

## **II. FRAME OF THEORIES**

This chapter will discuss several points. (1) definition of Language Learning Strategies, (2) Characteristics of Language Learning Strategies, (3) Taxonomies of Language Learning Strategies, (4) Research on Language Learning Strategies, (5) Concept of Reading, (6) Concept of Reading Comprehension, (7) Data Collection Technique for Language Learning Strategies.

### **2.1 Definition of Language Learning Strategies**

Within the field of foreign/second language teaching, the term language learning strategies has been defined by key researchers in the field. Tarone (1983: 67) defined a learning strategy as “an attempt to develop linguistic and sociolinguistic competence in the target language – to incorporate these into one’s interlanguage competence”. Later Rubin (1987: 22) stated that learning strategies “are strategies which contribute to the development of the language system which the learner constructs and affect learning directly”. O’Malley and Chamot (1990: 1) define learning strategies as “the special thoughts or behaviors that individuals use to help them comprehend, learn, or retain new information”. Oxford (1990: 8) expands the definition of learning strategies and defines them as “specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations”.

## 2.2 The Characteristics of Language Learning Strategies

When analyzing the learning strategies it can be seen that different writers use different terminology to refer to the strategies. For example, Wenden and Rubin (1987) use the term “learner strategies”, O’Malley and Chamot (1990) use the term “learning strategies”, and Oxford (1990) uses the term “language learning strategies.” Even though the terminology used for language learning strategies is not uniform among the scholars in the field, there are a number of basic characteristics accepted by them. Oxford (1990) summarizes her view of LLS by listing twelve key features below as they:

- Contribute to the main goal, communicative competence.
- Allow learners to become more self-directed.
- Expand the role of teachers.
- Are problem oriented.
- Are specific actions taken by the learner
- Involve many aspects of the learner, not just the cognitive.
- Support learning both directly and indirectly.
- Are not always observable.
- Are often conscious.
- Can be taught.
- Are flexible.
- Are influenced by a variety of factors.

(Oxford, 1990: 9)

## 2.3 Taxonomies of Language Learning Strategies

Many scholars in the field such as Rubin (1987), O’Malley and Chamot (1990), Oxford (1990), etc. have classified language-learning strategies. However, most of these attempts to classify LLS reflect more or less the same categorization without any drastic changes. Below Rubin’s (1987), O’Malley and Chamot’s (1990), Oxford’s (1990) taxonomies of LLS will be handled.

### **2.3.1 O'Malley's Classification of Language Learning Strategies**

O'Malley et al. (1985: 582-584) divide language-learning strategies into three main subcategories: Metacognitive Strategies, Cognitive Strategies, and Socio affective Strategies. It can be stated that *Metacognitive Strategy* is a term which refers to the executive skills, strategies which require planning for learning, thinking about the learning processes that is taking place, monitoring of one's production or comprehension, and evaluating learning after an activity is completed. Strategies such as self-monitoring, self-evaluation, advance organizers, self-management, and selective attention can be placed among the main metacognitive strategies.

When compared to Metacognitive Strategies, it can be stated that *Cognitive Strategies* are not only more limited to specific learning tasks but they also involve more direct manipulation of the learning material itself. Among the most important cognitive strategies are repetition, elaboration, contextualization, auditory representation, transfer, etc.

Regarding the *Socio affective Strategies*, it can be stated that they involve interaction with another person. They are generally considered to be applicable to various tasks. Questioning for clarification, cooperation with others to solve a problem, rephrasing, and self-talk are some examples of socio affective strategies.

### **2.3.2 Rubin's Taxonomy**

Rubin (1987), who is the pioneer in the field of LLS, draws a distinction between strategies directly contributing to learning and those contributing indirectly.

According to Rubin (1987), there are three types of strategies used by learners that contribute directly or indirectly to language learning.

The first category, *Learning Strategies*, consists of two main types Cognitive and Metacognitive Learning Strategies. They are thought to be strategies directly contributing to the language system constructed by the learner. Cognitive Learning Strategies (CLS) refer to the steps or processes used in learning or problem-solving tasks that require direct analysis, transformation, or synthesis of learning materials. Rubin (1987) identified six main CLS directly contributing to language learning: Clarification/Verification, Guessing/Inductive Inference, Deductive Reasoning, Practice, Memorization, and Monitoring.

Metacognitive Learning Strategies (MLS) are used to supervise, control or self-direct language learning. They involve a variety of processes as planning, prioritizing, setting goals, and self-management.

The second category consists of *Communication Strategies*, which are less directly related to language learning because they focus on the process of participating in a conversation and getting meaning across or clarifying what the speaker intended. These strategies are used by speakers when they are confronted with misunderstanding by a co-speaker.

*Social Strategies* comprise the last category, which are manipulated when the learners are engaged in tasks that afford them opportunities to be exposed to and practice their knowledge. Even though these strategies provide exposure to the

target language, they contribute indirectly to the obtaining, storing, retrieving, and using of language (Rubin and Wenden, 1987: 23-27).

### **2.3.3 Oxford's Classification of Language Learning Strategies**

Among all the existing learning strategy taxonomies Oxford (1990) provides the most extensive classification of LLS developed so far. However, when analyzed, her classification is not something completely different from the previously discussed ones. On the contrary, Oxford's taxonomy overlaps with O'Malley's (1985) taxonomy to a great extent. For instance, the Cognitive Strategies category in O'Malley's classification seems to cover both the Cognitive and Memory Strategies in Oxford's taxonomy. Moreover, while O'Malley puts socio affective strategies in one category, Oxford deals with them as two separate categories. Yet, a significant difference in Oxford's classification is the addition of the compensation strategies, which have not been treated in any of the major classification systems earlier.

Generally speaking, Oxford's taxonomy consists of two major LLS categories, the Direct and Indirect Strategies. Direct strategies are those behaviors that directly involve the use of the target language, which directly facilitates language learning. Oxford (1990) resembles the direct strategies to the performers in a stage play, whereas she takes after the indirect strategies to the director of the same play. While the performers work with the language itself, they also work with the director who is responsible for the organization, guidance, checking, corrections, and encouragement of the performers. These two groups work hand in hand with each other and they are inseparable.

Direct strategies are divided into three subcategories: Memory, Cognitive and Compensation Strategies. *Memory Strategies*: Oxford and Crookall (1989: 404) define them as “techniques specifically tailored to help the learner store new information in memory and retrieve it later”. They are particularly said to be useful in vocabulary learning which is “the most sizeable and unmanageable component in the learning of any language” (Oxford, 1990: 39). Memory strategies are usually used to link the verbal with the visual, which is useful for four reasons:

1. The mind’s capacity for storage of visual information exceeds its capacity for verbal material.
2. The most efficiently packaged chunks of information are transferred to long-term memory through visual images.
3. Visual images might be the most effective mean to aid recall of verbal material.
4. Visual learning is preferred by a large proportion of learners  
(Oxford, 1990: 40)

*Cognitive Strategies*: The second groups of direct strategies are the cognitive strategies, which are defined as “skills that involve manipulation and transformation of the language in some direct way, e.g. through reasoning, analysis, note taking, functional practices in naturalistic settings, formal practice with structures and sounds, etc.” (Oxford and Crookall, 1989: 404).

Cognitive strategies are not only used for mentally processing the language to receive and send messages, they are also used for analyzing and reasoning. What is more, they are used for structuring input and output. However, if learners overuse the cognitive strategies, this might cause them to make mistakes when they generalize the rules they have learned without questioning them, (that is, when they over generalize them) or when they transfer expressions from one

language to another, generally from the mother tongue to the target language (that is, when negative transfer occurs) (Oxford, 1990).

*Compensation Strategies:* Compensation strategies help learners to use the target language for either comprehension or production in spite of the limitations in knowledge. They aim to make up for a limited repertoire of grammar and, particularly vocabulary. When learners are confronted with unknown expressions, they make use of guessing strategies, which are also known as inferencing. When learners do not know all the words, they make use of a variety of clues either linguistic or non-linguistic so as to guess the meaning. Compensation strategies are not only manipulated in the comprehension of the target language, but they are used in producing it. They enable learners to produce spoken or written expressions in the target language without complete knowledge of it. The second group of strategies, that is, indirect strategies, consists of three subcategories as well: Metacognitive, Affective, and Social Strategies.

*Metacognitive Strategies:* Metacognitive strategies are defined as “behaviors used for centering, arranging, planning, and evaluating one’s learning. These ‘beyond the cognitive’ strategies are used to provide ‘executive control over the learning process’ (Oxford and Crookall, 1989: 404). Metacognitive strategies go beyond the cognitive devices and provide a way for learners to coordinate with their own learning process. They provide guidance for the learners who are usually “overwhelmed by too much ‘newness’ – unfamiliar vocabulary, confusing rules, different writing systems, seemingly inexplicable social customs, and (in enlightened language classes) non-traditional instructional approaches” (Oxford,

1990: 136). Having encountered so much novelty, many learners lose their focus, which can be regained through the conscious use of metacognitive strategies.

*Affective Strategies:* Oxford and Crookall (1989: 404) define affective strategies as “techniques like self-reinforcement and positive self-talk which help learners gain better control over their emotions, attitudes, and motivations related to the language learning. Knowing how to control one’s emotions and attitudes about learning may influence the language learning process positively since it will make the learning more effective and enjoyable. It is also known that negative feelings can hinder progress. The control over such factors is gained through the manipulation of affective strategies.

*Social Strategies:* Since language is a form of social behavior, it involves communication between and among people. They enable language learners to learn with others by making use of strategies such as asking questions, cooperating with others, and empathizing with others. Yet, their appropriate use is extremely important since they determine the nature of communication in a learning context. Based on the classification system described above, Oxford (1990) developed an inventory called the *Strategy Inventory for Language Learning* (SILL) to collect data regarding language-learning strategies

#### **2.3.4 Setiyadi’s Taxonomies**

O’Malley (1985) classified learning strategies into three, cognitive, meta-cognitive, and social categories. This classification is implemented in the development of Language Learning Strategies Questionnaire called LLSQ (Setiyadi, 2006) which is used in this study. Cognitive strategies developed in the

current study refer to all mental processes, except processes that involve self-monitoring and self-evaluating, in order to learn another language while the meta-cognitive strategies include self-direction, self-monitoring, self-evaluating, and self-correcting. Next, the other category, the social strategies, includes not only all processes that take place in groups, but also includes individual activities in social settings aimed to acquire another language.

Setiyadi made the original classification of the language learning strategies of the questionnaire was based on theory driving decision making and theories of skill-based learning strategies (Setiyadi, 1999). The result of reliability of the items under each skill-based category indicates that the scale were internally consistent. Since four scales ad significant intercorrelations, they were justified to be grouped into one single measurement, and named Language Learning Strategy Questionnaire or the LLSQ. By the explanation above the researcher chooses the use of LLSQ as the instrument to the research because as had mention before that is more comprehensive and detailed; it is more systematic in linking individual strategies, the further explanation on chapter III.

#### **2.4 Research on Language Learning Strategies**

Some researcher already done research about language strategies. There are:

In the 1970s a shift of focus from teaching methods, classroom techniques, and instructional materials to the language learner and his/her characteristics took place as a result of the disappointing research results which revealed that any single method, instruction or material could not guarantee effectiveness on its own in foreign language learning. Scholars in the field noticed that there were learners

who were successful no matter what teaching method or classroom instruction was used. Therefore, the primary concern of most research in the field has been on “identifying what good language learners report they do to learn a second or foreign language or language” (Wenden and Rubin, 1987:19). Rubin (1975) started doing research focusing on strategies of successful learners and stated that, once identified; such strategies could be made available to less successful learners so that they could increase their success rate. Based on her findings, she suggested that “the good language learner” is a willing and accurate guesser; has a strong persevering drive to communicate; is often uninhibited and willing to make mistakes in order to learn or communicate; focuses on form by looking at patterns; takes advantage of all practice opportunities; monitors his or her own speech as well as that of others; and pays attention to meaning. After the findings of Rubin, many studies have been conducted regarding the strategies employed by good language learners. Oxford (1989) states that, she based her classification of the LLS on the synthesis of the results obtained from all these studies. Yet, not all language learners use the same LLS even if they study the same material, in the same classroom, under the same conditions. That is, some other variables influence the choice of strategies.

The findings of Green and Oxford (1995) also indicated higher levels of strategy use by females than by males. Fourteen strategies, some of which are the use flashcards to remember words, reviewing English lessons often, connecting words and locations, skimming and reading carefully, seeking L1 words similar to L2 words, making summaries of information, etc., were used significantly more often

by females in that study, although only one (watching TV programs and video movies in English) was used significantly more often by males.

Oxford and Nyikos (1989) also reported that in their study, besides the conversational input elicitation strategies reflecting social interaction, two more types of strategies – general study strategies and formal rule-related practice strategies- were used significantly more often by females rather than by males. The researchers relate this result to factors such as the females' desire for good grades, a need for social approval, their verbal superiority to males, and females' greater willingness to conform to conventional norms. Not all studies that examined learning strategy use between the two sexes found significant differences. Grace (2000) investigated the gender differences in vocabulary retention and access to translations for beginning language learners in Computer Assisted Language Learning (CALL).

The analyses of the results revealed that when students were given bilingual multiple-choice tests, there were no significant differences between males and females on their short-term and long-term retention scores. Moreover, there were no significant differences in the amount of time males and females spent looking up translations. It was also reported that the findings of the survey suggested that males and females could equally benefit from a CALL environment. Ehrman and Oxford (1990) also reported that the number and kind of strategies used by females were similar to those used by males.

Anderson (1991) reports results that support Vann and Abraham's (1990) claims. In the study Anderson conducted, he examined the individual differences in

strategy use by adult second language learners while engaged in two reading tasks: taking a standardized reading comprehension test and reading academic texts. Anderson points out that the most important of the results indicated that there was not any single set of processing strategies that contributed to a large extent to the success of the two reading measures mentioned above. Readers who scored high and those who scored low seemed to be using the same kind of strategies while reading and answering the comprehension questions in the tests. Anderson concludes that “strategic reading is not only a matter of knowing what strategy to use, but also the reader must know how to use a strategy successfully and orchestrate its use with other strategies”.

A fourth variable investigated in relation to LLS is *age*. Ehrman and Oxford (1989) maintain that in their study age did not seem to be the key point to understanding language learning performance though this view contradicted with the view of many experts in the field that language-learning ability declines with age. Rather the motivational orientation of the adult learners, who were learning the language for immediate career purposes, might have had a greater factor than age. Generally, the studies conducted in the field with respect to learning strategies have focused on either the strategies manipulated by adults or by children. Such studies focus on the strategies employed by the effective and less effective students.

Chamot and El-Dinary (1999) conducted research with respect to children’s learning strategies in immersion classrooms. Their findings are similar in temperament with the results reported by Vann and Abraham’s (1990). That is,

the effective young learners were more flexible with their repertoire of strategies and more effective at monitoring and adapting their strategies than their less effective counterparts. The less effective learners, on the other hand, were more likely to cling to ineffective strategies either because of unawareness of their ineffectiveness or incapability to adapt strategies to the demands of the task. The good young learners in the study reported a variety of strategies they tried for a particular task, indicating that they recognised the need for flexibility in their use of strategies to achieve the language learning tasks. Chamot and El-Dinary (1999) assert that across age levels, effective language learners appear to be capable of examining and adjusting strategies.

Oxford and Nyikos (1989) also conducted a similar survey, in which career orientation was one of the variables investigated. The participants in this study were undergraduate students majoring in technical fields (engineering, computer, or physical sciences), social sciences (education or humanities), and business or other subjects. They found out that university major had a strong effect in the choice of LLS. Students with different career orientations appeared to use different LLS. In the study, the students majoring in social sciences used two of the strategies – functional practice and resourceful independent strategies significantly more often than did students with other majors.

## **2.5 Concept of Reading**

Reading can be said as the window of knowledge in which people are able to know much information and can get information completely from other skills such as listening, speaking, or writing. It might be said that through speaking with

others and listening to the radio or television, someone will not be as perfect as when they are reading.

As Smith (1978:5) says that “to learn to read children need to read”. He (1978:104) also says that “reading is extracting information from the text”. Moreover, he (1978:105) also says that “the fluent readers in all aspects of reading are those who pay attention only to that information in the print that is more relevant to their purposes”. Thus it can be inferred that reading is a process of getting information from the text based on the readers' needs through reading. For example, the students who read the text about an Indonesian culture, like the way of speech, the way they eat, etc. Their purpose of reading can be to find what an Indonesian culture is like, how it is different from a Western culture and so forth. The students' success of extracting information from reading might show how good their reading ability is; they might only need to pay attention to the relevant information that they want in order to make sense of the idea of the text. In other words, they do not need to spend much time to read the whole text in order to get the idea of the text.

Reading, as Clark and Silbertain (1987) say, “is actually a conversation of sorts between the writer and a reader”. The original or exact message the author means to communicate is really only known by the author. While the reader reacts and interprets print through his own knowledge base, there is no opportunity to verify what the author actually says or means.

Finochiaro (1964: 28) claims that

..... in general, reading should not be introduced until children have a good knowledge of the sound system and the most frequently used

structures. When reading is begun, the initial materials should be drawn from the conversations, stories, or dialogues which children have learned or memorized.

The question above shows that reading ability should cover the knowledge of language components, such as vocabulary or structure. Therefore, in teaching and learning process, the teachers of English should consider some teaching strategies that can be used to accomplish a desired outcome (Cooper, 1993: 135)

Bamford (1998: 12) says that “reading is the concentration of meaning from a printed or written material”. He (1998: 12) also says that “the construction of meaning involves the readers’ connecting information from the written message with previous knowledge to arrive at the meaning of an understanding”. It implies that reading ability or to be able to make sense of the idea from the text, one needs his previous knowledge is what one has already known. The previous knowledge might be gained through reading. The more they read, the more they previous knowledge might be. Therefore, in order to be able to get the idea from the text easily one must often read.

Nuttall in Editha (1989: 14) defines that reading is meaningful interpretation of printed or written verbal symbols. Furthermore, Dublin, Fraide, and Eskey (1985: 27) say that reading is the ability to make sense of written or printed symbols to guide recovery information from his or her human memory and subsequently use written message. It means that reading is an activity to get more information that we can save in our memory.

The aim of teaching reading is to develop students’ skills that they can read English text (Shaw, 1993: 103). Effective and efficient reading is always purposeful and

much current thinking on reading tends to focus primarily on the purpose of activity, even reading is done for pleasure still it is purposeful.

Another definition is given by Mackay (1979) who says that reading is an active process. Furthermore, Christian and Mary (1976) mention that reading is the important skills of all for the most students of English through the world. In other words, reading is very important for the students to study other elements of English such as vocabulary, speaking, writing, etc.

## **2.6 Concept of Reading Comprehension**

Smith (1978: 105) says that “reading is asking of printed text, and reading with comprehension becomes a matter of getting the students’ question answered which is found in the printed or written text”. Moreover, Smith (1978: 105) also says that “prediction is asking questions and comprehension is getting these questions answered”. As we read, we are constantly asking questions and as long as these questions are answered and as long as we are left with no residual uncertainty, we comprehend”. It means that comprehension is getting to understand or to know about something that readers need the information from many sources to answer their question.

In relation to reading, comprehension can be said as getting information from the text that is needed by the readers. For example, the students who read the text in a reading test, and the purpose is that to find out the implicit and explicit information asked in the test. If they can find it, it means that they comprehend the text. Then who reads the menu when they try to find out the information about the menu, the students will comprehend the text if they get the information of the

menu. In short, one comprehends the text if he can make sense the idea of the text and get the answer of their reading purposes.

Finnochiaro, Mary and Banomo (1973: 132) say:

“reading comprehension is the ability which depends on the accuracy and speed of gramophone pereption that is perception of written symbols, control of language relationship and structure, knowledge of vocabulay items and lexical combination, awareness of redudancy the ability to use contextual clues, and recognition cultural allusion”.

In other words, the reader should consider that there are some aspects in reading comprehension that include the knowledge of the reader that is related to the content of the message and the knowledge of the reader which is related to language terms. So, the reader ‘s background knowledge is needed in order to make sense of the idea of the text.

## **2.7 Data Collection Techniques for Language Learning Strategies**

In the body of research on language learning strategies, various researchers have made use of numerous methods for the identification of the patterns of strategy use among language learners ranging from questionnaires to computer tracking. The main reason for utilizing such a wide span of data collection techniques is that not all assessment techniques are appropriate for the identification of every type of strategy. Therefore, researchers must consider this point carefully while designing the data collection methodology of their research studies.

### **a. Observation**

Observation is one way of gathering data regarding learning strategies. However, it should not be forgotten that most of the learning strategies take place mentally and they are difficult to observe. For this reason, while designing an observational

study some important key features need to be considered carefully. Cohen and Scott (1996) point out some factors need to be taken into consideration while planning an observational study such as the number of observers and observed, the frequency and duration of observations, and how the observational data are collected, tabulated and analyzed. In addition to these suggestions, Oxford (1990) stresses the importance of the level of detail a researcher is planning to observe and the focus of the observations. The researcher may aim to observe the learning strategies used by the whole group, by a small group, or one student. She also suggests the foto of observation sessions since this will provide a permanent record of the sessions.

#### **b. Diary Writing**

Another way of collecting data concerning learning strategies is diary writing. It is a way of reporting the thoughts, feelings, achievements, and problems the learners report as well as their notions of teachers, friends or native speakers. Diaries are self-reports that are usually subjective. Oxford (1990) asserts that sometimes diary writing may require some training on the part of the learners since they may not know what to report, how to report it, and to what extent to report it. If a researcher is planning to read students' diaries s/he should inform learners in advance since they are mostly considered private. Some teachers have used diaries as a stimulus to class discussions of strategy use.

#### **c. Interviews**

A third way of collecting data regarding learning strategies is interviews. Their types range from unstructured to structured interviews. Since there is no particular

questioning technique in unstructured interviews the data obtained from such an interview is difficult to interpret and categories. Whereas the data gathered from a structured interview are “uniformly organized for all respondents and lend themselves to statistical analysis” (Cohen and Scott, 1996). O’Malley, Chamot and their colleagues (1985), have developed a Student Interview Guide, which asks learners to think about what they generally do when faced with a similar language task. Students are not required to do the task during the interview but they are asked to think about how they typically handle or do the task (O’Malley *et al.*, 1985). Oxford (1990: 197) also adds that “such interviews work well in small groups or with individuals”

#### **d. Questionnaires**

Making use of questionnaires in a research study is one of the most commonly used techniques to collect data since they “can be objectively scored and analyzed” (Oxford, 1990: 199). Similar to interviews, they vary from more structured, in which the items can range from “yes or no” answers or indications of frequency, to less structured questions asking respondents to depict or explain the language learning strategy in a detailed way. The data obtained from highly structured questionnaires are uniformly organized because of the standardized categories provided for all respondents and they lend themselves to statistical analysis (Cohen and Scott, 1996). A major benefit of large-scale questionnaires pointed out by Cohen and Scott (1996) is that they have the potential to generate and test hypotheses because of the large number of respondents. Oxford (1990: 199), on the other hand, asserts that the more structured questionnaires “might miss the richness and spontaneity of less structured formats”.

A good example of a structured learning strategy questionnaire is the SILL developed by Oxford and has been used in many parts of the world with the learners of many different languages such as Chinese, French, German, Spanish, Japanese, and Turkish. The SILL has 50 items grouped under 6 sections. Its 5-point scale ranges from “never or almost never” to “always or almost always.” Oxford (1990) points out that the overall average shows how often the learner are inclined to use learning strategies in general, while the means for each section of the SILL stand for which strategy groups the learner is liable to use most frequently.

#### **e. Computer Tracking**

Though the computer tracking technology has been applied in only limited way to research strategies, researchers are now trying to find out its potential with regard to assessing language learning strategies. Computer tracking “programs can be used to collect information either with or without the learner’s awareness”(Cohen and Scott, 1996: 103). Such tracking might be used to identify the language learning strategies associated with the use of resource functions such as a dictionary, a thesaurus, tutorials on how to complete given language tasks, etc., belonging to word processing programs, the sequence of processing of elements in reading text for comprehension or in producing written text, and the choice of speed for reading and writing tasks. Cohen and Scott (1996) assert that there might be some problems with the results of other assessment methods such as interviews, diaries, etc. for various reasons. However, by recording a learner’s use of a resource function, the computer eliminates the problem of distortion because

of human inaccuracy or unawareness. The computer tracking method has certain disadvantages as well. A major limitation of the method pointed out by Cohen and Scott (1996) is its inability to describe language learning use strategies or use strategies which do not result in the use of a resource function on the computer. For instance, if a learner uses inferencing to understand the meaning of a word, the computer would not be able to report this. Another limitation is that the use of computer tracking may not be practical since some participants may not feel comfortable working with a computer.

#### **f. Multiple Approaches to Data Collection**

O'Malley and Chamot (1990) point out that making use of different types of data collection methods may lead to different results since every assessment method has its own advantages and disadvantages. Therefore, some researchers have made use of multiple approaches to data collection. Cohen and Scott (1996: 104) suggest some major issues that should be taken into account while choosing the best data collection method(s). According to them in order to determine the most appropriate data collection method, a researcher should bear in mind issues such as “the purpose of the study, the number of learners and researchers, the resources available, the strategies to be studied, the types of the language tasks for which the strategies are used, and the context in which the language learning takes place”.