of a given word. When you look up a word in a dictionary, it would be a mistake to get the first meaning hastily and to leave the rest of the meaning unnoticed. It is quite possible that the first meaning in a dictionary is not the one you are looking for. So, students are recommended to check different meanings of a word to locate the specific meaning appropriate to the context in which the word is used. It means that good readers should consider all the possible meanings and according to the context choose the best meaning. Continual insistence on the use of this skill is needed. This means that you should make frequent use of the dictionary in class (even though it is quicker to give the meaning yourself); and students should select the appropriate meaning (Nuttall, pp. 69-76).

The following list includes several specific reading strategies presented by Aebersold et al. (2001: p.98).

- Note the key words in the first sentences of the paragraph or text
- Decide which word announces the main topic of the paragraph or text
- Decide which words announce the specific aspect of this topic of the paragraph
- Note if there is a sentence that states a probable main idea
- Note the most important words from each sentence as you read
- Ask yourself how this information relates to the information that come before it.
- Look for examples that illustrate the ideas stated before.
- Look for details that provide more specific information on the topic.
- Look for a sentence that concludes this particular aspect of this topic.
- Look for words that indicate a change in the kind of information.
- Look for a sentence that provides information about a new aspect of this topic.

Each of these strategies may be used several times while you are reading a text.

Similarly these authors (Aebersold et al. 2001: p. 130) believed that as students read, their comprehension of the text is shaped by their previous experience. They understand the ideas, they make inferences, and they compare new information with their own prior knowledge of that topic. Other strategies that readers should use to read a text include:

- Identify the author's purpose in writing the text
- Examine how the author establishes his or her perspective
- Recognize persuasion in writing
- Distinguish fact from opinion
- Check the logic of the development of the author's perspective
- Establish the assumptions underlying the text
- Recognize the influence of the author's personal beliefs and attitudes
- Note the author's use of language to set tone and register

As mentioned before there are pre-reading, during-reading, and post-reading strategies. Pre-reading strategies according to Aebersold et al (2001: pp. 74-76) are as follows:

- Read the introduction and identify the key issues to be discussed
- Read the conclusion paragraph, if present, carefully
- Skim the text
- Read the first sentence of each of the paragraphs (the paragraphs after the introduction and before the conclusion) to see what ideas are mentioned in them
- Scan parts of the text for specific information

Skimming and scanning are very useful strategies. Skimming is usually defined as quick, superficial reading of a text in order to get the gist of it. Although there are some questions in how the researchers skim, it does appear to be a strategy for getting clues to the main ideas, divisions, points, or steps in an argument. Barnett (1989), Grellet (1984) Hosenfeld et al. (1981), and Jenson (1986) give introduction on teaching this strategy.

Scanning is looking quickly through the text for a specific piece of information. It involves the following steps:

1. Determine what key words to look for
2. Look quickly through the text for those words
3. When you find each word , read the sentences around it to see if they provide the information being sought
4. If they do, do not read more. If they do not , continue scanning

Considering the rapid reading Redway (1991) regards the following six steps as necessary for strategic reading:

1. Reading: activating background knowledge;
2. Setting objective: purposeful reading and reading with questions in mind;
3. Overviewing: skimming through the reading material and leaving out irrelevant and

already familiar information;

4. Previewing: going through the whole material before starting reading;

5. Inviewing: through reading and reading in detail; and

6. Reviewing: summing up and summarizing the important points once again

Greenall, S. & Swan, M. (2002: pp. 2-4) maintains that every one reads with some kind of purpose. There are two main reasons for reading. The reason is either to read for pleasure or to read for information. Effective reading means being able to read accurately and efficiently, and to understand as much of the passage as to achieve your needed purpose. Sometimes comprehension failure happens and the reader is unable to achieve his/her purpose. This failure may relate to not knowing the meaning of a word, or related to lack of specific reading skills. The exercises in their book are grouped under headings which refer to the following specific skills and they are:

- Extracting main ideas
- Reading for specific information
- Understanding text organisation (how sentences are joined together to make paragraphs, how paragraphs form the passage,)
- Predicting
- Checking comprehension
- Inferring
- Dealing with unfamiliar words
- Linking ideas
- Understanding complex sentences
- Understanding writer's style
- Evaluating the text
- Reacting to the text (separation between writer's saying and reader's thinking)
- Writing summaries

Finally Ur, p. (1996) presented some suggestions based on a list of further possible reading activities by using different kind of text. These activities can be for different kinds of learner. The following ideas are presented by this author:

1. **Pre-question.** A general question is given before reading, asking the learners to find out a piece of information. That information is based on the understanding of the text.
2. **Do-it-yourself questions.** Learners write and answer to their own questions.
3. **Provide a title.** If the title is not given originally, the learners may suggest a title.
4. **Summarize.** Readers summarize the content in one or two sentences. This may also be done in the mother tongue.
5. **Continue.** If the text is a story predicts what might happen next.
6. **Preface.** In story texts the learners suggest what might happen before.
7. **Gapped text.** Towards the end of the text, four or five gaps are left that can only be filled in if the text has been approved.
8. **Mistakes in the text.** The text may have some mistakes. Learners are told in advance how many mistakes to look for.
9. **Comparison.** In the case of existence of two similar topics, readers make a comparison based on similarities and differences.
10. **Responding.** If the text is a letter or a provocative article, learners discuss how they would write an answer.
11. **Re-presentation of content.** Learners represent the given information through a different graphic medium. For example;
 - a drawing that illustrate the text
 - colouring
 - making a map
 - list of events or items discussed in the text
 - a diagram indicating relationships between items, characters or events

SECTION 3

2.4. Reading Problems

2.4.1. Introduction

According to Carrell, Et al. (2002) reading is perhaps the most completely studied and least understood process in education today. In spite of the fact that there are many kinds of books and journals in relating to the study and the teaching of reading, no theory of reading has won general acceptance. The quantity and variety of theoretical models of reading in the first language has resulted in a great amount of theoretical and pedagogical diversity among second language researchers and teachers (see, for example, Singer and Ruddel 1970). Recently a number of authors have mentioned the lack of a generally accepted theory of L2 reading as a major obstacle to teaching and testing ESL reading skills (see Eskey 1973; Harris 1976; Hatch 1973; Norris 1970; Robinett 1976).

2.4.2. Reading Problems

All of us have had the experience of having students who are utterly lost for words confronted by a written page that looks to them like a confusing and daunting mass of jumbled signs. Surely there are ways of leading them out of this maze into meaning (Soul-Susbielles 1987: 198-203).

This quotation very close to our own reading situations in Iran utterly reflects the EAP students' problem in reading. And there are often complaints as to the inefficient reading habits of these students. But the question is what goes wrong?

Successful readers are those who are able to recreate the author's meaning perfectly. Realistically, however not even native speakers recreate the author's message exactly. As Goodman and Burke (1972) state the situation that all readers do deviate from the text, and these deviations can be evaluated based on the degree to which the meaning of the text is

disrupted. Perfect learning, like perfect language, appears to be an abstraction that is not achieved in the real world. What, then can a language teacher expect of his students, and how can he differentiate between those students who are successful readers and those who are not? The answer to these two questions lies in the teacher's functional definition of the words successful and meaning. The successful recreation of meaning is not the same as perfect text processing, and this distinction is especially true in second language reading. Successful reading does not require that the students know and attend to all the grammar and vocabulary. They do not have to know the nuances of each linguistic element in the text to comprehend the author's general message. Successful readers understand the meaning of the text without becoming lost in the grammar and vocabulary and without becoming frustrated trying to arrive at meaning.

Grabe (1991) identifies some factors in an article that surveys research on reading in a second language since 1970. He notes that students begin reading in an L2 with a different knowledge base than they had when starting to read in their L1. Most L1 readers know several thousand words before they begin to read, and they have some ability to handle the basic grammar of their own language. L2 readers don't have those advantages. Grabe also notes that older beginning readers have advantages over beginning and younger L1 students, for instance more word knowledge, more highly developed cognitive strategies, the ability to use metacognitive strategies, and frequently more motivation.

Goodman (1975) argues any reading that does not with meaning is futile. Readers may short-circuit in a variety of ways for a variety of reasons. In general, readers short-circuit when they can't get meaning or lost the structure. Theoretically this can occur at any point in the reading process. Here is a list of short-circuits with successively more complex points:

Letter naming. A very old method of reading instruction taught young readers to spell out to themselves any unfamiliar words. Short-circuit still occurs but it is not too common.

- a. **Recoding.** Since print is a graphic code and speech is also a code, it is possible for readers to pay attention on matching print to sound with no meaning resulting. Since the readers change the codes and go from code to code such short-circuit may be considered recoding .Recoding may take place on several levels. For example ‘letter-sound recoding’ is the most superficial.
- b. **Syntactic nonsense.** The readers may treat print as syntactic nonsense, generating and approximate deep structure without going beyond the meaning. Even able readers do this type of short-circuit. With this short-circuit the oral reading may be relatively precise and yet involve little comprehension.
- c. **Partial structures.** Readers may resort to one or more of these short-circuit with alternating periods of productive reading. Furthermore, because the brain is always seeking meaning, some comprehensions will often ‘teak’ through even the most non-productive short-circuits.

From the old days, learning a new language meant having the ability of reading the literature of that language. As Smith (1991) stated, the “systems approach” involve breaking down reading into component skills, but it is proposed that breaking down reading makes learner to read more difficult because it makes non-sense out of what should be sense. Learners can learn to read only through materials and activities that make sense to them , that they can relate to what they already know or want to know, nothing can be taught unless it has the potential of making sense to the learner, and learning itself is nothing but the endeavourer to make sense. In spite of the widespread use of reading in both of teaching and testing of a foreign language, it was not until recent decades that the different factors involved in reading process were taken into consideration .

Alderson (1984) identifies two types of poor foreign or second language readers: a poor L1 reader; and a good L1 reader who has not been able to transfer his L1 reading ability to

the foreign language situations because of his problems with the foreign language (Threshold Hypothesis).

Barnitz (1985) demonstrates that for the beginning readers the lower level structural aspects of the text will probably occupy their attention as these readers struggle with the language. This will prevent them from accessing much information, which is coming from the meaning of the text.

Similarly using a think aloud technique, Horiba (1990) has worked on student's short term working memory. His research supports the previous findings (Bernhardt 1983; McLeod & McLaughlin 1986) that L2 reader whose command of language is limited pays more attention to vocabulary and grammar than do L2 reader whose behaviour is automatic in such lower-level processes. L1 readers attend more to the meaning of the text; as Yorio (1971) stated that the reader's knowledge of the foreign language is not like that of the native speaker. The guessing or predicting ability necessary to pick up the correct cues is hindered by the imperfect knowledge of the language. The wrong choice of cues or the uncertainty of the choice make associations more difficult due to unfamiliarity with the material and the lack of training. The memory span in a foreign language in the early stages of its acquisition is usually shorter than in our native language and recollection of the previous cues then is more difficult in a foreign language than in the mother tongue.

Aspatore (1984) discusses the problem that students have with reading. They are afraid. They are more concerned with getting the correct answer than with the more important process of how to get the answer. They depend too much on the dictionary, and they have problems making the transition from short readings to long ones. To help students overcome these problems, she suggests that teachers ask them to read and underline unknown words without looking up the meaning in the dictionary; to use contextual clues to guess the general meaning; to skip unknown words; and to focus on cognate, roots, prefixes, and suffixes.

Byrnes (1985) says that the act of comprehension is essentially meaning driven, holistic, top-down behaviour that is highly selective in the features it incorporates. Grellet (1999) states that proficient readers do not concentrate on sentences and words. In stead they start with global understanding and then work toward comprehension of detailed aspects of the reading. She maintains that reading is an active skill.... . It constantly involves guessing, predicting, checking, and asking oneself question.

In a second language study, Hosenfeld (1977) used a think aloud procedure to identify relations between certain types of reading strategies and successful or unsuccessful second language reading. The successful reader, for example, kept the meaning of the passage in mind while reading, read in broad phrases, skipped inconsequential or less important words, and had a positive self-concept as a reader. The unsuccessful reader on the other hand, lost the meaning of the sentences when decoded, read in short phrases, pondered over inconsequential words, seldom skipped words as unimportant, and had a negative self-concept.

Similarly Block (1986) used a think aloud procedure in her study of non-proficient readers from which she was able to obtain information about four characteristics namely integration, recognition of aspect of text structure, use of general knowledge, personal experiences, and response in extensive versus reflexive modes which differentiated successful from less successful readers .

August et al. (1984) report that students often need assistance in learning to monitor their own comprehension. In other words, they continue to read without being aware that they do not comprehend, and they must learn to realize when they lose track of the thread of the author's ideas. In their research unskilled readers may not even notice that a page is missing from the reading. Skilled readers report missing pages more often than unskilled readers and are usually able to infer the content of the missing material.

According to Schulz (1983) students engage in a word-by-word decoding and translation developed and practiced in elementary language courses often becomes the only strategy with which the learner approaches an L2 text. The result is loss of contextual focus and immediate frustration, as soon as the reader encounters an unknown word. The reader's approach is thus a linear one, based on the assumption that comprehension takes place through progressive analysis of small units beginning with the word and ending with the sentence.

Parallel to this, Hosenfeld (1977) described the following as the characteristics of poor readers: losing the meaning of sentences as soon as they decoded; reading in short phrases; seldom skipping words as unimportant and viewing them as equal in terms of their contribution to be total phrase meaning; and finally have a negative self-concept as a reader.

Equally Block (1986) mentions four criteria for differentiating more successful from less successful readers: 1) integration, 2) recognition of the aspects of the text structure, 3) use of general knowledge, personal experience and associations, and 4) response in extensive and reflexive modes. In the extensive mode the students attention is directed from themselves to the author or text, whereas in the reflexive mode readers relate their personality and knowledge to the text, i.e., direct their attention way from text toward themselves focussing on their own thought and feelings rather than on the information in the text .

A significant factor affecting comprehensibility in language classes is the lack of familiarity students may have with the foreign culture. Johnson (1981-1982) found that readers better understand content that is related to their own cultural background. Hudelson (1964: p. 226) maintains, "even proficient ESL readers recall more from a text based on their own culture than they do from a text based on a foreign culture." In her opinion being

familiar with the cultural context of the reading is more important than linguistic consideration.

In addition, writers from one culture may organize their thoughts differently from those in another culture. The psycholinguistic model of reading envisions readers developing predictions and expectations as they read. These expectations are based on background knowledge, which includes story schemata and scripts. Carrell (1984) concludes that reading comprehension is therefore influenced by the overall organization of the text as well as by the effect of smaller segments such as sentences and paragraphs.

2.4.3. Problematic Areas in EAP Settings

Traditionally it was believed that knowledge of technical terms via a glossary will provide the non-native readers with what they need particularly in scientific texts (Cohen et al. 1979 reprinted in Carrell 2002). However experience has shown that even students with mastery over the technical terms become frustrated in their reading. The explanation is that their difficulties extend beyond technical vocabulary. Selinker & Trimble also found out that students' difficulties in ESP and more specifically in EAP were not merely a result of technical vocabulary. In fact non-technical terminology in technical writing would sometimes give students more difficulty than technical ones. Selinker & Trimble also attributed much of the difficulty in reading comprehension to the structure of the writing.

Equally important, Cohen, et al. (1979), described other problematic areas: Heavy noun phrase subjects and objects, syntactic markers of cohesion; non-technical vocabulary in technical texts; as well as the interpretation, the significance of punctuation and various problems relating to long complex sentences.

As for the heavy noun phrase subjects and objects, Cohen et al. found that long groups of words performing a single grammatical function, say NPs across specialized texts were

difficult for non-native readers. Or the conjunctive words signalling cohesion (for example: however, thus, whereas) and the cross paragraph markers of cohesion were problematic. The non-natives unlike the natives, thus, did not organize the material they had read when that organization stretched across different paragraphs. And finally, the non-technical vocabularies taking on technical meanings in a particular field are not so common; words like essential, supply, efficient, maintain, emphasize, enhance, pattern, contribute, and the like are examples (Cohen, et al. 1979, reprinted in Carrell 2002).

And finally considering reading strategies use by readers Garner (1987) and Waxman and Padron (1987) believe that younger and less proficient students use fewer strategies and use them less effectively in their reading comprehension. According to findings of different researches, it becomes clear that there are indeed differences between successful or good readers and less successful or poor readers in terms of strategy use. There is also a strong relationship between reading strategies used by readers and proficiency level. Overall, successful readers, or high proficient readers, appear to be using a wider range of strategies.

2.4.4. Relationship between L1 and L2 Reading

The relationship between L1 and L2 reading has been investigated through different hypotheses. First, the linguistic independence hypothesis or language transfer hypothesis (Goodman 1971), which claims that L1 reading ability transfer to L2 reading, i.e., there is always a relationship, hypothetically a correlational one, between L1 and L2. And second, the linguistic threshold hypothesis (Alderson, 1984; Clarke, 1979; Cummin, 1979), which claims that L1 reading ability transfer to L2 reading when learners' L2 proficiency is higher than the linguistic threshold. The two hypotheses that mentioned above are explained here briefly.

2.4.4.1. Language Transfer Hypothesis (Linguistic Independence Hypothesis)

According to Grabe et al. (2002) transfer refers to the idea that L2 readers will use their L1 knowledge and experiences to help them to improve in their L2 reading. Regarding the reading process, transfer applies to a variety of language knowledge bases and cognitive abilities. Transfer can occur in many aspects of language for example with phonological knowledge, topical knowledge, general background knowledge, problem solving strategies and also inferencing skills. We also want to transfer our prior experiences to L2 reading comprehension including academic tasks or EAP purposes. It should be mentioned that sometimes transfer supports reading tasks (positive transfer) but sometimes it interferes with successful task completion. Furthermore, transfer is also discussed more generally, in Educational Psychology, in terms of transfer of learning.

Language transfer hypothesis has other names such as ‘linguistic independence hypothesis’ and also ‘the reading universal hypothesis.’ For example, the reading universal hypothesis supports that developing reading literacy in L1 serves as a bridge to developing reading literacy in their L2. Goodman (1973) wrote of the “universal aspects of literacy that underline the reading process and facilitate the transfer of skills and knowledge from one language to another.”

According to Longman Dictionary (1992) transfer is defined in this way. The carrying over of learned behaviour from one situation to another. There are two kinds of transfer. **Positive transfer** is learning in one situation which helps or facilitates learning in another later situation. My own experiences say that strategies transfer is considered one of the positive transfers. **Negative transfer** is learning in one situation which interferes with learning in another later situation.

Similarly Grabe et al. (2002: p. 52) states that positive transfer effects represent helpful resources for L2 reading development. In the right circumstances, many aspect of L1 reading

abilities support L2 comprehension, though this transfer typically assumes well-developed literacy in the student's L1. He adds that examples of positive transfer effects include the following: effective strategies for reading academic texts, appropriate purposes for reading, experience with successful task completion, flexibility in monitoring comprehension and skills for analysing and learning new words. Positive transfer effects provide a means for accelerated development of L2 reading abilities when they are assisted by instruction and teacher guidance.

2.4.4.2. Short-circuit Hypothesis

In 1979 Clarke first introduced the notion of a foreign or second language threshold or limited control over the language which short-circuits transfer of reading abilities acquired in the native language to L2 reading. In line with Clarke, Alderson (1984) argued that poor foreign language reading is due to teaching strategies in the first language not being employed in the foreign language due to inadequate knowledge of the foreign language. Good first language readers will read well in the foreign language once they have passed a language ceiling or a threshold of foreign language ability. The threshold hypothesis was proposed in reaction to the transfer hypothesis, in order to explain the observation that "reading in a language which is not the learner's first language is a source of considerable difficulty" (Alderson, 1984: p.1). It was claimed that L2 reading was not only slower, but it also resulted in less comprehension than L1 reading, even when readers understood the words and structures in the L2 text. He believed that for explaining of these difficulties in L2 reading, it was assumed that poor L2 lexical and grammatical knowledge prevented beginning L2 readers from applying reading strategies and metacognitive knowledge that they used in L1 reading. Metaphorically speaking, L2-specific linguistic knowledge constitutes a threshold that has to be surpassed before L1 skills transfer to L2 performance

and L1 and L2 become similar. Thus at the initial stages of L2 reading development, L2 vocabulary and grammar knowledge are more important than reading strategies and metacognitive knowledge.

Prior to Alderson's study of the threshold level there have been other studies in line with Clark's view, for instance Hauptman (1979), Coady (1979), Czikó (1980), Cummin (1980). Alderson (1984) compares the short-circuit hypothesis with the reading universals hypothesis, stating that reading is reading no matter in what language, that is L2 readers compensate for less well developed L2 skills by means of their L1 reading skills (Goodman 1973, Hudson 1982). Comparing these two hypotheses thus, Alderson concludes that reading inefficiencies is a matter of both language and reading but with firmer evidence it is a language problem for low levels of foreign language competence. By so doing, Alderson (1984) lends support to Clark's (1980) threshold hypothesis.

Alderson (1984) also points out the drawbacks of the previous studies and highlights the following questions: What is the nature of threshold? Does it vary with different readers performing different tasks? Do the studies consider the same individuals reading in L1 and L2? Are social, cultural, motivational, and educational variables taken into account?

Also a similar study by Carrell (1991) makes a great contribution to the question of L1 reading versus L2 language problem. She found out that both L1 ability and L2 language proficiency are statistically significant factors.

SECTION 4

2.5. Types of Reading

When we want to read, we have a number of initial decisions to make and these decisions are almost unconsciously in most cases. For example, when we pick up a newspaper, we usually read the front page with some combination of search processing,

general reading comprehension and skimming. We read some part of a newspaper for information, but with some purposes in mind we want to finish the newspaper fairly rapidly. It should be mentioned that few people try to read every line of a newspaper. First we may search the front page for a special story that we expect to be there. If the headlines guide us in the right way, we may check quickly for the length of the article, and we may read through a number of paragraphs for comprehension. Sometimes we will feel that we have enough information and will either stop reading the article or skim the remainder to be sure that we do not miss some surprisingly information part.

In academic reading, we sometimes synthesise information from multiple reading sources, from different parts of a long and complex text, or from a prose text and accompanying diagram or chart. Such reading is quite different from searching, skimming, or reading for general comprehension. In these circumstances a more critical set of goals must be established for an effective synthesis. The reader needs to remember points of comparison or opposition, assess the relative importance of the information, and construct a framework in which the information will be organised.

Finally people read for general comprehension whether for information or for pleasure. Here we might read a novel, a short story, a newspaper article, or a report of some type to understand the information in the text, to be entertained and/or to use the information for a particular purpose. The overall goal is not to remember most of the specific details but to have a good grasp of the main ideas and supporting ideas, and to relate those main ideas to background knowledge as appropriate. According to Grabe et al. (2002) the above mentioned purposes can be presented very briefly as follows:

1. Reading for search for simple information
2. Reading to skim quickly
3. Reading to learn from texts

4. Reading to integrate information
5. Reading to write
6. Reading to critique texts
7. Reading for general comprehension

Interested readers generally decide to investigate the contents further, and they may proceed in a variety of ways if they are not entirely convinced that the contents are worthwhile or interesting, they may skim the article or the first few pages of a novel to clarify if their initial reaction was correct. They may also skim the material if they are pressed for time. They may choose not to continue reading or they may decide that the material justifies a more complete reading. If they are reading for pleasure, they are likely to read toward the top of their reading speed, or at the rate that permits extensive reading. If they are reading for information, especially for complicated material, they are likely to read much more slowly or at a rate that permits intensive reading.

2.5.1. Extensive Reading

According to Nuttall (1996) in order to understand the whole part of a book, we should first understand different parts of it for example sentences, paragraphs, and chapters of it. However, we sometimes can understand a text adequately without grasping every part of it. Therefore students have to be encouraged to develop this kind of reading and also pay attention to extensive reading.

Moreover, longer texts are liable to get forgotten in the classroom, since it is easier to deal with short texts which can be studied in one or two lessons. But the whole is not just the sum of its parts, and there are reading strategies which can be trained through practicing on longer texts. Skimming and scanning, the use of a contents list, an index and similar apparatus are obvious ones.

Similarly according to Aebersold et al. (2001) an extensive approach to teaching reading is based on the belief that when students read for general comprehension large quantities of texts of their own choosing, their ability to read will consequently improve. The emphasis in extensive reading courses is to use reading as a means to an end. In other words, reading is used to accomplish something else, such as a written summary, a written report, an oral report, a group discussion, a debate. In this reading, students are given more freedom to choose reading materials that interest them and more responsibility in finding materials within their language proficiency range. The real texts may be selected by the students' own willing or to some extent selected by the teacher.

2.5.2. Intensive Reading

According to Nuttall (1996) intensive reading involves approaching the text under the guidance of a teacher or a task which forces the student to focus on the text. The ultimate aim is to arrive at an understanding, not only of what the text means, but also of how the meaning is produced.

Similarly Aebersold et al. (2001) believe that in an intensive approach to reading-which currently reigns in most L2/FL classrooms and books-reading the text is treated as an end in itself. Each text is read carefully and completely for maximum comprehension. Teachers provide direction and help before, sometimes during, and after reading. Students do many exercises that require them to work in depth with various selected aspects of the text.

Finally according to Longman Dictionary reading activities are sometimes classified as extensive and intensive: Extensive reading means reading in quantity and in order to gain a general understanding of what is read. It is intended to develop good reading habits, to build up knowledge of vocabulary and structure, and to encourage a liking for reading. Intensive

reading is generally at a slower speed, and requires a higher degree of understanding than extensive reading (for further reading see Nackay et al. 1979; Nuttall 1996).

In addition to extensive and intensive reading there are some other readings that I'm going to mention some of them which are considered important in academic reading.

2.5.3. Bottom-up Reading

An older, and now considered outdated, view was that reading takes place by matching sounds and letters; or, stated in terms of more sophisticated terminology, reading was considered a process of manipulating phoneme- grapheme relationships. According to Aebersold et al. (2001) bottom-up reading argues that the reader constructs the texts from the smallest units and that the process of constructing the text from those small units becomes so automatic that readers are not aware of how it operates (see Eskey 2002; Stanovich 1990). Decoding is an earlier term for this process.

Similarly Nuttall (1996) believes that the reader builds up a meaning from the black marks on the page: recognizing letters and words, working out sentence structure. We can make conscious use of it when an initial reading leaves us confused. Perhaps we can not believe that the apparent message was really what the writer intended; this can happen if our word knowledge is inadequate, or if the writer's point of view is very different from our own. In that case we should carefully observe (scrutinize) the vocabulary and syntax to make sure we can grasp the plain sense correctly.

The approaches to reading which are part of some children's first language experience in terms of recognizing letters, memorizing names of the letters in the alphabet, and sounding out simple words are part of the traditional, conventional view of what reading is all about. An aspect of this view was that reading is a passive activity, with writing as the active counterpart. Basically, the model fostered practices in reading instruction which built up

learners' decoding abilities from the bottom-up, starting with the smallest units, single letters, "letter blond" and building up to words and phrase.

2.5.4. Top-down Reading

That more static view was upset over twenty years ago by reading specialists who offered a competing model, one which became known as a "psycholinguistic" theory about reading (Goodman, 1967; Smith, 1978b). In this kind of reading the readers bring a great deal of knowledge, expectations, assumption, and questions to the text and, given a basic understanding of the vocabulary, they continue to read as long as the text confirms their expectations (Goodman 1967). According to this newer model, the role of readers was considered to be quite active: they predict meaning as they read, they don't attend to separate letters, rather they match what they already know with the meaning they derive from the text. In this one, reading is more a matter of reconstructing meaning using only partly the graphophonic, syntactic, and semantic systems of the language. More salient to successful reading is being able to guess what the author will say next by confirming predictions related to one's past experience and knowledge of the language. Inevitably this model took on the nickname of "top- down reading" since it stresses comprehension of larger units of meaning.

2.5.5. Narrow Reading

This approach suggests early rather than late specialization in a second language acquisition, and aims at supplying students with input on a variety of topics. Krashen (1981) who first raised this issue, points out that narrow reading and narrow input in general is more efficient for L2 acquisition.

The case for narrow reading is based on the idea that the acquisition of both structure and vocabulary comes from many exposures in a comprehensible context. Narrow reading

facilitates the process of language learning and reading comprehension in several ways. First, since each topic has its own vocabulary and discourse, narrow reading provides built-in review. Second, familiarity with content is a tremendous facilitator of comprehension and thus a facilitator of language acquisition. And as Krashen states: the more one reads in one area, the more one learns about the area, and the easier one finds subsequent readings in the area. Furthermore Krashen (1981) continues that the earliest advantage of narrow reading is that it is potentially very motivating, and reading in a topic of real interest has a chance of resulting in students reading for the message and meaning. And this is a phenomenon which is considered to be essential for real language acquisition.

2.6. The Importance of Extensive Reading

At this juncture it is very impertinent to quote Christine Nuttal who states, “The best way to improve your knowledge of a foreign language is to go and live among its speakers. The next best way is to read extensively in it” (Nuttal 1996: p. 128). These words of Nuttal endorse the earlier established view that the target students benefit from reading in English in the absence of an ‘English environment’ outside the classroom. Experienced teachers know what Nuttal has said, and also there is research evidence to justify it. This is useful when persuading head teachers to give you funds to buy books, or convincing parents that reading is not a waste of time. All of us as English teachers want students to read better: fast and with full understanding. To do this they need to read more, and there seem to be two ways to achieve this: requiring them to do so and tempting them to do so (Nuttal, 1996: p. 128).

Furthermore according to Richard R. Day et al. (2000: p.6) an extensive reading approach aims to get students reading in the second language and liking it. Or, to put things more formally, as the Longman Dictionary of Language Teaching and Applied Linguistics does, extensive reading is “intended to develop good reading habits, to build up knowledge of

vocabulary and structure, and to encourage a liking for reading”(Richards, Platt, & Platt, 1992: p. 133).

William Grabe, in a 1991 TESOL Quarterly paper, discusses some of the benefits of extensive reading by stating “longer concentrated period of silent reading build vocabulary and structural awareness, develop automaticity, enhance background knowledge, improve comprehension skills, and promote confidence and motivation” (p.396). In addition Clyde Fowle lists out a few specific advantages of extensive reading as follows:

- Increased exposure to the target language
- Faster reading skills
- More sophisticated reading strategies
- Increased vocabulary range
- Better understanding of the structure
- Personalisation of language learning
- A positive attitude to the target language
- Increased self-confidence in the language
- More learner independence
- Improved writing skills

(Fowle 2001: p. 22)

More exposure to the target language means that the learner has the opportunity to meet words in natural linguistic context .Generally, a large sight vocabulary of the learner becomes his/her working vocabulary. Extensive reading can play an effective role in developing the components upon which fluent reading and true comprehension depends: a large sight vocabulary; a large general vocabulary; knowledge of various text- types; and increased knowledge of the world in which we live.

(Brown 2000)

And finally according to Richards and Schmidt (2002: 193) extensive reading is one of the ways of teaching reading. They stated that “extensive reading means reading in quantity and in order to gain a general understanding of what is said.” Thus, although there are variations in the ways in which an extensive reading programme is administered, extensive reading programmes share the basic tenet that students read a relatively large amount of texts compared with what is called intensive reading, which usually involves a slower reading of a relatively small amount of materials and often with translation exercises. In extensive reading programme students read simpler materials than in intensive reading. Thus extensive reading as mentioned by Richards & Schmidt (2002: p. 193-4) “is intended to develop good reading habits, to build up knowledge of vocabulary and structure, and to encourage a liking for reading.”

2.7. The Extensive Reading Bookstrap Hypothesis

Because extensive reading is my basic work in teaching of reading strategies, it is necessary to write about this hypothesis, moreover this hypothesis explains-what the different authors said about extensive reading-more. According to Richards, D. et al. (2002: p. 30) bookstrap hypothesis is an engineering concept describing a process in which the results of an action are fed back to achieve greater results quickly with less efforts. If we use this term with reading it would be like this: students’ initial successful experiences in extensive reading result in the discovery that they can read in the second language and that is rewarding and pleasurable. This increases the students’ positive attitudes toward reading and also enhances the growth of motivation to read in the second language. Thus this positive beginning experiences result to better reading.

2.8. The Characteristics of an Extensive Reading Approach

According to Richards, D. et al. (2002: p. 7-8) a more useful way of understanding the complexity of extensive reading is to name the characteristics that are found in successful extensive programme. Some of them are as follows:

1. Students read as much as possible, perhaps in and definitely out of the classroom.
2. A variety of materials on a wide range of topics is available. So as to encourage reading for different reasons and in different ways.
3. Students select what they want to read and have the freedom to stop reading material that fails to interest them.
4. The purpose of reading is usually related to pleasure, information, and general understanding.
5. Reading materials are well within the linguistic competence of the students in terms of vocabulary and grammar.
6. Reading speed is usually faster rather than slower as students read books and other material they find easily understandable.
7. Teachers guide students to the goals of the program, explain the methodology, etc.

2.9. Intensive versus Extensive Reading in EAP

As Carrell and Carson (1997) state that there is a need for both intensive and extensive reading in an EAP curriculum. Intensive reading with a focus on skills or strategies instruction has been shown to yield positive affects on second language reading. At the same time students need to practice extensive reading in order to coordinate and apply intensively acquired skills/strategies over the larger text and multiple reading sources that are required in an academic course work.

The most logical goal for college reading and learning programs would be to teach students a repertoire of strategies and tactics that will prepare them for the for the tasks and texts they encounter in college, and to help students transfer specific strategies to the particular academic literacy demands of each course (Simpson & Haye 1992).

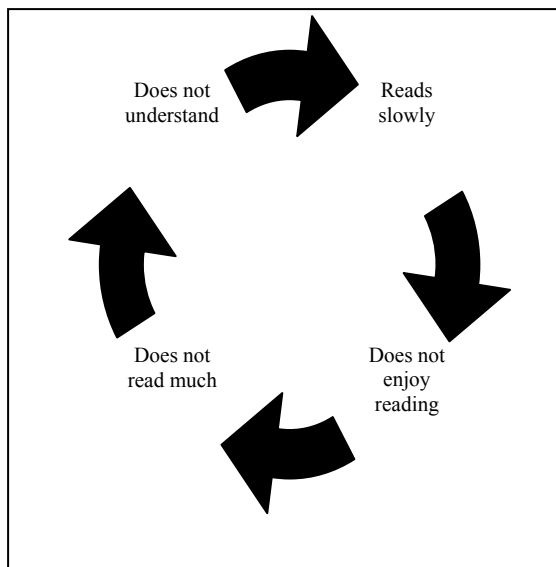
Nuttall (1996) states that extensive and intensive readings are complementary and both are necessary. She also continues: Most of the skills and strategies we want our students to develop by the use of longer texts including complete books. These two approaches are described traditionally as intensive and extensive reading.

She also asserts that intensive reading involves approaching the text under the close guidance of the teacher. The aim of this type of reading is to arrive at a profound and detailed understanding of the text, not only of what it means but also of how the meaning is produced. The “how” is as important as the “what,” for the intensive reading lesson is intended primarily to train students in reading strategies. Nuttall (1996) also maintains that it is of course easier to handle work on short texts but we are often able to understand longer texts, e.g. a book, without fully grasping every part of it. Thus we must make the most of this ability and encourage our students to build on it. There are reading strategies which can only be trained by practice on longer texts.

Thus, as Carrell and Carson (1997) state, an extensive reading program might be organized to turn the vicious circle of the weak reader (a reader who reads so slowly that he doesn't understand much, and as a result doesn't enjoy reading, and therefore doesn't read much, and thus reads slowly) into a good reader (a reader who reads fast enough that he reads more, and understand better, and therefore enjoys reading, and as a result reads more).

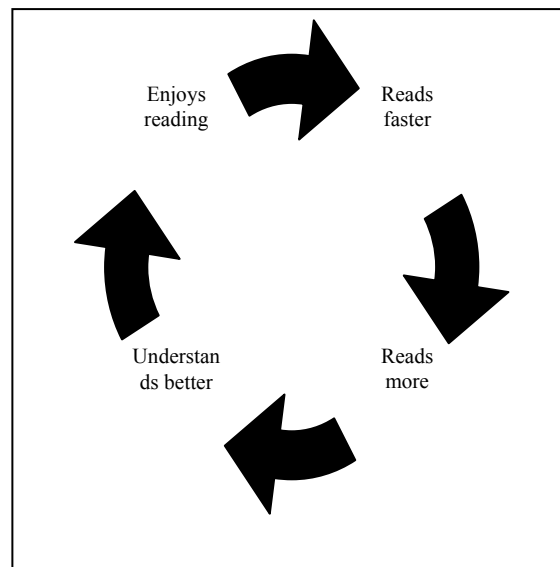
Turning of the vicious circle of a weak reader into a good reader are presented in the following figures.

Figure 4



The vicious circle of the weak reader

Figure 5



The vicious circle of the good reader

2.10. Strategy Instruction and Intensive Reading in EAP

The importance of strategy instruction has had positive effects not only on L1 but also on L2 reading pedagogy, and as Carrell and Carson (1997) showed, it is a means of helping ESL learners in EAP settings to learn the necessary techniques they will need for successful interaction with academic texts. Carrell (1985) demonstrated the importance of teaching a text structure strategy for EAP texts. There is however a number of training strategies related to intensive reading which pinpoint the positive effects of a text-strategic approach. For instance Barnett (1988) proved strategy training helpful, or Carrell, Pharis, and Liberto (1989) reported two metacognitively based strategy training techniques. Kern (1989) pointed the effectiveness of explicit instruction in a number of word, sentence, and discourse analytic strategies.

And an important component of reading strategy training has been its focus on metacognition, i.e. cognition about cognition. As Alderson (1991) points out successful

second language reading comprehension is not a simply matter of knowing what strategy to use, but the reader must also know how to use it successfully and to orchestrate its use with other strategies. It is thus not sufficient to know about strategies but a reader must also be able to apply them strategically.

2.11. Strategy Training and Extensive Reading

Extensive reading is in fact learning to read by reading. It generally involves rapid reading of large quantities of material or longer reading, e.g. whole books, for a thorough understanding with generally on the meaning of what is being read than on the language. Extensive reading is intended to get the reader to focus on reading for the sake of reading and for information or entertainment, and less on reading for the sake of mastery of a particular linguistic structure. Thus it can involve a wide variety of reading strategies or skills.

A current strand in reading research is the recent resurgence of interest in extensive reading as part of L2 reading development programs. For example Krashen (1989) continues to call for a major role for pleasure or free voluntary reading in ESL acquisition. Similarly Elley (1991) has reported the positive effects of extensive reading programs as gained from some empirical studies. Equally important Swaffar (1995) explored the uses of pleasure reading as the basis for foreign language learning. In her own university-level foreign language teaching, she has tried narrow reading focusing on single topics as a form of extensive reading. Grabe (1995) also called for extensive reading in L2 programs and stated that extensive reading can or may contribute to effective reading.

The following extract is an overview of his statements:

- 1) Extensive reading develops automatic word recognition , particularly by building up orthographic knowledge and letter-sound correspondence;
- 2) It is a key means for students to continue learning a second language on their own when

they have completed their instruction (reprinted in Carrell and Carson, 1997);

- 3) It is a key resource for building student motivation once students are hooked;
- 4) It may be the best way to develop large recognition vocabulary;
- 5) It has demonstrated positive influence on student's general background knowledge.

This is very important for learning to read new materials in other domains and learning new information from texts, i.e. the "Matthew effect" which causes the rich to get richer.

- 6) It has also demonstrated positive influence on reading comprehension proficiency, as well as on other language skills;
- 7) It might be the only genuine way for students to develop and maintain reading strategies and become more strategic readers;
- 8) It is essential for developing the ability to read to learn, a major goal for academically oriented instruction.

Furthermore according to Grabe, W. et al. (2002: pp.113-4) Pressley has promoted an approach called TSI (transactional strategy instruction) that guides students to become strategic readers. Pressley based on strategy-training research come to the conclusion that students need instruction with the following characteristics:

1. Instruction must be long term because becoming a strategic reader takes years.
2. Teachers explain only effective comprehension strategies through think-aloud discussion.
3. Teachers teach students to use strategies as needed.
4. Both teachers and students model the uses of strategies for one another on a continual basis.
5. The usefulness of strategies is emphasized and students are reminded frequently about the benefits of strategy use.

6. Strategy instruction is viewed as a vehicle to generate discussion and dialogue about student comprehension of texts.

Thus with respect to different strategies-training researches we can conclude that strategies instruction pave the way for readers to be efficient readers.

2.12. Combining Intensive and Extensive Reading: A Curricular Approach

L2 readers in EAP courses need to develop language and academic reading abilities and so they require a curriculum based on their broad needs, a program which includes both intensive and extensive reading aspects. Though intensive/ strategic reading can be proceed with a variety of short unrelated texts, extensive reading instruction clearly requires texts that are of sufficient information to sustain reader's engagement.

2.13. Content-based Instruction (CBI)

One response to the needs of EAP reader for intensive and extensive reading has been the development of content-based instruction. CBI is based on the idea that real language learning is most likely to occur when the context of that learning is not only typical but real, and when the learners are not merely acting out roles but typing their new language to fulfil genuine communicative purposes (Eskey 1992).

For CBI the curriculum is organized around content and the dual purpose of CBI models: 1) the learning of a second language and 2) mastery of the content knowledge (Brinton, Snow & Wesche 1989). Typically this approach suggests the use of a single subject specific text that by its nature is appropriate for both intensive and extensive reading. What underlies CBI is the notion that language learning will emerge from a focus on learning content.

Finally according to Longman Dictionary different types of reading are as follows:

1. Perceiving a written text in order to understand its contents. This can be done silently (**silent reading**).
2. Saying written text aloud (**oral reading**). This can be done with or without an understanding of the contents.

Different types of reading comprehension are often distinguished, according to the reader's purpose in reading and the type of reading used. The following are commonly referred to:

- A. Literal comprehension:** reading in order to understand, remember, or recall the information explicitly contained in a passage
- B. Inferential comprehension:** reading in order to find information which is not explicitly stated in a passage, using the reader's experience and intuition, and by inferring
- C. Critical or evaluative comprehension:** reading in order to compare information in a passage with the reader's own knowledge and values
- D. Appreciative comprehension:** reading in order to gain an emotional or other kind of valued response from a passage

Chapter III

METHODOLOGY OF RESEARCH

3.0. Introduction

Methodology in research means the procedures used in carrying out an investigation, including the methods used to collect and analyze data. To carry out any of the type of research investigation, data must be gathered with which to test hypothesis. Many different methods have been developed to aid in the acquisition of data. These tools employ distinctive ways of describing and quantifying the data. Each is particularly appropriate for certain sources of data, yielding information of the kind and in the form that can be most effectively used.

This chapter concentrates on the practical side of the present study to highlight the method and the procedures by giving sufficient detail about the subjects participating in the study, the instrumentation, the design of the study, and the procedures. In addition the statistical analysis of data required for the conducting this experiment will be discussed towards the end of this chapter. Nevertheless, before proceeding, one should recall the purpose of this study.

The research questions stemmed from Casanave's (1998) expanded view of schema theory, the strategy schema, Goodman's (1971) language transfer or linguistic independence hypothesis, and Clarke's idea of short-circuit or language ceiling hypothesis in ESL or EFL are central focus in this study.

Considering the hypotheses and goals of the present study, it should be stated that in Iran most of the EAP students have problems in reading of English subjects including the General English Course. In fact most of them fail to learn to read adequately in English language, and very frequently they seem to read with less understanding than we expect them to have. In the

present project the aim is to find out the causes of poor reading. I'm trying to find out the answers for the following questions.

- a. Is it a reading problem or language problem?
- b. Should we develop students' reading strategies?
- c. Does a limited control over language short-circuit the ability to read better?
- d. Can students transfer their L1 reading ability to L2 situation? In this regard what is the difference limited between good and poor readers?

To arrive at the answers I taught selected reading strategies to experimental groups of successful and unsuccessful readers. Thus the following research questions were raised:

- I. Is there a statistically significant difference between the reading comprehension ability of the EAP students who receive reading strategies instruction beforehand and those who do not?
- II. Is there any relationship between reading strategies instruction and the improvement of general English reading ability of successful readers?
- III. Is there any relationship between reading strategies instruction and the improvement of general English reading ability of unsuccessful readers?

Based on the above research questions the following three null hypotheses were presented.

- I. Reading strategies instruction has no significant impact on improving the general English reading ability of Iranian EAP students.
- II. Teaching reading strategies to successful readers has no significant impacts on their reading comprehension ability.
- III. Reading strategies instruction to unsuccessful readers has no significant impacts on their reading comprehension.

Since the present study was within the framework of experimental design of research, namely, pretest-posttest equivalent groups, it consisted of the following sections as mentioned before:

(A) Subjects

(B) Instrumentation

(C) Design of the study

(D) Procedures

(E) Analysis of data

3.1. Subjects

The subjects were all Iranian female students at Ardebil Islamic Azad University. This study was conducted with 148 intermediate EAP students at this university, studying mathematics, science, and elementary education at the teacher training centre of Ardebil Branch. The subjects had passed their introductory course and were ready for their general English course according to English curriculum programs for Iranian EAP students. The sample was randomly selected from among different classes and also the age, sex, and university level variables were kept constant (20-23 year old, female, and third semester students, respectively).

A pilot study was conducted for the validation of the pre-test and post-tests as well. Thirty five students took part in the pilot study and received the test. According to the results of the pilot study, the reliability of reading passages is about 0.83 which is considered high. It should be mentioned that KR-21 method (Kuder & Richardson) was used to estimate the reliability of test scores. This formula is based on the assumption that all items in a test are designed to measure a single trait. This method, sometimes called rational equivalence, is a

purely statistical procedure. It only requires the calculation of the mean (\bar{X}) and the variance (V) of test scores. These parameters are put in the following formula:

$$(KR-21) r = \left[\frac{k}{k-1} \right] \left[1 - \frac{\bar{x}(k-\bar{x})}{kv} \right]$$

Where:

K= the number of the items in a test

\bar{X} = the mean score

V= the variance

The chosen reading comprehension test is administered concurrently with another well-known, reputable test (TOEFL) of which the validity is already established. According to the obtained results the validity was about 0.87. Finally the appropriate time allocated to answer the questions was found to be 55 minutes according to the results obtained from the pilot study.

Reliability, validity and Acceptability

A common question usually asked by students and teachers is directed toward the acceptable or desirable magnitude of reliability and validity coefficients. How reliable and valid should a test be? Of course there is no clear-cut answer to this question. It depends, to a great extent, on the application of the test scores, and on the importance of the decisions to be made upon the test scores. The more important the decision to be made, the more coefficients is needed in the scores, and thus, the more reliable and valid tests are required. It is generally accepted tradition that validity and reliability coefficients below 0.50 are considered low, 0.50 to 0.75 are considered moderate, and 0.75 to 0.90 or above are considered high. Thus, according to obtained measures both reliability and validity of the selected reading comprehension test are considered high. The obtained scores, using formulas and so on are presented below for information.

3.2. Computation of Reliability by KR-21 formula

X	F	F _x	X- \bar{X}	(X- \bar{X}) ²
42	1	42	42-29.06 = 12.94	(12.94) ² = 167.44
39	2	78	39-29.06 = 9.94	(9.94) ² *2 = 197.60
34	5	170	34-29.06 = 4.94	(4.94) ² *5 = 122.02
33	3	99	33-29.06 = 3.94	(3.94) ² *3 = 46.57
31	6	186	31-29.09 = 1.94	(1.94) ² *6 = 22.58
29	8	232	29-29.06 = -.06	(.06) ² *8 = .03
27	4	108	27-29.06 = -2.06	(-2.06) ² *4 = 16.97
25	2	50	25-29.06 = -4.06	(-4.06) ² *2 = 32.96
19	2	38	19-29.06 = -10.06	(-10.06) ² *2 = 202.40
10	1	10	10-29.06 = -19.06	(-19.06) ² *1 = 363.28
4	1	4	4-29.06 = -25.06	(-25.06) ² *1 = 628

$$\bar{X} = \frac{\sum X}{N} \rightarrow$$

$$\bar{X} = \frac{1017}{35} = 29.06$$

$$V = \frac{\sum (X - \bar{X})^2}{N - 1} \rightarrow$$

$$V = \frac{1799.85}{34} = 53.93$$

Where:

k= the number of

the item in a

test

\bar{x} = the mean score

V= the variance

$$\sum (X - \bar{x})^2 = 1799.85$$

$$(KR-21)r = \left[\frac{k}{k-1} \right] \left[1 - \frac{\bar{x}(k-\bar{x})}{kv} \right]$$

$$r = \left[\frac{45}{45-1} \right] \left[1 - \frac{29.06(45-29.06)}{45 * 53.93} \right]$$

$$r = (1.02) \left(1 - \frac{463.21}{2426.85} \right)$$

$$(1.02)(1-.195)$$

$$\Rightarrow r = (1.02) (1-.195)$$

$$\Rightarrow r = 0.83$$

considered high

3.3. Computation of Validity by Coefficient of Correlation

X (Reading comprehension)	Y (TOEFL)	X^2	Y^2	XY
42	38	1764	1444	1596
39	36	1521	1296	1404
39	35	1521	1225	1365
34	30	1156	900	1020
34	30	1156	900	1020
34	31	1156	961	1054
34	32	1156	1024	1088
34	37	1156	1369	1258
33	29	1089	841	957
33	26	1089	676	858
33	31	1089	961	1023
31	35	961	1225	1085
31	27	961	729	837
31	23	961	529	713
31	28	961	784	868
31	34	961	1156	1054
31	39	961	1521	1209
29	31	841	961	899
29	27	841	729	783
29	25	841	625	725
29	30	841	900	870
29	28	841	784	812
29	26	841	676	754
29	34	841	1156	986
29	22	841	484	638
27	29	729	841	783
27	26	729	676	702
27	30	729	900	810
27	21	729	441	567
25	23	625	529	575
25	27	625	729	675
19	13	361	169	247
19	15	361	225	285
10	14	100	196	140
4	1	16	1	4

$$\sum X = 1017 \quad \sum Y = 963 \quad \sum X^2 = 31351 \quad \sum Y^2 = 28563 \quad \sum XY = 29664$$

$$r = \frac{N(\sum xy) - (\sum x)(\sum y)}{\sqrt{[N(\sum x^2) - (\sum x)^2][N(\sum y^2) - (\sum y)^2]}}$$

$$r = \frac{35(29664) - (1017)(963)}{\sqrt{[35(31351) - (1017)^2][35(28563) - (963)^2]}}$$

$$\Rightarrow r = \frac{1038240 - 979371}{\sqrt{(1097285 - 1034289)(999705 - 927369)}}$$

$$\Rightarrow r = \frac{58869}{\sqrt{62996 - 72336}} \Rightarrow \frac{58869}{67504.65} = 0.87$$

0.87 Considered high

As mentioned before thirty five students took part in the pilot study for the validation of tests, and the remaining 306 students participated in the main study. The Nelson Standard Test (language proficiency test version 200B) was administered to 306 students to homogenize the subjects. This test was used to measure the students' general knowledge of basic grammar and vocabulary and was used as a tool for making a homogeneous group. After administering the NELT test comprising 14 vocabulary items and 36 grammatical items, 67 students were excluded. Then 239 students, whose scores fell within one standard deviation above and below the mean, were selected (20-35).

This study investigated whether reading strategies instruction to successful and unsuccessful readers would improve their reading comprehension ability. Therefore, readers had to be checked for their homogeneity regarding their reading comprehension ability. In order to have two successful-reader groups and two unsuccessful-reader groups, being homogeneous pair-wise in terms of their level of reading ability, a total number of 239 students took the pre-test which consisted of eight reading comprehension passages with 45 multiple-choice items. As a result, 91 students were excluded because their scores fell within

half standard deviation above and below the mean, i.e., scores between 17 to 25. Finally 148 subjects were selected. Seventy four subjects were considered good/successful readers because their scores were half standard deviation above the mean (26-43). The remainder, namely 74 subjects were considered poor/unsuccessful readers because their scores were half standard deviation below the mean (4-16). Each of the good and poor reader groups were assigned to two equally-numbered groups, i.e., A and B & A₁ and B₁ each with 37 students. Groups A and A₁ were called the experimental groups and group B and B₁ were called the control groups. Thus, in the present study the researcher had two experimental groups and two control groups which were equal in size.

3.4. Instrumentation

Three types of tests were used to carry out the purpose of the present study.

- a. Nelson Standard Test (version 200 B) for pre-intermediate students (Appendix A)
- b. Eight reading comprehension passages as pre-test and post-test (Appendix B)
- c. A questionnaire comprising two parts: the first part consisted of reading strategies in English language with forty items and the second one was with 20 reading strategies in Persian (Appendix C)

3.4.1. The Nelson Test

In order to homogenize the subjects in terms of their general knowledge of basic grammar and vocabulary and regarding the students' level (pre-intermediate), the Nelson Test (version 200B) was administered to serve the mentioned purpose. To select an appropriate section of the Nelson test for this very study and its subjects some experienced colleagues were consulted.

3.4.2. Reading Comprehension Test

Eight reading comprehension passages were used as pre-test and post-tests to measure the effect of treatment on reading comprehension ability of the students. The reading passages were selected from the following books:

1. Developing Reading Proficiency 1 (written by: Dr. M.H. Tahririan)
2. Intermediate Reading Comprehension (written by: Damiriyeh, M.M.)
3. General English through Reading (written by: Baradaran, A. & Mehdi Khademzadeh, M.)
4. Scientific English Reading (written by: Sajadian, S.M. & Mirhassani, A.)

The selected passages were followed by multiple-choice questions. They had similar readability indexes. Selecting the appropriate reading passages required several steps. At the university in B.A. level, students study their own text book in General English Course which depends on their teacher's choice. Fourteen different passages from the course book (General English through Reading) were chosen and their readability indexes were calculated by Fog's readability formula. The readability indexes of the passages were found to be 17.70, 23, 18.55, 15.93, 15.04, 15.29, 20.24, 15.25, 15.73, 14.76, 17.77, 17.52, 13.98, and 13.93 with the mean of 16.76 and standard deviation of 2.56. Thus the selected passages had to be in the range of $16.76 + 2.57$ from the mean, i.e., 14.20 to 19.32.

The next step was to find appropriate passages with similar readability levels. To do this, several passages were chosen from different books. Then, several passages were examined and finally eight passages with the readability of 14.28, 15.11, 15.51, 15.60, 16.82, 17.07, 17.95, and 19.19 with the mean of 16.44 were found to be appropriate.

3.4.3. The Questionnaire

The reading strategies debriefing questionnaire was developed to elicit relevant skills from the stated subjects, and to tap into their metacognitive as well as awareness judgments

about reading strategies. The questionnaire was both in L2 and in the students' L1, in order to avoid misunderstanding relative to low control over L2 and also to investigate language transfer hypothesis, and it was modelled and modified out of the following: resources Auerbach and Paxton (1997); Kanar (1991); Anderson (1991); Carrell (1989); O'Neil and Quazi (1981) Jordan (1997); Varzegar, Farhady & Maftoon(1999). The most important reading strategies including pre-reading, during-reading and post-reading strategies were included in the questionnaire and the students were asked to read the questionnaire very carefully and choose the best answers based on their experiences. It should be mentioned that after surfing the internet for several weeks and consulting the research supervisor and other faculty members of the department as well as seeking some post graduate ELT students' ideas, three websites along with their links were chosen to extract and use their formats. The websites were as follows:

www.nclrc.org/portfolio/formRussianSample.html

www.aaic.org.au/x-scripts/rs1.html

www.nclrc.org/.../formSampleRubricsforLearningStrategies.html

The questionnaire consisted of 40 multiple-choice items in English language, and 20 multiple-choice items in their own language, i.e. Persian. The students received marks for good strategies, and no marks were obtained for poor reading habits. And thus the reading-strategies questionnaire could indicate the students' familiarity and/or unfamiliarity with reading strategies. Reading strategies were selected based on the number of students who indicated that they used in the questionnaire. The strategies that were included in the questionnaire and also the selected reading strategies are as follows:

3.4.3.1. Included reading strategies in the questionnaire

1. Previewing the text

2. Deciding the purpose of the study
3. Thinking about what one already knows about the content of the text
4. Reading chapter headings and turning them into questions
5. Looking at the illustration, pictures and trying to guess how they are related to the text
6. Skimming the text quickly to get the gist
7. Being familiar with affixation
8. Writing a summary of the article based on previewing
9. Guessing the meaning of a word from the lexical, grammatical, semantic relationship and also through knowledge of derivation, synonyms, antonyms, etc. (two cases)
10. Learning of how to use a dictionary
11. Skipping of unknown words
12. Knowing how to outline
13. Going back and trying to figure out the meaning of words
14. Continuing of reading without looking up every unknown word in the dictionary
15. Using dictionary as a last resort only for the important words
16. Looking for answers to the questions asked before
17. Making predictions about what is to come
18. Connecting background knowledge to the information in the text
19. Note-taking
20. Looking for signal words (but, therefore, etc.)
21. Continuing of reading without translating word-by-word)
22. Underlining and highlighting the most important parts
23. Trying to read a passage with both comprehension and speed
24. Scanning the article to locate a particular information
25. Attaching great importance to the lexical, grammatical and also semantic relationship in a text
26. Reading the conclusion paragraph, if present, very carefully
27. Recognizing of enumeration
28. Classifying the words according to their meaning and grammatical categories
29. Using a graph devices such as reading tables, bar and line graphs to show what was included in the text
30. Drawing a conclusion between predictions made before and during reading and what have read in the text
31. Rereading the text to remedy comprehension failures

32. Reviewing notes, glosses and text marking
33. Retelling and summarizing the main ideas (2 cases)
34. Explaining the content of the passage in reader's own language
35. Deciding whether the used strategies helped me in reading or not
36. Trying to use other strategies if the used strategies are not considered fruitful
37. Consulting with a professor about ambiguous parts of the text
38. Discussing with others and looking at the book to defend my opinions

3.4.3.2. Selected Reading Strategies

Reading Strategies	No. of users
1. How to use a dictionary	26
2. How Scanning the article for locate a particular information	22
3. Being familiar with affixation	21
4. Skimming for general idea	21
5. Preview the text	21
6. Note – taking	20
7. Guessing the meaning of a word from the lexical, grammatical, and also the semantic relationship	20
8. Distinguishing of main ideas from minor ideas	19
9. Knowing how to outline	17
10. Underlining and highlighting	17
11. Reviewing notes, glosses and text marking	17
12. Skipping unknown words	13
13. Guessing the meaning of unknown through knowledge of derivation, synonyms, antonyms, etc.	12
14. Connecting of background knowledge to the information in the text	11
15. Using dictionary as a last resort	6
16. Activating of background knowledge	5
17. Recognizing of enumeration	5
18. Rereading the text to remedy comprehension failures	5
19. Continuing of reading	5
20. Reading of conclusion paragraph, if present, very care fully	5

3.5. The Design of the Study

According to Farhady (1982), there are three major research designs; descriptive, correlational, and experimental. The present study is within the framework of experimental design of research, namely, **pretest-posttest equivalent groups design**. The schematic presentation of the above mentioned design is as follows:

$$\begin{array}{cccc} \mathbf{R} & \mathbf{O_1} & \mathbf{X} & \mathbf{O_2} \\ \hline \mathbf{R} & \mathbf{O_3} & \mathbf{C} & \mathbf{O_4} \end{array}$$

A true experimental study enjoys these characteristics: randomization, pre-testing, having experimental and control groups, and post-testing. Of course some of these characteristics are present in other research methods as well.

However, the accumulation of all these characteristics is unique to the experimental method of research. There were four groups in this study, two experimental groups and two control groups, the experimental groups, i.e., successful and unsuccessful reader groups received instruction on reading strategies while the control groups did not receive any instruction.

According to Seliger (1989), conducting an experiment means that at least one independent variable, as in here, reading strategies, to be manipulated and its effects to be measured by some dependant variables, as in here, reading comprehension ability, while other variables such as age, sex, language background, nationality, and language proficiency to be controlled in various ways, as it was mentioned before.

Thus, the present study is within the framework of experimental design of research, namely, pretest-posttest equivalent groups design. The selected design is one of the most effective in minimizing the threats to experimental validity. The pre-test was administered before the application of any treatment, and the post-test at the end of treatment period. At the end of treatment period, the gained scores were compared and subjected to a test of statistical

significance, i.e., an analysis of variance. The assumption was that the means of randomly assigned experimental and control groups from the same population would differ as a result of sampling error. If the difference between the means was too great to attribute to sampling error, the difference might have been attributed to the treatment variables effect.

Therefore the design of the present study was pretest-posttest equivalent groups design. The element of randomization, pre-testing, post-testing, treatment, and the relationship between reading strategies and reading comprehension were determined in the study.

3.6. The Procedures

The following procedures were performed to carry out the present study.

- I.** The researcher extracted the reading strategies of successful readers both in L1 and L2 through a questionnaire. The students were asked to read the questionnaire very carefully and choose the best answers based on their experiences. The questionnaire consisted of two sections: English questionnaire with forty reading strategies and Persian questionnaire with twenty reading strategies in Persian language. Fourteen reading strategies were chosen from each, i.e., fourteen reading strategies from English questionnaire and fourteen reading strategies from Persian, with respect to the students obtained marks.
- II.** The Nelson Standard Test (version 200B) was administered to 306 students in order to homogenize the subjects in terms of their general knowledge of basic grammar and vocabulary. Then 209 students out of 306, whose scores fell within one standard deviation above and below the mean were selected, i.e., scores from 20 to 35 and extreme marks, namely, 67 students were excluded.
- III.** In order to have two successful/good reader groups and two unsuccessful/poor reader groups, being homogeneous pair-wise in terms of their level of reading

ability, eight reading comprehension passages with 45 multiple-choice items, were administered to 239 students as a pre-test in order to verify that they enjoyed the same level of reading comprehension ability. Here again 91 subjects were excluded because their scores fell within half standard deviation above and below the mean. These students were considered intermediate students in their reading comprehension ability and were excluded from the study. Finally, 148 subjects with respect to their obtained marks in reading comprehension test were selected. Seventy four subjects were considered good/successful readers because their scores were half standard deviation above the mean (26-43). The remainder namely 74 subjects were considered poor/unsuccessful readers because their scores were half standard deviation below the mean(4-16).Considering odd numbers for one and even numbers for the other group, each of the good and poor reader groups were assigned to two equally-numbered groups,i.e., A and B & A₁ and B₁ each with 37 students. Groups A and A₁ were called the experimental groups and groups B and B₁ were called the control groups. Thus in this study the researcher had two experimental and two control groups.

IV. The subjects in experimental groups (one good-readers group and one poor-readers group) attended one session (100 minutes) a week for 14 weeks, i.e., one semester. In this period they were taught the selected reading strategies both in L1 and L2 each with 14 reading strategies. As mentioned before, reading strategies were selected based on the number of students who indicated that they used them in the questionnaire of L1 and L2 as well (Appendix C). It should be mentioned that two reading strategies (one in L1 and one in L2) were taught to experimental groups but control groups did not receive any instruction.

V. Finally, the eight reading passages which were used in the pre-test, were administered as a post-test to the subjects to in all four groups. These eight passages were administered after the end of treatment, that is, after fourteen sessions, in order to investigate the effect of treatment. The experimental groups used the knowledge of reading strategies during the treatment period, whereas the two control groups did not. Exactly like the pre-test, the subjects were asked to read the passages very carefully during the allocated time (55 minutes) and to answer to 45 multiple-choice questions.

In order to guarantee the homogeneity of the groups more, an f-test was used. The results indicated that the four groups were at the same level of language proficiency. F-test results will be explained more in chapter four.

At the end, the obtained results were subjected to a test of statistical significance, i.e., an analysis of variance (ANOVA), which indicates a significant difference among the four means to determine whether the reading comprehension ability of the subjects had been improved by strategies instruction or not. The students' obtained scores in post-tests were also processed in a computer program called SPSS (statistical package for social science) for approving the obtained results in ANOVA. In the present study, the researcher used a two-tailed test at the .05 alpha level of significance as the standard to reject the null hypotheses. The results of SPSS will be explained more in the next chapter.

In correction of the students' post-test papers, one mark was allocated for each correct answer and the subjects were not penalized for wrong answers. It was a great advantage for unsuccessful readers because most of them answered the multiple-choice questions by chance due to limited control over language.

3.7. Data Analysis

After collecting the necessary data, they were analyzed. At the end of the experimental period, the difference between the mean test scores of the experimental and control groups were subjected to a test of statistical significance, i.e., an analysis of variance (ANOVA). The assumption was that the mean of randomly assigned experimental and control groups from the same population would differ as a result of sampling error. If the difference between the means was too great to attribute to sampling error, the difference would be attributed to the treatment variable effect. Thus the obtained data were analyzed by performing an ANOVA, which indicated significant differences among the four means. Of course it should be stated that the obtained data were also performed using a computer program called Statistical Package for Social Science. In modern life computers can be used in analyzing data. Computers can perform calculations in just a few seconds than human beings would need weeks to do by hand. The researcher preferred to employ a suitable computer program because it can perform many statistical calculations easily and quickly. Computations of means, standard deviation, correlation coefficient, t-test, analysis of variance which is the central focus of the present study, and various other statistical calculations are just a few of the programs and subprograms that are available at computer centres.

Furthermore, it has been said that the computer makes no mistakes, but program writers do make mistakes, and any directions given to the computer are faithfully executed. The computer doesn't think; it can only execute the directions of a thinking person. If poor data or faulty programs are introduced into the computer, the data analysis will be meaningless. With these points in mind, I asked an experienced statistician to help me in this regard and he did. As mentioned in the procedure taken to carry out the present study, the researcher used a two tailed test at the .05 alpha level of significance as the standard to reject the null hypotheses. If the significance level is lower than .05 (being the highest acceptable error rate), thus the null

hypothesis is rejected. But if the observed significance level is bigger than .05 alpha levels, the null hypothesis is accepted.

Chapter IV

DATA ANALYSIS AND DISCUSSION

4.0. Results

As mentioned before, the purpose of the present study was to investigate the relationship between successful readers' strategies in L1 and L2 and the impact of instruction of such strategies on L2 reading comprehension ability. This study also aimed at finding an answer to the question of reading problem versus language problem, first raised by Alderson (1984) and then by Carrell (1991).

Before going into the details of the data analysis, it would be useful to state questions raised and hypotheses put forward in the first chapter, once more, in order to establish a close relationship between them and the rest of this chapter.

Regarding research questions and hypotheses addressed before, it is important to say that in Iran most EAP students have problems in reading their English text books including the General English course. In fact most of them fail to learn to read adequately in English language, and very frequently they seem to read with less understanding than we expect them to have. In the present project the aim was to find out the causes of poor reading. I'm trying to find out the answers for the following questions.

- a. Is it a reading problem or language problem?
- b. Does a limited control over language short-circuit the ability to read better?
- c. Should we develop students' reading strategies?
- d. Can students transfer their L1 reading ability to L2 situation? In this regard what is the difference between successful and unsuccessful readers?

The research questions addressed in this study concern the impact of reading strategies instruction on improving the reading comprehension of Iranian EAP students. More specifically the following research questions were addressed.

- I. Is there a statistically significant difference between the reading comprehension ability of the EAP students who receive reading strategies instruction beforehand, and those who do not?
- II. Is there any relationship between reading strategies instruction and the improvement of general English reading ability of successful readers?
- III. Is there any relationship between reading strategies instruction and the improvement of general English reading ability of unsuccessful readers?

Based on the above research questions the following three null hypotheses are presented.

- I. Reading strategies instruction has no significant impact on improving the general English reading ability of Iranian EAP students.
- II. Teaching reading strategies to able readers has no significant impacts on their reading comprehension ability.
- III. Reading strategies instruction to poor readers has no significant impacts on their reading comprehension ability.

As mentioned in chapter three, thirty five students took part in a pilot study for the validation of pre-test and post-test as well. According to the results of pilot study, the reliability of reading passages is about 0.83 which is considered high. It should be mentioned that KR-21 method (Kuder & Richardson) was used to estimate the reliability of test scores. The selected reading comprehension passages were administered concurrently with another

well-known, reputable test (TOEFL) of which the validity was already established. According to the obtained results the validity was about 0.87. Finally the appropriate time allocated to answer the questions was found to be 55 minutes according to the results obtained from the pilot study.

Then the Nelson Standard Test (version 200B) was administered in order to 306 EAP students in order to exclude extreme marks. As a result 239 students whose score fell within one standard deviation above and below the mean (20-35) were selected.

The Nelson Standard Test (version 200B) was administered in order to guarantee the homogeneity of the subjects in terms of their general knowledge of basic grammar and vocabulary. The descriptive statistics for NELT are shown in table 4.1.

Table 4.1- Descriptive Statistics for NELT

M	SD	V	K	N
27.90	7.72	59.71	50	306

Then, in order to check the readability level of the students' text book and the eight selected reading comprehension passages the Fog's readability formula was used. Readability formulas, though variant on the surface, have some common characteristics. Most of them utilize factors such as number of syllables or words, length of sentences, or the syntactic complexity of sentences. Some of them are difficult, others are easy and practical. However different formulas tend to rate the passage in similar ways. In fact, it doesn't make much difference which formula is applied as long as a single formula is consistently applied (Mizee, 1991). One of the practical formulas developed by Fog, referred to as the Fog index of readability, is the following formula:

$$\text{Text difficulty} = \frac{\text{number.of.words}}{\text{number.of.sentences}} + \left(\frac{\text{number.of.3.syllable.words}}{\text{number.of.words}} \right) 40$$

The manner of calculating of text difficulty of the students' own text book by Fog's readability formula with the name of passages is presented as follows:

Passage 1: A dictionary: words = 299 sentences = 17 3 syllable words = 35

$$\begin{aligned} \frac{299}{17} + \left(\frac{25}{299} \right) 40 &\Rightarrow \frac{299}{17} + \frac{1400}{19960} \Rightarrow \frac{3576040 + 23880}{203320} = \\ \frac{3599840}{203320} &= \mathbf{17.70} \end{aligned}$$

Passage 2: Locating a word in a dictionary:

words = 298 sentences = 13 3 syllable words = 23

$$\begin{aligned} \frac{298}{13} + \left(\frac{33}{298} \right) 40 &\Rightarrow \frac{298}{13} + \frac{920}{11920} \Rightarrow \frac{3552160 + 19960}{154960} = \\ \frac{3564120}{154960} &= \mathbf{23} \end{aligned}$$

Passage 3: Spelling:

words = 111 sentences = 6 3 syllable words = 6

$$\begin{aligned} \frac{111}{6} + \left(\frac{6}{111} \right) 40 &\Rightarrow \frac{111}{6} + \frac{240}{4440} = \frac{82140 + 240}{4440} \Rightarrow \\ \frac{82380}{4440} &= \mathbf{18.55} \end{aligned}$$

Passage 4: Syllable division and stress pattern

words = 159 sentences = 10 3 syllable words = 5

$$\begin{aligned} \frac{159}{10} + \left(\frac{5}{159} \right) 40 &\Rightarrow \frac{200}{6360} + \frac{240}{4440} = \frac{101124 + 200}{6360} \Rightarrow \\ \frac{101324}{6360} &= \mathbf{15.93} \end{aligned}$$

Passage 5: Pronunciation: words = 150 sentences = 10 3 syllable words = 6

$$\frac{150}{10} + \left(\frac{6}{150}\right)40 \Rightarrow \frac{150}{10} + \frac{240}{6000} = \frac{90000 + 240}{6000} \Rightarrow$$

$$\frac{90240}{6000} = \mathbf{15.04}$$

Passage 6: Parts of speech:

words = 122 sentences = 8 3 syllable words = 5

$$\frac{122}{8} + \left(\frac{5}{122}\right)40 \Rightarrow \frac{122}{8} + \frac{200}{4880} = \frac{74420 + 200}{4880} \Rightarrow$$

$$\frac{74620}{4880} = \mathbf{15.29}$$

Passage 7: Meaning:

words = 122 sentences = 11 3 syllable words = 15

$$\frac{122}{11} + \left(\frac{15}{122}\right)40 \Rightarrow \frac{122}{11} + \frac{600}{880} = \frac{1971360 + 6600}{97680} \Rightarrow$$

$$\frac{1977960}{97680} = \mathbf{20.24}$$

Passage 8: Word etymology:

words = 103 sentences = 6 3 syllable words = 9

$$\frac{103}{6} + \left(\frac{9}{103}\right)40 \Rightarrow \frac{103}{6} + \frac{360}{4120} = \frac{424360 + 2160}{24720} \Rightarrow$$

$$\frac{427520}{24720} = \mathbf{15.25}$$

Passage 9: Words and their parts

words = 220 sentences = 14 3 syllable words = 4

$$\frac{220}{14} + \left(\frac{4}{220}\right)40 \Rightarrow \frac{220}{14} + \frac{160}{8800} = \frac{1936000}{123200} \Rightarrow \mathbf{15.73}$$

Passage 10: Affixation:

words = 147 sentences = 10 3 syllable words = 7

$$\frac{147}{10} + \left(\frac{7}{147}\right)40 \Rightarrow \frac{147}{10} + \frac{280}{5880} = \frac{86436 + 280}{5880} \Rightarrow$$

$$\frac{86716}{5880} = \mathbf{14.76}$$

Passage 11: Some common bases:

$$\text{words} = 284 \quad \text{sentences} = 16 \quad 3 \text{ syllable words} = 8$$

$$\frac{284}{16} + \left(\frac{8}{284} \right) 40 \Rightarrow \frac{284}{16} + \frac{320}{11360} = \frac{201640 + 320}{11360} \Rightarrow$$

$$\frac{201960}{11360} = \mathbf{17.77}$$

Passage 12: Affixes:

$$\text{words} = 210 \quad \text{sentences} = 12 \quad 3 \text{ syllable words} = 6$$

$$\frac{210}{12} + \left(\frac{6}{210} \right) 40 \Rightarrow \frac{210}{12} + \frac{240}{8400} = \frac{147000 + 240}{8400} \Rightarrow$$

$$\frac{147240}{8400} = \mathbf{17.52}$$

Passage 13: Prefixes:

$$\text{words} = 209 \quad \text{sentences} = 15 \quad 3 \text{ syllable words} = 11$$

$$\frac{209}{15} + \left(\frac{11}{209} \right) 40 \Rightarrow \frac{209}{15} + \frac{440}{8360} = \frac{17047240 + 6600}{125400} \Rightarrow$$

$$\frac{17053840}{125400} = \mathbf{13.98}$$

Passage 14: Negative prefixes:

$$\text{words} = 129 \quad \text{sentences} = 9 \quad 3 \text{ syllable words} = 6$$

$$\frac{125}{9} + \left(\frac{6}{125} \right) 40 \Rightarrow \frac{125}{9} + \frac{240}{5000} = \frac{625000 + 2160}{45000} \Rightarrow$$

$$\frac{627160}{45000} = \mathbf{13.93}$$

To determine the range of readability level of the selected reading comprehension passages, the researcher calculated the mean, variance, and standard deviation of obtained text difficulty numbers. The results are presented in the following page.

x	$x - \bar{x}$	$(x - \bar{x})^2$
.....		
13.93	3.93-16.76 = -2.83	8.00
13.98	13.98-16.76 = -2.78	7.72
14.76	17.76-16.76 = -2	4
15.04	15.04-16.76 = -1.72	2.95
15.25	15.25-16.76 = -1. 24	2.28
15.29	15.29-16.76 = -1.47	2.16
15.73	15.73-16.76 = -1.03	1.06
15.93	15.93-16.76 = -0.83	0.68
17.52	17.52-16.76 =0.76	0.57
17.70	17.70-16.76 = 0.94	0.88
17.77	17.77-16.76 = 1.01	1.02
18.55	18.55-16.76 = 1.79	3.20
20.24	20.24-16.76 = 1.79	12.11
23	23-16.76 = 6.24	38.93

$$\sum (x - \bar{x})^2 = 85.56$$

$$\bar{x} = \frac{\sum x}{N} \Rightarrow \bar{x} = \frac{234.69}{14} = \mathbf{16.76}$$

$$V = \frac{\sum (x - \bar{x})^2}{N - 1} \Rightarrow V = \frac{85.56}{13} = \mathbf{6.5851}$$

SD= 2.56

Thus the selected reading comprehension passages should be within the range of 16.76 ± 2.56 , i.e., from 14.20 to 19.32. Table 4.2 and 4.3 display the readability indexes of the passages very briefly.

Table 4.2 – Readability Indexes of the Text Book Reading Passages

Readability	Text book reading Passages																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	X	V	SD
Indexes	17.70	23	18.55	15.93	15.04	15.29	20.24	15.25	15.73	14.76	17.77	17.52	13.98	13.93	16.76	6.58	2.56

According to table 4.2 the selected reading comprehension passages should be within the range of 16.76 ± 2.56 , i.e., from 14.20 to 19.32.

Table 4.3- Readability Indexes of the 8 Reading Passages of Pre and Post-test

Readability	Selected reading comprehension Passages							
	1	2	3	4	5	6	7	8
Indexes	14.28	5.11	5.51	15.60	16.82	17.07	17.95	9.99

As the results in table 4.3 indicate, all the indexes of eight reading passages fell within the mentioned range, i.e., 14.20 to 19.32.

In order to divide the subjects into either successful or unsuccessful reader groups and exclude subjects with intermediate level, the selected reading passages with 45 multiple-choice items were administered to 239 students as pre-test. Here again 91 students were excluded because their scores fell within half standard deviation above and below the mean (scores between 21 ± 4.28 , i.e., 17.28- 25.25. The descriptive statistical data for the pre-test is represented in table 4.4.

Table 4.4- Descriptive Statistics for the Pre-test

M	V	SD	K	N
21.00	73.60	8.57	45	239

Finally 148 subjects were selected for the main study. According to students' obtained scores in pre-test, seventy four students were supposed to be good/successful readers and remainder, namely 74 students were considered as poor/unsuccessful readers. The students' scores in each group were ranked from high to low. Each group was randomly divided into two equally-numbered groups each with 37 students (odd numbers for treatment and even numbers for no treatment). Thus the researcher had two good-reader groups, i.e., A and B and also two poor-reader groups which were labelled as A₁ and B₁. Groups A and A₁ were called experimental groups and B and B₁ groups were called control groups. The descriptive statistical data for students' performance in each group are shown in tables 4.5 and 4.6.

Table 4.5- Descriptive Statistics for the Pre-test Belonging to Good-readers Groups

Group	M	V	SD	K	N
Experimental	30.89	14.58	3.81	45	37
Control	31.13	6.89	2.62	45	37

Table 4.6- Descriptive Statistics for the Pre-test Belonging to Poor-readers Groups

Group	M	V	SD	K	N
Experimental	10.72	10.74	3.27	45	37
Control	10.64	10.61	3.25	45	37

In order to determine the homogeneity of variances of each pair, an F-test was used. The F-test is calculated by dividing the largest variance over the smallest one. Table 4.7 displays the results.

Table 4.7- Results of F-test

Good-readers group	F.critical	D.F	Two-tailed probability	F.observed
Experimental	3.15	72	0.05	1.15
Control	3.15	72	0.05	1.01

It should be stated that the F ratio is never less than one, for the largest variance is always divided by the smallest. To test for homogeneity of variance, an F distribution table was used in much the same way as the t distribution table. F critical values are presented for determining the statistical significance of the calculated F critical ratio, based upon the appropriate rows and columns, each at N-1 degrees of freedom.

Thus, the results in table 4.7 show that the observed F as 1.15 & 1.01 were smaller than the F-critical value 3.15 at the 0.05 level of significance; therefore, the researcher concluded that the variances are homogeneous. We should keep in mind that unless the calculated F equals or exceeds the appropriate F critical value, it will be assumed that the variances are homogeneous and difference is not significant.

Finally, after 14 sessions i.e., one semester of treatment to the experimental groups at Islamic Azad University in Ardebil state, the pre-test was administered to all subjects in four groups as a post-test. The descriptive statistic for subjects' performance in each group is displayed in table 4.8 and 4.9 in the following page.

Table 4.8- Data for Students' Performance Belonging to Poor-readers in Post-test

Group	M	V	SD	K	N
Experimental	12.70	11.32	3.36	45	37
Control	12.16	12.16	3.79	45	37

Table 4.8 shows that there is no big difference between the two means of experimental and control groups. From a statistical point of view the difference between two means is not meaningful. Therefore the researcher concluded that reading strategies instruction to poor readers has no significant impact on their reading comprehension ability. Of course this was true about the experimental group and the control group did not receive any instruction.

Furthermore it is necessary to say that the means of experimental and control groups in pre-test were 10.72 and 10.64 respectively. If we compare the mentioned pre-test means with the obtained post-test means, here the difference is not also meaningful. The results of comparing the means of unsuccessful experimental and control groups will be explained in detail in this chapter.

Table 4.9- Data for Students' Performance Belonging to Good-readers in Post-test

Group	M	V	SD	K	N
Experimental	39.32	12.72	3.56	45	37
Control	32.27	8.42	2.90	45	37

The results in table 4.9 show that there is a meaningful difference between the two means of experimental and control groups. From a statistical point of view, i.e., t-test the difference between two means is meaningful. Therefore the researcher concluded that teaching reading strategies to able readers has significant impact on their reading comprehension ability. The means of obtained scores of experimental and control groups in pre-test were 30.89 31.13 respectively. The comparison of means between pre-test and post-test of experimental group is meaningful and significant, thus reading strategies instruction had a significant impact on improving the reading ability of successful readers. Here also this was true about the experimental group and the control group did not receive any instruction.

Finally, the obtained data were analyzed in two ways. First, the one way analysis of variance was used to compare the means of four groups, i.e., two experimental and two control groups simultaneously. By using ANOVA we can examine the differences among the means and decide whether these differences are likely to happen by chance or by treatment effect. Table 4.10 displays the results of ANOVA.

Table 4.10- Descriptive Statistics of ANOVA

Source of variance	SS	D.F	M.S	F _{obs}	F.critical	
					0.05	.01
Between groups	1124.88	3	7041.62	601.36	2.68	3.95
Within groups	1686.17	144	11.70			
Total	22811.04	147				
P<0.01			P<0.05			

SS= sum of square
D.F = degree of freedom
MA = mean square
F_{obs} = F-observed

It is necessary to state that the t-test was employed to determine whether the means of two random samples were too different to attribute to chance or sampling error. The analysis of variance is an effective way to determine the means of more than two samples that are too different to attribute to sampling error. In single classification, or one way analysis of variance, the relationship between one independent variable, as in here, reading strategies and one dependent variable, as in here, reading comprehension is examined. For the present study the analysis of variance consisted of the following operations:

1. The variance of scores for four groups was combined into one composite group, known as the **total- group variance (V_t)**.
2. The mean value of the variances of each of the four groups, was computed separately, is known as **within-groups variance (V_w)**.
3. The difference between the total groups variance and the within groups variance is known as between-groups variance (V_t- V_w = V_b).
4. The F ratio is computed via:

$$F = \frac{V_b}{V_w} = \frac{\text{between - groups variance}}{\text{within - groups variance}}$$

The logic of the F is as follows. The within-groups variance represents the sampling error in the distribution and is also referred to as error variance. The between-groups variance represents the influence of the experimental variable. If the between-groups variance is not substantially greater than the within-groups variance, the researcher would conclude that the difference between the means is probably only a reflection of sampling error. If the F ratio were substantially greater than one, it would seem that the ratio of the between-groups and the within-groups variance was too great to attribute to sampling error.

The critical values of the F ratio (named for Sir Ronald Fisher) are found in an F table, which indicates the critical values necessary to test the null hypothesis at selected level of significance (John W. Beast; James V. Kahn, 1989).

As the table 4.10 represents, the F 601.36 was much greater than F-critical (2.68), so it was concluded that there was a statistically significant differences between the means.

As mentioned before the MSB (mean square between) and MSW (mean square within) are two estimates of a population. The first one is an estimate biased for treatment and belongs to a distribution with 3 degrees of freedom. The second estimate which is unbiased for treatment and belongs to a distribution of 144 degrees of freedom. The F distribution for the interaction of 3/144 is 2.68 at 0.05 alpha level of probability and a ratio of 3.95 at 0.01 level of significance. The F-observed, i.e., 601.36 was very much greater than the critical value of F, i.e., 2.68 at 0.05 alpha level of significance and 3.95 at 0.01 level of significance, so it could be concluded that there was a statistically significant difference between the performance of four groups on doing reading comprehension tasks and such different rating could not be due to chance. As a result the first null hypothesis was rejected by the researcher.

Having found out the means of two experimental groups and two control groups on post-test, the next step was to find out, statistically, the difference between the means to reject or accept the second and third null hypotheses. According to Hatch and Farhady (1982), t-test is the best means to calculate the difference between two means. Regarding the present study the following formulas were employed for comparing the means of the different groups.

$$t_{\text{obs}} = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{(N-1)s_1^2 + (N-2)s_2^2}{N_1 + N_2 - 2} \left(\frac{1}{N_1} + \frac{1}{N_2}\right)}}$$

$$t_{\text{obs}} = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{S_1^2}{N_1} + \frac{S_2^2}{N_2}}}$$

In fact the above mentioned formulas for comparing the means of two independent samples are actually equivalent.

In the present study there were four groups including two experimental and control groups. For comparing them they were classified as follows.

G₁ = Experimental group (successful readers)

G₂ = Control group (successful readers)

G₃ = Experimental group (unsuccessful readers)

G₄ = Control group (unsuccessful readers)

In order to test the second null hypothesis the following **t-tests** were required:

4.1. T-tests for the Scores Achieved on Post- test

4.1.1. Comparison of G1 and G2

For comparing the means of experimental and control groups of successful readers the following formula was used:

$$F_{\text{obs}} = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{(N-1)s_1^2 + (N-2)s_2^2}{N_1 + N_2 - 2} \left(\frac{1}{N_1} + \frac{1}{N_2} \right)}}$$

\bar{X}_1 = mean experimental group (successful readers)

\bar{X}_2 = mean of control sample

N_1 = number of cases in experimental group

N_2 = number of cases in control group

S_1^2 = variance of experimental group

S_2^2 = variance of control group

If the value of the numerator in this ratio is not significantly greater than the denominator, it is likely that sampling error-not the effect of treatment or experimental variable-is indicated.

G₁**G₂****G₁** = Experimental group (successful readers)**G₂** = Control group (successful readers)

$$\bar{X}_1 = 39.32$$

$$\bar{X}_2 = 32.27$$

$$S_1^2 = 12.72$$

$$S_2^2 = 8.44$$

$$N_1 = 37$$

$$N_2 = 37$$

$$t_{\text{obs}} = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{(N-1)s_1^2 + (N-2)s_2^2}{N_1 + N_2 - 2} \left(\frac{1}{N_1} + \frac{1}{N_2}\right)}}$$

$$t_{\text{obs}} = \frac{39.32 - 32.27}{\sqrt{\frac{(36)12.72 + (36)8.44}{37 + 37} \left(\frac{1}{37} + \frac{1}{37}\right)}}$$

$$t_{\text{obs}} = \frac{7.05}{\sqrt{\frac{(457.92 + 303.84)}{72} (.05)}} \Rightarrow t = 9.79$$

The obtained results in the t-test formula are $t_{\text{observed}} (t_{\text{obs}})$. In order to determine (t_{cri}), the degree of freedom and significance level should be taken into account. as it was mentioned, in this research the significance level was “0.05” and degree of freedom was 72. Comparison of the means of the post-test of successful readers including experimental and control groups and also the result of the t-test show that the two means are different.

4.1.2. Comparison of G1 and G3

G_1 = Experimental group (successful readers)

G_3 = Experimental group (unsuccessful readers)

G_1	G_3
$\bar{X}_1 = 39.32$	$\bar{X}_2 = 12.70$
$S_1^2 = 12.72$	$S_2^2 = 11.32$
$N_1 = 37$	$N_2 = 37$

$$t_{\text{obs}} = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{S_1^2}{N_1} + \frac{S_2^2}{N_2}}}$$

$$t_{\text{obs}} = \frac{39.32 - 12.70}{\sqrt{\frac{12.72}{37} + \frac{11.32}{37}}} \Rightarrow t_{\text{obs}} = \frac{26.62}{\sqrt{\frac{12.72 + 11.32}{37}}}$$

$$t_{\text{obs}} = \frac{26.62}{\sqrt{.64}} \Rightarrow t = \frac{26.62}{.80} = 33.27$$

4.1.3. Comparison of G1 and G4

G_1 = Experimental group (successful readers)

G_4 = Control group (unsuccessful readers)

G_1	G_4
$\bar{X}_1 = 39.32$	$\bar{X}_2 = 12.16$
$S_1^2 = 12.72$	$S_2^2 = 14.35$
$N_1 = 37$	$N_2 = 37$

$$t_{\text{obs}} = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{S_1^2}{N_1} + \frac{S_2^2}{N_2}}}$$

$$t_{\text{obs}} = \frac{39.32 - 12.16}{\sqrt{\frac{12.72}{37} + \frac{14.35}{37}}} \Rightarrow t_{\text{obs}} = \frac{27.16}{\sqrt{\frac{12.72 + 14.35}{37}}}$$

$$t_{\text{obs}} = \frac{27.16}{\sqrt{.73}} = \frac{27.16}{.85} = \mathbf{31.95}$$

4.1.4. Comparison of G3 and G4

G₃ = Experimental group (unsuccessful readers)

G₄ = Control group (unsuccessful readers)

G₃

$$\bar{X}_1 = 12.70$$

$$S_1^2 = 11.32$$

$$N_1 = 37$$

G₄

$$\bar{X}_2 = 12.16$$

$$S_2^2 = 14.35$$

$$N_2 = 37$$

$$t_{\text{obs}} = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{S_1^2}{N_1} + \frac{S_2^2}{N_2}}}$$

$$t_{\text{obs}} = \frac{12.70 - 12.16}{\sqrt{\frac{11.32}{37} + \frac{14.35}{37}}} \Rightarrow t_{\text{obs}} = \frac{.54}{\sqrt{\frac{11.32 + 14.35}{37}}}$$

$$t_{\text{obs}} = \frac{.54}{\sqrt{.69}} = \frac{.54}{.83} = \mathbf{.65}$$

The obtained result in the t-test formula is the t_{observed} (t_{obs}). Taking into account the degree of freedom and significance level (0.05), t_{critical} can be obtained. The observed statistics must exceed critical value, i.e., t_{obs} is bigger than t_{cri} . It is in this case that the raised null hypothesis is rejected. If the result is vice versa, i.e. t_{cri} is bigger than t_{obs} , the null hypothesis is supported (Brown, 1995).

Having found that the t_{obs} of four mentioned groups, a Scheffe test was employed to locate the exact place of differences among the means. The researcher looked at any or all combinations of means in order to compare them. Table 4.10 summarizes the results.

4.2. Comparison of Performances in Experimental and Control Groups

Table 4.11- The Scheffe Test for Comparing of Four Means

Comparison	Mean 1	Mean 2	t_{obs}	D.F	t_{cri}
G₁ VS. G₂	39.32	32.27	* 9.79	72	4
G₁ VS. G₃	39.32	12.70	* 33.27	72	4
G₁ VS. G₄	39.32	12.16	* 31.95	72	4
G₃ VS. G₄	12.70	12.16	.65	72	4

G₁ = Experimental group (successful readers)

G₂ = Control group (successful readers)

G₃ = Experimental group (unsuccessful readers)

G₄ = Control group (unsuccessful readers)

* = Indicative of significant differences

The final step was to compare each of t-observed values. The results of table 4.11 show that the t_{obs} for group 1 and 2 is 9.72. This amount of t exceeds 4 (t-critical), so the second null hypothesis was rejected at 0.05 level of significance, at 72 degrees of freedom. Thus the researcher concluded that teaching reading strategies to successful readers has significant impacts on their reading ability. Furthermore, the comparison of group 1 and 3 and also group 1 and 4 performance confirmed the rejection of second null hypothesis too. The obtained t-observed from group 1 and 3 & and group 1 and 4, i.e. 33.27 and 31.95 exceed the t-critical, so second null hypothesis was rejected.

The t-conserved value for the comparison of group 3 and 4 is **.65**. This amount of t is lower than the critical value, i.e., 4 at 72 degrees of freedom. Thus the third null hypothesis concerning poor reading and reading strategies instruction was not rejected and the researcher concluded that strategies instruction to unsuccessful readers has no significant impact on their reading ability.

As mentioned before, the present study aims at finding an answer to the question of reading problem versus language problem, first raised by Alderson (1984) and then followed by Carrel (1991). Considering reading problem versus language problem, the results showed that reading ability and reading strategies instruction is related. At low levels of reading ability, this relationship is negative. On the contrary, at high levels of reading ability, the successful readers could use reading strategies and also transfer L1 reading ability to L2 situations. According to the Clarke (1980) good readers had passed the threshold level, and thus they could benefit from their reading strategies in L1 and L2 in order to read more efficiently.

As it was mentioned before, the collected data including the subjects' scores in post-test were also performed using a computer program called S.P.S.S. (statistical package for social science). Exactly the same results of analysis of variance (ANOVA) were obtained. In the present study, the researcher used a two-tailed test at the 0.05 alpha level of significance as the standard to reject the null hypothesis. The results of S.P.S.S will not be explained here and only are presented in the following pages for more information.

4.3. Students' Obtained Scores in Post-test

Table 4.12- Students' Scores in Post-test

Unsuccessful readers		Successful readers	
Control group	Experimental group	Control group	Experimental group
4	5	26	34
5	7	26	34
7	8	28	34
7	8	29	34
7	9	29	34
8	10	29	36
8	10	30	36
9	10	30	36
10	11	30	36
10	11	30	36
10	11	30	36
10	11	30	36
10	12	31	37
11	12	32	37
11	12	32	37
11	12	32	38
12	12	32	39
12	12	32	39
12	12	33	41
13	12	33	41
13	12	33	41
13	13	33	41
13	13	33	41
13	14	33	41
14	14	34	41
14	14	34	42
15	14	34	42
15	14	34	42
16	15	34	42
16	15	35	42
16	15	35	43
16	17	35	44
17	18	36	44
17	18	36	44
18	18	36	44
18	19	36	45
19	20	39	45

4.4. Tables 4.13 & 4.14 Show the Descriptive Statistics of Four Groups

Table 4.13- Descriptives

Group	Statistic	Std. Error
Mark C.G.U.R. Mean	12.16	.623
95% Confidence Interval for Mean	Lower Bound 10.90	
	Upper Bound 13.43	
5% Trimmed Mean	12.24	
Median	12.00	
Variance	14.362	
Std. Deviation	3.790	
Minimum	4	
Maximum	19	
Range	15	
Interquartile Range	6	
Skewness	-.175	.388
Kurtosis	-.619	.759
E.G.U.R. Mean	12.70	.553
95% Confidence Interval for Mean	Lower Bound 11.58	
	Upper Bound 13.82	
5% Trimmed Mean	12.70	
Median	12.00	
Variance	11.326	
Std. Deviation	3.365	
Minimum	5	
Maximum	20	
Range	15	
	Upper Bound 33.24	
5% Trimmed Mean	32.32	
Median	33.00	
Variance	8.425	
95% Confidence Interval for Mean	Lower Bound 31.30	

Std. Deviation		2.903	
Minimum		26	
Maximum		39	
Range		13	
Interquartile Range		4	
Skewness		-.176	.388
Kurtosis		-.046	.759
<hr/>			
E.G.S.R. Mean		39.32	.586
95% Confidence Interval for Mean	Lower Bound	38.13	
	Upper Bound	40.51	
5% Trimmed Mean		39.30	
Median		41.00	
Variance		12.725	
Std. Deviation		3.567	
Minimum		34	
Maximum		45	
Range		11	
Interquartile Range		6	
Skewness		-.064	.388
Kurtosis		-1.353	.759

Table 4.14- ANOVA

Mark	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	21124.885	3	7041.628	601.362	.000
Within Groups	1686.162	144	11.709		
Total	22811.047	147			

4.5. Multiple Comparisons of Good-readers & Poor-readers Groups

Table 4.15- Multiple Comparisons

Dependent Variable:Mark

	(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tukey HSD	C.G.U.R.	E.G.U.R.	-.541	.796	.905	-2.61	1.53
		C.G.S.R.	-20.108*	.796	.000	-22.18	-18.04
		E.G.S.R.	-27.162*	.796	.000	-29.23	-25.09
	E.G.U.R.	C.G.U.R.	.541	.796	.905	-1.53	2.61
		C.G.S.R.	-19.568*	.796	.000	-21.64	-17.50
		E.G.S.R.	-26.622*	.796	.000	-28.69	-24.55
	C.G.S.R.	C.G.U.R.	20.108*	.796	.000	18.04	22.18
		E.G.U.R.	19.568*	.796	.000	17.50	21.64
		E.G.S.R.	-7.054*	.796	.000	-9.12	-4.99
	E.G.S.R.	C.G.U.R.	27.162*	.796	.000	25.09	29.23
		E.G.U.R.	26.622*	.796	.000	24.55	28.69
		C.G.S.R.	7.054*	.796	.000	4.99	9.12
LSD	C.G.U.R.	E.G.U.R.	-.541	.796	.498	-2.11	1.03
		C.G.S.R.	-20.108*	.796	.000	-21.68	-18.54
		E.G.S.R.	-27.162*	.796	.000	-28.73	-25.59
	E.G.U.R.	C.G.U.R.	.541	.796	.498	-1.03	2.11
		C.G.S.R.	-19.568*	.796	.000	-21.14	-18.00
		E.G.S.R.	-26.622*	.796	.000	-28.19	-25.05
	C.G.S.R.	C.G.U.R.	20.108*	.796	.000	18.54	21.68
		E.G.U.R.	19.568*	.796	.000	18.00	21.14
		E.G.S.R.	-7.054*	.796	.000	-8.63	-5.48
	E.G.S.R.	C.G.U.R.	27.162*	.796	.000	25.59	28.73
		E.G.U.R.	26.622*	.796	.000	25.05	28.19
		C.G.S.R.	7.054*	.796	.000	5.48	8.63

*. The mean difference is significant at the 0.05 level.

Table 4.11 shows the students' obtained scores in all four groups. The results in table 4.12 show that the significance level, as in here, .0 is smaller than alpha level of significance, as in here 0.05. Thus the first null hypothesis was rejected. So it was concluded that there was a statistically significant differences between the means.

Also the results in table 4.13 indicate that the obtained significant level, i.e. 0.0 is smaller than alpha level of significant level, i.e. 0.05. Thus the second null hypothesis was also rejected. Therefore, the researcher concluded that reading strategies instruction to successful readers has **significant** impacts on their reading comprehension ability. The obtained level of significances in comparing the experimental group of successful readers with the control group of unsuccessful readers and also experimental group of successful readers with control group of unsuccessful readers were smaller than 0.05 level of significance. Thus the results of these comparisons confirmed the rejection of the second null hypothesis. But the level of significance in comparing experimental and control groups of unsuccessful readers was greater than 0.05 level of significance. Thus the third null hypothesis was accepted. It should be mentioned that if the obtained level of significance is smaller than 0.05 alpha level of significance, the null hypothesis is rejected and if it is bigger than 0.05 level of significance, the null hypothesis is accepted. This can be represented as:

Level of sig. < 0.05 = rejection

Level of sig. > 0.05 = acceptance

4.6. Internal and External Validity of Research

To make a significant contribution to the development of knowledge, an experiment must be valid. Campbell and Stanly (1966) described two types of validity, internal validity and external validity. Campbell (1979) further divided experimental validity and added two other types, statistical and construct validity. For the purpose of the present study, I will continue the discussion about the two types of experimental validity described by Campbell and Stanly.

According to Campbell and Stanly an experimental has internal validity to the extent that the factors that have been manipulated (independent variables) actually have a genuine effect on the observed consequences (dependent variables) in the experimental setting. Furthermore they defined external validity as the extent to which the variable relationships can be generalized to other settings, other treatment variables, other measurement variables, and other populations.

A question that may be raised is whether the improvement on the subjects' performance in the experimental group is due to the treatment. Could it not be the case that some other extraneous variables or factors had affected them? In other words how much are the findings of the research internally valid?

As with the present study, care was taken to control as many variables as possible to limit the outcome to the independent variable, i.e., reading strategies instruction. The questionnaire was a great help in controlling non-linguistic factors such as student's motivation or their using of reading strategies at home, etc. Also the Nelson Standard Test was a great help in controlling linguistic factors such as vocabulary and grammar knowledge of the subjects. Moreover the researcher was the teacher of both experimental group and control group and, consequently, could control the classroom activities according to the orientation of the research. Now that the effect of the mentioned variable have been

controlled, as much as possible, then the change in the dependant variables, i.e., improvement on the reading comprehension ability, must be attributed to the effects of the independent variable, i.e., reading strategies instruction.

With regard to External Validity of the study, it should be pointed out that since it deals with the application of the outcome of the research study to other similar situation, it will be discussed in the next chapter.

4.7. Discussion

The present study was aimed at finding out whether there was any relationship between reading ability and teaching reading strategies to good and poor readers. This study also aimed at finding an answer to the question of reading problem versus language problem, first raised by Alderson (1984) and then by Carrell (1991). Casanave's (1988) expanded view of schema theory, the strategy schema, Goodman's (1971) language transfer hypothesis, and Clarke's short-circuit or language ceiling hypothesis in ESL or EFL were the central focus in this study.

In order to reject or confirm the null hypotheses, a preliminary analysis was needed. So, some of the statistical measures including mean, reliability, validity, variance, and standard deviation of the tests, the readability levels of subjects' text book passages and selected ones, were computed.

After 14 weeks, i.e., one semester of strategies instruction in L1 and L2 to successful and unsuccessful readers of experimental groups, the obtained results computed via (ANOVA) indicated that the first null hypothesis suggesting no correlation between strategies instruction and improving reading ability was rejected.

Therefore, with sufficient supportive evidence, the researcher concluded that there was a difference between the performance of those who were taught reading strategies and that of

those who received no instruction. It is important to note that this study has provided evidence supporting the transfer of reading abilities from L1 to L2. The results lend support to the already familiar question of reading problem versus language problem and furthermore the result lends support to part of Day and Bamford's (1998) model of acquisition and development of L2 reading attitudes in that L1 reading attitude is one of the factors forming L2 attitude. The finding that transfer from L1 to L2 reading happens not only in the cognitive domain (reading abilities and strategies) was found by previous studies, but also in the effective domain, such as in attitude, will mark an important step for the advancement of research into the relationship between L1 and L2 reading .

The second null hypothesis suggesting no relationship between strategies instruction and improving reading ability was also rejected. As the results (table 4.11) show, the t-observed value for the experimental and control groups of good/successful readers is 9.79 and this is greater than t-critical value (4). The second null hypothesis was rejected at 0.05 level of significance at 72 degrees of freedom. In the same way, the third null hypothesis concerning poor reading and the teaching of reading strategies was also put to test. Since the t-observed for the experimental and control groups of poor readers was **0.65** and it was lower than the critical value of t at 0.05 level of significance, at 72 degrees of freedom, i.e., 4 , the third null hypothesis was not rejected. Thus, the researcher concluded that there was no significant difference and that reading strategies instruction to poor readers had no significant impact on their reading ability.

On the other hand, the results of ANOVA (table 4.10) showed that the F-ratio (601.36) was much greater than F-critical (2.68), so it was concluded that there was a statistically significant difference between the performance of four groups on doing reading comprehension tasks and such different rating could not be due to chance.

Finally, a Scheffe test was applied in order to investigate where the difference occur. Each of the t-observed values for the four groups was compared (table 4.11) and the results made it clear that the t-observed values exceeded t-critical values except for poor readers. The t-observed value for poor readers was 0.65, which was lower than the critical value of 4. So it was concluded that the difference between groups one and two & groups 1 and 3, and group 1 and 4 was due to reading strategies treatment, but for groups 3 and 4 that are poor readers, the strategies instruction had no significant impact on improving their reading ability.

4.8. Summary

With reference to the above discussion over the obtained data and factors affecting the outcome, we see no significant difference between the performance of the experimental group and the control group before treatment. While the obtained results from t-test after treatment indicates a remarkable difference between the performances of EG and CG. On the basis of this difference and due to considerations for the internal validity of the study, one can safely reject the first and second null hypotheses considering the students who receive reading instruction in general and successful readers in particular and claim that reading strategies instruction has a significant impact on improving the general English reading comprehension ability of Iranian EAP students. But considering poor readers, reading strategies instruction has no impact on improving their general English reading ability. Since various other studies in the area of reading strategies have found that younger and less proficient students use fewer strategies due to limited control over language and use the strategies less effectively in their reading comprehension (Garner, 1987; Waxman and Padvon, 1987).

From the findings of research in reading strategies, it becomes quite clear that there are indeed differences between successful or good readers, and less successful or poor readers in terms of strategy use. There is also a strong relationship between reading strategies used by readers and proficiency level. Overall, successful readers appear to be using a wide range of strategies. Moreover, these readers also appear to use strategies more frequently than less successful or poor readers.

In the next chapter we shall discuss the implications that these findings can have those who, in one way or another, deal with language and pedagogy.

Chapter V

CONCLUSION, IMPLICATION, AND SUGGESTIONS FOR FURTHER RESEARCH

5.0. Conclusions

First of all it is necessary to mention the reading problems raised in chapter two once more very briefly in order to elaborate the conclusions of the present study more clearly. All of us have had the experience of having students who are utterly lost for words faced by a written page that looks to them quite unfamiliar. Surely there are ways of leading them out of this maze into meaning (Soul-Susbiellers 1987). This quotation accurately reflects the EAP students' problems in reading in Iran.

Successful readers are those who are able to recreate the reading text perfectly. Sometimes even native speakers can not arrive at the author's message exactly. As Goodman and Burke (1972) state all readers do deviate from the text, and these deviations can be evaluated based on the degree to which the meaning of the text is disrupted.

Goodman (1975) argues that any reading that does not result in meaning is futile. Readers may short-circuit in a variety of ways for a variety of reasons. In general, readers short-circuit when they can't get the meaning or lost the structure. Theoretically, this can occur at any point in the reading process.

Alderson (1984) identifies two types of poor foreign or second language readers: a poor L1 reader, and a good L1 reader who has not been able to transfer his L1 reading abilities to the foreign language situations because of his problems with the foreign language.

According to Aspatore (1984), the problem that students have with reading is that they are afraid. They are more concerned with getting the correct answer than with the more

important process of how to get the answer. They depend too much on the dictionary, and they have problems making the transition from short readings to long ones. To help students overcome these problems, she suggested that teachers ask them to read and underline unknown words without looking up the meaning in the dictionary; to use contextual clues to guess the general reading; to skip unknown words; and to focus on cognates, roots, prefixes, and suffixes.

Byrnes (1985) says that the act of comprehension is essentially meaning driven, holistic, top-down behaviour that is highly selective in the features it incorporates. Grellet (1999) states that proficient readers do not concentrate on sentences and words. Instead, they start with global understanding and then work toward comprehension of detailed aspects of the reading. She maintains that reading is an active skill... it constantly involves guessing, predicting, checking, and asking oneself question.

In a second language study, Hosenfeld (1977) used a think-aloud procedure to identify relations between certain types of reading strategies and successful and unsuccessful second language reading. For example, the successful reader kept the meaning of the passage in mind while reading, read in broad phrases, skipped inconsequential or less important words, and had a positive self-concept as a reader. The unsuccessful reader on the other hand, lost the meaning of the sentences when decoded, read in short phrases, pondered over inconsequential words, seldom skipped words as unimportant, and had a negative self-concept.

Similarly Block (1986) used a think aloud procedure in her study of non-proficient readers from which she was able to obtain information about four characteristics, namely integration, recognition of aspect of text structure, use of general knowledge, personal experiences, and response in extensive versus reflexive modes which differentiated successful from less successful readers.

August et al. (1984) report that students often need assistance in learning to monitor their own comprehension. In other words, they continue to read without being aware that they do not comprehend, and they must learn to realize when they lose track of the thread of the author's ideas. In their research unskilled readers may not even notice that a page is missing from the reading. Skilled readers report missing pages more often than unskilled readers and are usually able to infer the content of the missing material.

According to Schulz (1983), students engage in a word-by-word decoding and translation developed and practiced in elementary language courses often becomes the only strategy with which the learner approaches an L2 text. The result is loss of contextual focus and immediate frustration, as soon as the reader encounters an unknown word. The reader's approach is thus a linear one, based on the assumption that comprehension takes place through progressive analysis of small units beginning with the word and ending with the sentence.

Parallel to this, Hosenfeld (1977) described the following as the characteristics of poor readers: losing the meaning of sentences as soon as they decoded; reading in short phrases, seldom skipping words as unimportant and viewing them as equal in terms of their contribution to the total phrase meaning; and finally have a negative self-concept as a reader.

Equally, Block (1986) mentions four criteria for differentiating more successful from less successful readers: 1) integration, 2) recognition of the aspects of the text structure, 3) use of general knowledge, personal experience and associations, and 4) response in extensive and reflexive modes. In the extensive mode the students' attention is directed from themselves to the author or text, whereas in the reflexive mode readers relate their personality and knowledge to the text.

It should be mentioned that a significant factor effecting reading comprehension in language classes is the lack of familiarity students may have with the foreign culture. Johnson

(1982-1982) found that readers better understand content that is related to their own cultural background.

In addition, writers from one culture may organize their thoughts differently from those in another culture. The psycholinguistic model of reading envisions readers developing predictions and expectations as they read. These expectations are based on background knowledge, which includes story schemata and scripts. Carrell (1984) concludes that reading comprehension is therefore influenced by the overall organization of the text as well as by the effect of smaller segments such as sentences and paragraphs.

The present study examined some evidence related to the question of whether poor reading in a foreign language is due to problems with the foreign language or problems with reading as a set of strategies. Also the researcher aimed to investigate whether there is any statistically significant difference between the mean performance of the EAP students who receive reading strategies instruction beforehand and those who do not. In doing so, the researcher administered two different tests. First the researcher administered the Nelson Standard Test (version 200B) in order to homogenize the subjects in terms of their general knowledge of basic grammar and vocabulary. Then the researcher administered eight reading comprehension passages with 45 multiple-choice items as a pre-test in order to have two good reader groups and two poor reader groups, being homogeneous pair-wise in terms of their level of reading ability.

Next the subjects in the experimental groups attended one session (100 minutes) a week for 14 weeks. In this period, they were taught 14 appropriate reading strategies. It should be mentioned that the subjects in the control groups did not receive any instruction. And finally, the eight reading comprehension passages which were used in the pre-test, were administered as a post-test to the subjects in all four groups in the last session.

Finally, by using ANOVA, the researcher examined the differences among the means and decided whether those differences were likely to happen by chance or by treatment. Since the ANOVA relates directly to whether the null hypothesis is rejected or not, the researcher concluded that there existed a difference between the average performance of students who received treatment and those who did not. As a result, the first and second null hypotheses were rejected, but the third null hypothesis was not.

The findings of the present study lent support to already familiar question of reading problem versus language problem first raised by Alderson (1984) and later on by Carrell (1991). It was found that both were significant factors, but the point is that at lower levels of language competence it is mostly a matter of language problem. When students want to go **beyond their language proficiency level**, they are overwhelmed. When a lot of words and vocabularies are unknown to them, they become frustrated. When the grammar structures of the sentences are long and complex, the students get tired or lost, or both. If the topic written about is beyond their experience or base of knowledge, they are adrift on an unknown sea. When they face these feelings while reading, they may stop reading because they can not understand the meaning of the text enough to satisfy their expectations, needs, or interests.

Furthermore according to Patricia L. Carrell (1998) a great deal of research in first language reading over the last 25 years has shown that young and unskilled readers do not use strategies often or effectively without help. Failure to use reading strategies effectively has been observed in the first language reading of young or unskilled readers when:

- (1) they fail to monitor their comprehension,
- (2) they believe that the strategies will not make a difference in their reading,
- (3) they lack knowledge about text features,
- (4) they are disinterested in the text and unwilling to use strategies, and

(5) they prefer familiar yet primitive strategies over less-familiar but more effective tactics.

Similarly various other studies in the area of reading strategies have found that younger and less proficient students use fewer strategies and use them less effectively in their reading comprehension (Garner, 1987; Waxman and Padron, 1987).

As suggested by Clarke's (1980) short-circuit hypothesis, the students should pass a certain threshold level or language ceiling if they want to benefit from reading strategies. According to the results obtained from the present study, EAP students who were better readers were found to be better strategy users as well, and conversely the poor readers could not use reading strategies because they had not passed the language threshold level. The language competence or linguistic ability of these students was not developed enough to help them benefit from reading strategies. Therefore, if we want to help our EAP students read better and more effectively, firstly they should be helped with L2, and then their reading skills must be empowered. The first can be done by giving them instruction in grammatical structures, helping them to expand their knowledge of vocabulary, and having them read extra materials. For the second case, we should teach them appropriate reading strategies in L1 and L2.

Also we conclude that teaching reading strategies to the students who are not competent, particularly in reading strategies, along with making them conscious of their ability, gives them a broader sense of depth of reading comprehension texts and improves their reading ability.

Conversely, regarding students that are at high levels of language competence, it is a reading problem, that is, if the good readers are taught appropriate reading strategies, they will be better readers. Thus, teaching reading strategies has a positive effect on improving their reading ability.

Regarding the relationship between L1 and L2 reading, it should be stated that this relationship has been investigated through different hypotheses: first, the linguistic independence hypothesis or language transfer hypothesis (Goodman 1971), which claims that L1 reading ability transfer to L2 reading situation; and second, Clarke's idea of short-circuit or the linguistic threshold hypothesis which claims that L1 reading ability transfer to L2 reading when learners' L2 proficiency is higher than the linguistic threshold. Considering the obtained results of the present study, these hypotheses are explained below.

Regarding the language transfer hypothesis, it was discussed that there are two kinds of transfers, i.e., positive and negative. According to the obtained results the strategies transfer was considered one of the positive transfers. Positive transfer occurs when learning in one situation helps or facilitates learning in another later situation. In this study the selected reading strategies in L1 helped the successful readers to answer the selected reading passages questions better.

Similarly Grabe et al. (2002) state that positive transfer effects represent helpful resources for L2 reading development. In the right circumstances, many aspects of L1 reading abilities support L2 comprehension, though this transfer typically assumes well-developed literacy in the student's L1. He adds that examples of positive transfer effects include the following:

- effective strategies for reading academic texts
- appropriate purposes for reading
- experience with successful task completion
- flexibility in monitoring comprehension
- skills for analyzing and learning new words

Positive transfer effects provide a means for accelerated development of L2 reading abilities when they are assisted by instruction and teacher guidance.

Reviewing the obtained results for the threshold level, we found that language specific types of knowledge, such as vocabulary knowledge and grammar knowledge have substantial effects on L1 and L2 reading comprehension.

In 1979, Clarke first introduced the notion of a foreign or second language threshold or limited control over the language, which short-circuits transfer of reading abilities acquired in the native language to L2 reading. In line with Clarke, Alderson (1984) argued that poor foreign language reading is due to teaching reading strategies in the first language not being employed in the foreign language due to inadequate knowledge of the foreign language. Good first language readers will read well in the foreign language once they have passed a language ceiling or a threshold of foreign language ability. The threshold hypothesis was proposed in reaction to the transfer hypothesis, in order to explain the observation that reading in a language which is not the learner's first language is a source of considerable difficulty (Alderson 1984).

Prior to Alderson's study of the threshold level there have been other studies in line with Clarke's view, for instance Hauptman (1979), Coady (1979), Cziko (1980), Cummin (1980). Alderson (1984) compares the short-circuit hypothesis with the reading universals hypothesis, stating that reading is reading no matter in what language, that is L2 readers compensate for less well developed L2 skills by means of their L1 reading skills (Goodman 1973). Thus, Alderson by comparing of these two hypotheses concluded that reading inefficiencies is a matter of both language and reading but with firmer evidence, it is a language problem for low levels of foreign language competence. By so doing, Alderson (1984) lent support to Clarke's (1980) threshold hypothesis. In the present study, the third null hypothesis concerning poor readers was not rejected. Therefore, the researcher concluded that teaching reading strategies to poor readers has no significant impact on their reading comprehension ability.

Also a similar study by Carrell (1991) made great contribution to the question of reading problem versus language problem. She found out that both L1 ability and L2 language proficiency are statistically significant factors.

5.1. Implications

In the most pragmatic world of today, the significance of any new idea is judged only by its utility and application. A theoretically versatile, yet practically handicapped doctrine, contributes little or nothing. Therefore, before investing on a new project one first needs to consider its instrumentality and practicality.

External validity is a decisive factor in determining the practicality of the research findings. According to Hatch & Farhady (1982), “external validity refers to the extent that the outcome of any research study would apply to other similar situations in the real world” (p. 8).

In order to make sure of the applicability of the research findings the researcher took the school and university facilities into consideration. As a result, the treatment in this research did not require highly sophisticated equipments. The setting in which the research was carried was that of real world- every school and university has facilities like those used in conducting the research.

With regard to the selection of subjects, which can affect the external validity, it should be pointed out that the subjects were a sample group of the total population.

One of the main problems that learners of English as a foreign language (EFL) confront is how to improve their reading comprehension proficiency. This is actually the concern of both EFL learners and teachers in Iran since it is the major classroom activity in the Iranian educational system. Reading skills is essential in the Iranian university entrance exam, which most high school and pre-university graduates need to pass and furthermore it is a basic need since EAP students usually read material for a learning purpose.

It should be pointed out that many studies have been done on the reading comprehension and the use of reading strategies in L1 and L2 and their influence on L2 reading comprehension ability of Iranian high school and pre-university students in general. Also in Iranian universities, the relationship between some of the reading strategies and reading comprehension ability has been investigated. In fact most researches have been done on the relationship between one single type of reading strategy and reading comprehension ability but the present study has been done according to the strategies selected by students through a questionnaire and then after instruction of those strategies to successful readers and also unsuccessful readers the relationships between them have been investigated.

Thus, the present study is an attempt to shed some light on the issue of “reading strategies in L1 and L2, and the impact of instruction of such strategies on L2 reading comprehension ability” and to show that teaching the reading strategies to EAP language learners will help them to assist their reading process. By teaching reading strategies, especially at university level, the EAP students would be familiar with the techniques for reading, and this familiarity would certainly increase their success in learning the material.

Furthermore, Pressley & EL. Dinary (1992) have suggested that teaching readers to use strategies should be a prime consideration in the reading classroom. The significance of strategy training is that it equips students with problem-solving abilities that they can apply whenever they encounter reading difficulties.

5.1.1. Implications for EFL Teaching

The recognition of the central role of the learner and introduction of the notion of capacity to participate in discourse (Widdowson, 1978) and pragmatic conventions governing such participation (Levinson, 1983; Leech, 1983), have led to a shift in the philosophy of education. Consequently in recent years some applied linguists have shifted focus from the

outcomes of instruction to the processes through which knowledge and skills might be gained.

The result of this study contributes to this paradigm shift theoretically and pedagogically. It indicates that the teacher's concern should be processes and procedures through which knowledge and skills might be gained rather than on the outcomes of instruction.

Through process approaches, teachers provide students with some situations in which they experience solving problems in an effective way so that they can transfer those experiences to the actual social situations. In this way keeping in mind that language learners may face unrehearsed situations the goal is to provide the learner with the behaviour potential or capacity to use what he/she has learned in general situations. In this way we are contributing to the question raised by Widdowson (1978):

How can the skills be taught, not as self-sufficient achievement
but as an aspect of communicative competence? How can skills
be related to abilities, usage to use?

The primary concern of any educator should be enhancement of the learners' repertoire of strategies for solving their problems and gaining the ability to take charge of their own learning and contribute to their autonomy. It is only in this case that students learn more than what we teach because in process approach we do not equate teaching and learning. The teacher's task should be providing situations that trigger students' meaning making processes and set them in motion by resorting to their background knowledge and contextual features to negotiate meaning. In this regard, Krashen (1983) holds that it is not possible to produce native-like speaker, but to bring the students to the point where they can begin taking the advantage of using the natural input available to them.

The present research follows Richard's (1990) assertion that the new responsibility of the teacher is to unravel and highlight the strategies of successful learners and require his students to adopt them to their own method of learning. English teachers would be more successful if they embed reading strategies instruction into their classes by encouraging the students to employ the strategies discussed. An important aspect of strategic reading in the classroom with other students is that through pre-reading, during-reading, and post-reading strategies, some time is spent discussing the topic, asking questions, commenting on the topic which is carried out orally. This is a kind of practice that contributes to students speaking ability, too.

5.1.2. Pedagogical Implications

The findings of this study suggest a number of implications for the classroom. Reading strategies appear to play an active role in foreign language reading comprehension processes. The importance of reading strategies with respect to good and poor readers is manifested in the study. Therefore according to the obtained results, poor readers first should be helped with their L2, i.e., language competence, and then with reading strategies. The basic reason for this is a limited control over language short-circuits (or impedes) the ability to read better and thus the transfer of reading abilities of L1 to L2 situations is short-circuited (Taillerfer 1996).

What is clearly recommended here to teachers or those directly responsible for preparing reading strategies, especially for EAP students, is to attach paramount importance to the reading strategies, which help students to improve their reading comprehension ability. The findings of this study may help teachers to have a closer look at reading strategies, and develop their understanding of the selection of effective reading strategies, which lead to better reading. On the other hand, students can use the reading strategies and appreciate their

usefulness. Finally, the awareness of reading strategies and practicing them greatly increases the positive outcome of instruction.

Given that one of the most important goals of teaching reading strategies is to help our students to become strategic and independent readers, several suggestions for EFL and EAP reading teachers can be made on the basis of the findings of the present study. First, strategies should be taught through direct explanation, explicit teacher modelling, and extensive feedback. More importantly, they should be informed of the value and usefulness of strategies in L2 reading. Second, EFL readers should be given direct strategy training for a long period. As Gaskins (1994) claims, teaching of strategies without direct explanation and explicit teacher modelling for a short period of time would not have a long-term effect on students and effectively help them develop as strategic readers.

Also the importance of the content of texts is emphasized. Students should be encouraged to conceptualize the content of their reading texts and, at the same time, to monitor their own reading comprehension. It is the teacher's duty to enhance the students' interest. Students will not learn well and will not activate their schemata if the reading materials are not to their interest.

Finally, this study brings to light the complexity, and the importance of the reading process, urging both the teachers and the students, to look more critically at the reading comprehension issue. Reading passages form parts of nearly all textbooks, especially EAP textbooks, regardless of the approach the designers have. Considering the importance of the reading process, the designers should remember to use authentic texts. Teachers should make students familiar with the reading process; the students should also understand the importance of the reading process if they want to improve in this skill.

5.2. Suggestions for Further Research

Every research opens new directions for further investigations. Strategies-training studies are poorly researched areas of investigation. Based on the finding of numerous studies, recent research in the area of reading comprehension has focused on reading-related strategies, and strategy- training studies. For the most part, such studies have found that strategy training leads to improved reading performance. Though awareness and monitoring change have been implicit components of many of the training programs, the core of this instructional work has been the teaching of successful readers' strategies in L1 and L2. The content of the instruction has been academically fundamental strategic components and the recipients of the instruction have been those learners who have taken the General English course with 3 credits and want to be familiar with reading strategies and use them in order to improving of their reading ability . On the basis of strategy-instruction literature, the following guidelines for effective strategy instruction in classroom are offered.

1. Teachers must care about the processes involved in reading and studying, and must be willing to allocate instructional time to them through direct strategy-training and modelling
2. Teachers must analyze the reading strategies they teach. In other words, teachers should think about how a particular strategy is best applied and in what contexts. Teachers can observe students as they read in order to determine students' strengths and weaknesses in terms of strategy use, which in turn will help in providing appropriate strategy instruction.
3. This study brings to light the complexity and the importance of the reading process, urging both the teachers and the students to look at more critically at reading comprehension issue.

4. Teachers should emphasize the importance of content area texts for EAP students and accordingly the role of EAP texts for successful and unsuccessful are strongly emphasized. It should be kept in mind that according to Joseph Addison “reading is to the mind what exercise is to the body.”
5. Teachers should teach strategies over a long period of time, not just in a single lesson or unit allowing strategic instruction to influence the curriculum.
6. Teachers should provide students with opportunities to practice strategies they have been taught.
7. Teachers should be prepared to let students teach each other about reading and the study process.

The present study was conducted in the area of reading comprehension and reading strategies on EAP students. Research on the different aspects of reading can be many and varied because the field itself is quite vast. Each piece of study in the field gives rise to a number of questions, each of which can be the topic of a new research. In the course of this study, a few other related questions arisen, which may be attractive enough for others to pursue. This study has been done on General English subject during a limited period of time while other studies can be done on other subjects including technical and semi-technical courses. Furthermore, the following are some of the questions related to the topic of the present study.

1. Does the shift in reading strategies which help the readers to understand the writer’s message, lead to better comprehension?
2. The study was carried out with female subjects within the age range of 20-23. Further studies can examine male students with the same age range to check the results obtained from this study.

3. This study was carried out with students' general English texts. Further studies can be conducted with other fields such as technical and semi-technical texts, etc.
4. How does the use of reading strategies correlate with the individuals' level of language proficiency?
5. Can reading strategies be taught successfully to poor readers? What about good readers?
6. Can L1 reading abilities be transferred to L2 situations?
7. The participants in this study were both successful readers and unsuccessful readers (third semester) of EAP students majoring in mathematics, theology, and elementary education in a teacher training centre. There is a room for other researches with intermediate students, taking into account the implications of threshold level.
8. A research can be conducted to investigate the during-reading strategies used by Iranian EFL students. Following it one can investigate the effect of age, gender, motivation, level of proficiency, and major of study on learners' choice of strategies.
9. Also one can compare the effect of intensive and extensive reading on developing strategy use and reading skill.
10. How would L1 reading strategies affect the choice of reading strategies in L2?
11. To what extent does the knowledge of reading strategies in first language help the reader to understand the second or foreign language text?

As the final word, the researcher believes that the present study has been done in the spirit of finding a solution to a sensitive issue in Iranian education. Since the researcher does not have any claims about coming up with the absolute solution, there is always some space for improvement.

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Nelson Test (version 200 B)

Choose the correct answer. Only one answer is correct.

Nowadays ..1.. quite early what kind of work they would ..2.. When I was at school, we had to choose when we were fifteen. I choose scientific subjects. “ in the future , scientists..3.. a lot of money,” my parents said ..4.. to learn physics and chemistry , but in the end I decided that I would never be a scientist . It was a long time..5.. my parents that I wasn’t happy at school. “I didn’t think you were,” said my mother. “ ..6.,” said my father. “well, the best ..7.. now is to look for a job.”

I talked about it with my friends Frank and Lesley. Neither of them..8.. suggest any thing, but they promised that they..9.. their friends. A few days later while I..10.. bed, someone telephoned. “Is that Miss Jenkins?” a man’s voice asked. “I understand your hobby is photography and I’ve got a job that might interest you in my clothes factory . My name is Mr. Thomson.” He seemed pleasant on the phone so I went ..11.. . I was ..12.. I almost forgot to say goodbye . “Good luck!” my mother ..13.. me .

I arrived a bit early and when Mr. Thomson came he asked me if ..14.. a long time . “No, not long,” I replied. After talking to me for about twenty minutes he offered me a job not as a photographer though, as a model!

- 1- *A. the most people decide
B. the most people decides
C. most people decide
D. most people decides*

- 2- *A. like to do
B. like to make
C. do
D. make*

- 3- *A. shall earn
B. will earn
C. going to earn
D. are earning*

- 4- *A. During three years I’ve tried
B. During three years I tried
C. For three years I’ve tried
D. For three years I tried*

- 5- *A. that I didn’t tell
B. before I told
C. when I wasn’t telling
D. before telling*

- 6- *A. Nor I did
B. I didn’t neither
C. I didn’t either
D. I didn’t too*

29- To travel from England to Scotland you a passport.

- A. *mustn't have* B. *haven't got*
C. *don't need* D. *needn't*

30- Your pen's on the floor.

- A. *Pick it up!* B. *Pick up it!*
C. *Take it up!* D. *Take up it!*

31- I like bacon and eggs

- A. *for breakfast* B. *for the breakfast*
C. *with breakfast* D. *with the breakfast*

32- Do you like the cakes? I don't like

- A. *all them* B. *them all*
C. *every* D. *everyone*

33- Children shouldn't leave their toys on the floor. They should

- A. *put out them* B. *out off them*
C. *put them away* D. *put them off*

34- Where can we get a ball? Let's

- A. *lend one from John* B. *lend John's one*
C. *borrow one of John* D. *borrow one from John*

35- I home at half past six.

- A. *was at* B. *come at*
C. *arrive in* D. *go to*

36- I early, but on Sundays I stay in bed late.

- A. *usually go up* B. *usually get up*
C. *used to go up* D. *used to get up*

37- When Mr. Jones?

- A. *you have met* B. *you did meet*
C. *you met* D. *did you meet*

38- The girls talked to were quite happy.

- A. *we* B. *which we*
C. *those we* D. *what we*

39- Tony likes walking in the country and

- A. *also does Mary* B. *so does Mary*
C. *Mary likes also* D. *so Mary likes*

40- it is from Bristol to Glasgow!

- A. *What long a way* B. *What distance*
C. *How long way* D. *How far*

41- I meet her every day.

- A. used to
C. liked
- B. wanted
D. am not able

42- You said the books were on the desk but there.

- A. there was no one
C. there were no ones
- B. there were none
D. was none

43- Have you got a, please?

- A. fishes tin
C. tin of fishes
- B. fish tin
D. tin of fish

44- John's not been to New York.

- A. Neither has Ben
C. Nor is Ben
- B. Ben hasn't also
D. Ben isn't too

45- How have you been to America?

- A. much time
C. long for
- B. many times
D. long ago

46- Tell back tomorrow.

- A. Pam to come
C. to Pam to come
- B. Pam come
D. to Pam com

47- There was a lot of post today but you.

- A. it's nothing for either of
C. there's nothing for either of
- B. it's nothing for either
D. there's nothing for either

48- He doesn't English.

- A. neither speak or write
C. speak or write
- B. neither speak nor write
D. speak nor write

49- Is that the man yesterday.

- A. you've met
C. you met
- B. has met you
D. met you

50- The restaurant had plenty of tables but

- A. one only empty
C. no one empty
- B. only one empty
D. no ones empty

Read the following passages very carefully and then choose a, b, c, or d which best completes each of the following questions.

(1)

The teacher's main task is to create conditions that will encourage and stimulate learning. Teachers must help students develop their own initiative and ability to think critically. Good teachers guide students in seeking important knowledge and analyzing possible solutions to meaningful problems. They also help students understand important values involved in dealing with various problems. Teachers use a variety of methods to achieve the desired learning goals. They also use such teaching aids as books, audio-visual materials, teaching machines, and field trips.

Good teachers are well educated, know their subject, and understand their students. They are familiar with the principles of education, the psychology of human development, and the theories of learning.

1. **The passage is mainly about**
 - a. how teachers guide learning
 - b. what teachers need for teaching
 - c. methods of teaching
 - d. different teachers

2. **Which of the following is not considered as a teaching aid?**
 - a. teaching machines
 - b. audio-visual materials
 - c. teaching hours
 - d. field trips

3. **It is implied that good teachers**
 - a. need to be familiar with principles of education
 - b. should not be educated
 - c. must be paid enough to lead a good life
 - d. solve their students' problems

4. **According to the passage, good teachers**
 - a. guide their students
 - b. give knowledge to their students
 - c. make useful examinations
 - d. develop theories of learning

5. **The pronoun "they" in the second paragraph refers to**
 - a. students
 - b. teachers
 - c. subjects
 - d. principles

(2)

When man began to search the skies with improved telescopes, what he saw made him feel very small. Compared with the universe, Earth seemed to be just a tiny bit of cosmic dust.

Earth is only a small planet perched on the edge of the Milky Way. The Milky Way, our galaxy, has roughly thirty billion stars like our sun. It is itself just one of about a hundred million galaxies in the known universe.

Space is so vast and distances are so great that there is a problem in measuring them. Instead of writing down all the zeros, we describe these distances in light-years. A light-year is the distance which light, moving at 186,326 miles per second, travels in one year.

Our closest neighbour galaxy, Andromeda, is more than 900,000 light-years away from earth.

6. Good telescopes showed men that

- a. the Milky Way is the only galaxy
- b. other galaxies are close to ours
- c. the sun is a large star in the Milky Way
- d. the earth is a tiny part of the universe

7. A galaxy is the name for

- a. a large group of stars
- b. the sun
- c. planets like the earth
- d. the universe we know

8. In the Milky Way we can see many

- a. galaxies
- b. suns like ours
- c. stars like our sun
- d. both b and c

9. Distances in the universe are measured in

- a. miles
- b. feet and inches
- c. light-years
- d. months and years

10. Our galaxy's closest neighbour is as far away as light can travel in

- a. a year
- b. 900,000 years
- c. a second
- d. 186,000 seconds

(3)

Many nations provide early childhood education in schools and kindergartens. In almost every nation, elementary education is compulsory and free. In every country, the elementary schools teach children to read and write and to work with numbers. The pupils also learn their country's customs and their duties as citizens. In most countries, the pupils

also study such subjects as geography, history, and science. In many countries, the majority of children receive only an elementary education. Secondary and higher education are available only to outstanding students or to those who can afford private schooling. These nations include most developing countries, some East European countries, and such West European countries such as Greece, Portugal, and Spaniard, France, Great Britain, Japan, and the highly developed countries require all young people to complete from 9 to 11 years of school, including 3 or 4 years of secondary school.

11. The word schooling should mean something similar to

- a. development
- b. education
- c. elementary schools
- d. reading and writing

12. The passage is mainly about

- a. education in developing countries
- b. schools in different countries
- c. lessons in elementary education
- d. educational organization

13. According to the passage, in many countries.....

- a. elementary schools are private
- b. secondary education is expensive
- c. science is not taught at high schools
- d. outstanding students can complete elementary education

14. Which of the following may not be part of elementary education in some countries?

- a. reading and writing
- b. history and geography
- c. working with numbers
- d. customs and social duties

15. Greeks and Spaniards.....

- a. require all their children to complete secondary education
- b. are among East European nations
- c. have not been mentioned among highly developed nations
- d. are mentioned developing nations

(4)

There is a strong evidence proving that smoking is injurious to a smoker's health. In addition to throat cancer, scientists have noted an increase in diseases of the heart among people who smoke. Tobacco in the bloodstream causes blood vessel to contract and therefore the blood circulates slowly. The arteries harden, and less blood reaches the brain. Ultimately this slow-down which causes a blood vessel to break in the brain is commonly called a "stroke". Furthermore, tobacco in the bloodstream reduces the ability of haemoglobin to release oxygen. The lack of oxygen forces the heart to beat faster and it increases the risk of heart attack as well.

However, the most recent studies show that a smoker also endangers the health of the people around him. Scientific studies show that the families and co-workers of smokers suffer from the diseases related to smoking in greater numbers than the families and friends of non-smokers. The non-smoking wives and husbands of smokers sometimes develop diseases related to smoking before the smokers develop them. Statistics also shows that non-smokers who are in close contact with smokers in the office develop these diseases at a greater rate than co-workers who sit farther away from the smokers.

As a result of this information, non-smokers try to protect their health in different ways. In some companies, smokers and non-smokers work in separate offices. Other companies surround the smoking employees with smoke filters.

Most companies do not allow smoking in employees' public places such as canteen and cafeteria. They also request visitors not to smoke. Non-smoking office workers say: "It may be the smokers' right to smoke, but it is our right to live."

If you smoke, tomorrow will be too late to decide to give it up. Give it up right now.

16. There is a strong evidence proving that smoking is

- a. dangerous to smokers' health
- b. only dangerous to non-smokers' families
- c. not dangerous to smokers' health
- d. not dangerous to non-smokers' health

17. Scientists believe that smoking causes.....

- a. throat cancer only
- b. not only throat cancer but also heart diseases
- c. heart diseases only
- d. no diseases

18. The non-smoking wives and husbands of smokers

- a. often develop diseases related to smoking sooner than the smokers do
- b. often develop diseases related to smoking rather than the smokers do
- c. sometimes develop diseases related to smoking before the smokers
- d. sometimes develop diseases related to smoking after the smokers

19. Statistics shows that close contact with smokers is

- a. useful
- b. safe
- c. healthy
- d. dangerous

20. According to the passage, non-smokers try to protect in different ways.

- a. their health
- b. the health of smokers
- c. the health of their friends
- d. the health of scientists

21. Some companies, according to the passage, believe that

- a. there is no need for separation between smokers and non-smokers
- b. there must be separation between these two groups and they separate them
- c. the non-smokers must be surrounded by smoke- filters
- d. the offices must be surrounded by smoke-filters

22. The writer believes that smokers must give up smoking

- a. immediately
- b. gradually
- c. tomorrow
- d. in near future

(5)

Ask three people to look out the same window at a busy street corner and tell you what they see. Chances are you will receive three different answers. Each person sees the same scene, but each perceives something different about it.

Perceiving goes on in our minds. Of the three people who look out the window, one may say that he sees a policeman giving a motorist a ticket. Another may say that he sees a rush-hour traffic jam at the intersection. The third may tell you that he sees a woman trying to cross the street with four children in tow. For perception is the mind's interpretation of what the senses- in this case our eyes- tell us.

Many psychologists today are working to try to determine just how a person experiences or perceives the world around him. Using a scientific approach, these psychologists set up experiments in which they can control all of the factors. By measuring and charting the results of many experiments, they are trying to find out what makes different people perceive totally different things about the same scene.

23. Seeing and perceiving are

- a. the same action
- b. two separate actions
- c. two actions carried on entirely by the eyes
- d. several actions that take place at different times

24. Perceiving is an action that takes place

- a. in our eyes
- b. only when we think very hard about something
- c. only under the direction of a psychologist
- d. in every person's mind

25. Perceiving involves what

- a. our senses tell us
- b. our minds interpret
- c. we see with our eyes only
- d. both a and b

26. People perceive different things about the same scene because

- a. they see different things
- b. they cannot agree about things
- c. some have better eyesight
- d. none of these

27. Psychologists study perception by

- a. setting up many experiments
- b. asking each other what they see
- c. looking out of windows
- d. studying people's eyes

28. Implied but not stated:

- a. Psychologists do not yet know how people see
- b. The best experiments are those in which all factors are controlled
- c. The study of perception is going on now
- d. Perception does not involve psychological factors

29. The best title for this selection is

- a. How We See
- b. Learning about Our Minds through Science
- c. What Psychologists Perceive
- d. How to Become an Experimental Psychologist

(6)

Throughout history, hundreds of different fortune-telling methods have been used. One of the most famous methods involves gazing into a crystal ball. Many methods of fortune telling seem to depend entirely on chance. For example, fortune-tellers have made predictions based on the order in which a rooster ate grains of wheat placed on letters drawn on the ground. Predictions also have been based on the shape taken by oil poured on water, or on segments of writing chosen from a book at random.

However, fortune-tellers claim that mysterious causes and relationships, not chance, make their predictions possible. For example, astrology is based on the belief that the sun, moon, planets, and stars control the lives of human beings. Therefore, the positions and movements of these celestial bodies supposedly can be used to predict the future.

Other fortune-telling systems include numerology and palmistry. In numerology, a fortune-teller makes predictions through numbers based on a person's name and birth date. In palmistry, a fortune-teller tries to foresee an individual's future by studying the lines, markings, shape, and the size of the person's hand.

30. The passage is mainly about

- a. methods of fortune-telling
- b. mysterious relations of fortune-telling
- c. astrology and palmistry
- d. the importance of predicting the future

31. Which of the following has been considered to depend on chance

- a. the order in which the rooster eats the grains of wheat
- b. the position and movement of celestial bodies
- c. the numbers based on a person's name and birth date
- d. the place of letters drawn on the ground

32. Palmistry should be

- a. the same as numerology
- b. a method of fortune-telling

- c. *the study of lines*
- d. *a part of astrology*

33. According to the passage, fortune-telling

- a. *is not based on scientific facts*
- b. *answers questions that scientists cannot*
- c. *has made life easier because it predicts the future*
- d. *can predict the amount of a person's future*

34. We understand from the passage that fortune-telling must be

- a. *a modern science*
- b. *practices in developed countries*
- c. *an old practice*
- d. *accepted by all people around the world*

(7)

People who love music, who can lose themselves in a book, or who can spend hours painting a picture of a barn, know the deep satisfaction that can be found in art. It is not easy to express this satisfaction in words. But, in some partly mysterious way, works of art are among the things of highest value in our lives.

A fine piece of music, a masterpiece of painting, or a first-rate play has the power to capture and hold our fullest and most concentrated attention. We are completely wrapped up in it, and everything works out right. The music comes to the right close at the right time and in the right way. The play ends, not necessarily on a happy note, but in a way that seems inevitable and appropriate. As we grow more and more aware of the painting, its parts seem to belong together and to be made for each other. We perceive harmony in the object, and feel harmony within ourselves.

When the aesthetic experience has ended, we often feel uplifted and refreshed. Our eyes and ears, or our insight into other persons, may be sharpened and refined, we may feel more at home with ourselves. Works of art have value for us in some such way as this.

35. The passage is about

- a. *deep satisfaction*
- b. *enjoying the arts*
- c. *creating work of art*
- d. *artistic understanding*

36. According to the passage, works of art

- a. *satisfy the artist only*
- b. *may cost a lot of money*
- c. *are valuable for almost everybody*
- d. *are usually mysterious*

37. The harmony in the work of art

- a. *wraps us in ourselves*
- b. *helps everything end happily*
- c. *makes plays and painting similar*
- d. *give us a feeling of harmony*

38. We understand from the passage that works of art are

- a. attractive
- b. masterly
- c. unavoidable
- d. appropriate

39. According to the passage

- a. we can love arts if we can find a reason for it
- b. we should love arts although we may not want to
- c. we say we love arts without knowing why
- d. we know why we love arts although we may not be able to say why

(8)

In one year the world uses as much energy as that contained in 21 billion barrels of oil, and each year the need for energy grows. This means that the fuels needed to produce energy should also grow; but the supply of fuels for example, coal, oil, and gas is limited. In fact, these fossil fuels may not last for a century. What, then, will take their place?

For the answer, man should look to the sky. Each day the earth receives much more energy from the sun than it can use. And this energy is free. The only problem is that we don't know how to control it.

If scientist can learn how to use the power of the sun, its energy could be put to many different uses. For example, mirrors could concentrate the sun's energy in such a way that it would melt metals. Solar heaters could be used to warm our houses and cook our meals. And solar batteries could be used in telephone communication, in space exploration and research, and in farming.

Perhaps the greatest problem in controlling the sun's energy is making it continuous; that is , in discovering how solar energy can be stored so that it will be available when the sun doesn't shine.

40. The energy we use in a year is equivalent to

- a. 21 billion of barrels of gas
- b. 21 million barrels of gas
- c. 21 billion barrels of oil
- d. 21 million barrels of oil

41. Fossil fuels are

- a. coal, solar energy, and gas
- b. water, gas , and coal
- c. gas, electricity, and coal
- d. coal, gas , and oil

42. Each day the sun gives the earth

- a. a little more energy than needed
- b. a lot more energy than needed
- c. stored energy
- d. less energy than needed

43. Solar energy could be used

- a. to explore space
- b. to control the sun
- c. for mirrors
- d. to produce energy from fossil fuels

44. The problem in using solar energy is how

- a. to make it melt
- b. to make it stop
- c. to make it continue
- d. to make it shine

45. The planet we live on receives a lot of energy from the sun and this energy is.....

- a. cheaper
- b. expensive
- c. limited
- d. free

Full name.....Course of study.....

Dear student,

I'm working in the area of English Language Teaching at the University of Hyderabad. The purpose of my study is to investigate the relationship between reading strategies instruction and the improvement of general English reading ability of EAP students. I know you are interested in reading of English materials a lot. As part of my project, I need information regarding reading strategies you use. Please read the questionnaire very carefully and choose the best answers based on your experiences. I assure you that the information given by you will be kept in confidence and will be used for only academic purposes.

1. ***I preview the text and see the title, pictures, and captions under pictures, headings, bold-faced print and other graphics.***
 Never *Rarely* *Sometimes* *Often*
2. ***I decide in advance what my reading purpose is, and then I read with that goal in mind.***
 Never *Rarely* *Sometimes* *Often*
3. ***I think about what I already know about the content of what I will read.***
 Never *Rarely* *Sometimes* *Often*
4. ***I read chapter headings and turn them into questions I can answer as I read.***
 Never *Rarely* *Sometimes* *Often*
5. ***I look at the illustration / pictures and try to guess how they are related to the text.***
 Never *Rarely* *Sometimes* *Often*
6. ***I skim the text quickly to get the gist.***
 Never *Rarely* *Sometimes* *Often*
7. ***When I look at a word, I can usually recognize the meaning of its prefix, root, or suffix.***
 Never *Rarely* *Sometimes* *Often*
8. ***I write a summary of the article based on previewing.***
 Never *Rarely* *Sometimes* *Often*
9. ***When I don't know the meaning of an unfamiliar word I try to guess the meaning by using knowledge of derivation, synonyms, antonym, etc.***
 Never *Rarely* *Sometimes* *Often*
10. ***I try to learn how to use a dictionary and be familiar with information given by it .***
 Never *Rarely* *Sometimes* *Often*
11. ***I skip the word or part that I don't know the meaning.***
 Never *Rarely* *Sometimes* *Often*
12. ***When I read for general English purposes, I outline the material to help me organize my thoughts.***
 Never *Rarely* *Sometimes* *Often*
13. ***While reading when I confused about something, I go back and try to figure it out.***
 Never *Rarely* *Sometimes* *Often*
14. ***I continue reading without looking up every unknown word in the dictionary.***
 Never *Rarely* *Sometimes* *Often*

15. *I try to use a dictionary as a last resort only for the important words and their definitions.*
 Never Rarely Sometimes Often
16. *While reading I'm looking for answers to the questions I asked before.*
 Never Rarely Sometimes Often
17. *I look for main ideas when I read.*
 Never Rarely Sometimes Often
18. *As I read, I frequently make predictions about what is to come.*
 Never Rarely Sometimes Often
19. *I try to connect background knowledge to the information in the text.*
 Never Rarely Sometimes Often
20. *During reading I take notes on the important points of the text.*
 Never Rarely Sometimes Often
21. *When I read I look for signal words (but, therefore, etc.)*
 Never Rarely Sometimes Often
22. *I continue reading without translating word –by-word.*
 Never Rarely Sometimes Often
23. *I underline and highlight the most important parts of what I am reading.*
 Never Rarely Sometimes Often
24. *While reading I try to read a passage with both comprehension and speed.*
 Never Rarely Sometimes Often
25. *I attach great importance to the lexical, grammatical and also the semantic relationships in a text.*
 Never Rarely Sometimes Often
26. *I read the conclusion paragraph, if present, very carefully.*
 Never Rarely Sometimes Often
27. *I scan the articles for locate a particular information.*
 Never Rarely Sometimes Often
28. *During reading I recognize enumerations.*
 Never Rarely Sometimes Often
29. *After reading I classify the words according to their meaning and their grammatical categories.*
 Never Rarely Sometimes Often
30. *I use a graphic devices (reading graphs such as reading tables , bar and line graphs, reading charts, maps) to show what was included in what I read .*
 Never Rarely Sometimes Often
31. *I draw a conclusion between predictions I made it before and during reading and what I have read in the text.*
 Never Rarely Sometimes Often
32. *I reread the text to remedy comprehension failures.*
 Never Rarely Sometimes Often
33. *After finishing reading I review notes, glosses and text markings.*
 Never Rarely Sometimes Often
34. *After reading I retell and summarize the main ideas.*
 Never Rarely Sometimes Often
35. *I explain the content of the passage in my own words.*
 Never Rarely Sometimes Often
36. *After reading I decide whether the strategies I used helped me in reading or not.*
 Never Rarely Sometimes Often

37. *If the used strategies are not considered fruitful, I try other strategies.*
O Never O Rarely O Sometimes O Often
38. *After reading I consult with a professor about ambiguous parts of the text.*
O Never O Rarely O Sometimes O Often
39. *I orally ask myself questions about what I have just read or summarize with my own words .*
O Never O Rarely O Sometimes O Often
40. *After reading I discuss with others about what I have read and look back at the book to defend my opinions .*
O Never O Rarely O Sometimes O Often

دانشجوی عزیز

این پرسشنامه جهت ارزشیابی شیوه خواندن شما تهیه شده است. خواهشمند است پرسشها را با دقت و با توجه به شیوه ای که معمولاً در خواندن متون انگلیسی بر می گزینید پاسخ دهید:

ردیف	پرسشها	بله	خیر
۱-	آیا با علاقه و با جدیت شروع به خواندن می کنید؟		
۲-	قبل از شروع ، رئوس مطالب را سریع مرور می کنید؟		
۳-	در ابتدا متن را یک بار تا انتها می خوانید؟		
۴-	با خواندن جمله اول شروع به ترجمه آن می کنید؟		
۵-	بیشتر لغت به لغت می خوانید و تمامی لغات را معنی می کنید؟		
۶-	جزئیات برای شما مهم نیستند و بیشتر به معنی و مفهوم کلی هر پاراگراف و متن توجه دارید؟		
۷-	معانی لغات دشوار را بلافاصله در فرهنگ لغت چک می کنید؟		
۸-	آیا سعی می کنید معانی لغات دشوار را حدس بزنید؟		
۹-	فقط لغات مهم و کلیدی را که معنی آنها برای فهم متن ضروری است در فرهنگ چک می کنید؟		
۱۰-	لغات دشوار و جمله بندی انگلیسی شمارا از ادامه خواندن منصرف می کند؟		
۱۱-	می توانید قسمت های مهم متن و رئوس مطالب را تشخیص دهید؟		
۱۲-	آیا در هنگام خواندن ، مطالب مهم را علامت گذاری و یا در حاشیه متن یادداشت می کنید؟		
۱۳-	آیا می توانید جملات و جزئیات را به هم ربط داده و به یک مفهوم کلی برسید؟		
۱۴-	سوالاتی در حین خواندن ، برای شما مطرح می شود و در ادامه دنبال پاسخ آن می گردید؟		
۱۵-	به علامت گذاریها (کاما ، نقطه، دو نقطه، ...) توجه می کنید؟		
۱۶-	به تصاویر ، اشکال ، جدول ها و دیگر موارد (در صورت بودن) توجه دارید؟		
۱۷-	ساختار جملات (فعل و فاعل را مخصوصاً) به آسانی تشخیص می دهید؟		
۱۸-	پس از اتمام هر پاراگراف و یا متن ، مطالب را جمع بندی و خلاصه می کنید؟		
۱۹-	آیا در کل مطالعات غیر درسی و خارج از کلاس دارید(داستانهای ساده انگلیسی و غیره)؟		
۲۰-	آیا در زبان فارسی مطالعات غیر درسی و خارج از کلاس دارید(مطالعات علمی، نشریات ، داستان و غیره).		

توجه: اگر توضیحات دیگری به نظرتان می رسد اضافه نمائید و در صورت امکان شیوه خواندن خود را در چند سطر توضیح دهید: (از همکاری شما بسیار سپاسگذارم . موفق و پیروز باشید - بهلولی).