

A Comparative Study of Differences  
in the Uses of Learning Strategies  
Between Effective and Less Effective Learners  
in an EFL Context

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A Thesis  
Presented to  
The Faculty of the Graduate Course at  
Hyogo University of Teacher Education

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In Partial Fulfillment  
Of the Requirements for the Degree of  
Master of Education

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by  
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December 1992

## Acknowledgements

Many people have helped me and encouraged me to complete this thesis. First and foremost, I would like to thank Assistant Professor Hideyuki Takashima, my seminar supervisor, for his valuable comments and insightful suggestions on the manuscript at every page. His ideas and inspirations have helped me develop this thesis from its beginning. I am certain that without his support this thesis would never have been completed.

I would also like to express my appreciation to Dr. Anita Wenden, Professor at York College, who talked to me in the JALT International Conference at Kobe 1991 and provided me with her papers. She convinced me of the importance and necessity of learning strategy research.

Further, I would like to thank the teachers of Betsuin, Hayahoshi, Ikushin, Nanso, Seibo, Taisei and Takada Junior High Schools for their cooperation in the implementation of the descriptive study. I would also like to thank the students who participated in the descriptive study for providing me with valuable data.

I am also deeply grateful to the following persons:

To Professor Masamichi Tanaka who constantly provided me with invaluable advice and warm-hearted encouragement.

To other faculty members and my colleagues in the

Department of English Language at Hyogo University of Teacher Education, for their encouragement and support.

To Mr. Teruo Mori, Principal of Nanso Junior High School, for encouraging me continuously to fulfill my tasks at this course fruitfully.

I regret to say that I cannot acknowledge all of them for their support here.

And last, but not least, I wish to acknowledge the Kyoto Prefectural Board of Education, for providing me with the opportunity to study at the Hyogo University of Teacher Education.

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## Chapter 1

### Background of Strategy Research

#### 1.1 Introduction

In the classrooms of junior or senior high schools in the circumstances of English as a Foreign Language (EFL) as well as English as a Second Language (ESL), school teachers are wondering why some learners are more successful than others. Why the remarkable differences of achievement between learners? Because an increasing number of students are dropping out of the lessons and losing their interests in English as the grades go up, in spite of teachers' endeavor to try to improve their teaching methodologies, teachers are asking themselves whether it is possible to guide less effective learners into success by English education and lessons.

On the other hand, since the early 1970s, there has been a shift in the focus of research from teaching methods to learners themselves. A great concern arises for how learners actually go about their learning tasks in a second language or foreign language - learner characteristics and their possible influence on the process of acquiring a second language. In the fields of second language acquisition as well, the focus has been in the similarities between learners - what processes of learning are common or universal, as the studies of error analysis or morpheme studies show. In recent years, however, there also arises a concern for the differences between



learners, that is, the individual differences.

Then what factors will influence the achievements of learning English? What are the decisive factors which will separate learners into more effective and less effective learners? Skehan (1989),<sup>1</sup> for example, points out the following factors: intelligence, aptitude, motivation, learner strategies and cognitive styles that effect second language learning.

All these factors are assumed to be very important, although it is impossible to consider them all at once. So that, in this study, we would like to concentrate on language learning strategies rather than invariant variables like intelligence. We can expect learning strategies to be rather easy for modification by instruction. In other words, we can expect that "less competent learners should be able to improve their skills in a second language through training on strategies evidenced among more successful language learners."<sup>2</sup>

The main purpose of this paper is thus to identify the good language learning strategies, especially those which more

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<sup>1</sup> Peter Skehan, *Individual Differences in Second-Language Learning* (New York: Edward Arnold, 1989).

<sup>2</sup> J. Michael O'Malley, "The Effects of Training in the Use of Learning Strategies on Learning English as a Second Language," *Learner Strategies in Language Learning*, eds. Anita Wenden and Joan Rubin. (Hertfordshire: Prentice-Hall, 1987) 133.

effective learners are employing and less effective learners are not employing. Our study concentrates in the first phase of study which leads to strategy training.

## 1.2 Definition

Language Learning Strategies (=LLS) can be defined as follows:

... learning strategies are specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations.<sup>1</sup>

But there are some criticisms to this definition of LLS. Certainly the main criticism to the LLS research has been the ambiguity of the term learning strategies itself. Stern (1983), for example, describes it as follows: "The term learning strategy ... has not been employed in the same way by all researchers."<sup>2</sup> There contain two problems in the definition of LLS.

The first is whether overgeneralization, transfer and simplification can be included in LLS category. Ellis (1985),<sup>3</sup> for instance, considers simplification as one of the typical

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<sup>1</sup> Rebecca L. Oxford, *Language Learning Strategies: What Every Teacher Should Know* (New York: Newbury House, 1990) 8.

<sup>2</sup> H. H. Stern, *Fundamental Concepts of Language Teaching* (Walton Street: Oxford University Press, 1983) 405.

<sup>3</sup> Rod Ellis, *Understanding Second Language Acquisition* (Oxford: Oxford University Press, 1985) 175.

LLS. And, as Schumann (1982)<sup>1</sup> shows, simplification is used by the learner probably because they do not know it, not because they choose to use it. Learners are not employing such strategies intentionally, but they are merely using it unconsciously. With regard to this, Wenden (1987) says that strategies such as simplification, overgeneralization and transfer are "universal language processing strategies."<sup>2</sup> In other words, these strategies are common strategies which all second language learners should employ in the development of interlanguage. They are not sources of individual differences.

The main purpose of LLS research lies in strategy training. Bialystok (1981)<sup>3</sup> notes that LLS can be presumably be taught to any second language learner and thus modify his progress through their facilitative effects. Therefore it is not appropriate to include unintentional LLS in the definition of LLS, which cannot be used in strategy training, so that the definition of LLS in this study is as follows:

(1) LLS we deal with are not universal processing strategies, which second language learners use in the

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<sup>1</sup> John H. Schumann, "Simplification, Transfer, and Relexification as Aspects of Pidginization and Early Second Language Acquisition," *Language Learning* 32 (1982): 338.

<sup>2</sup> Anita Wenden, "Conceptual Background and Utility," *Learner Strategies in Language Learning*, eds. Anita Wenden and Joan Rubin. (Hertfordshire: Prentice-Hall International, 1987) 3.

<sup>3</sup> Ellen Bialystok, "The Role of Conscious Strategies in Second Language Proficiency," *Modern Language Journal* 65 (1981): 24

development of interlanguage, but specific actions or techniques.

(2) LLS we considered are not unconscious strategies, but intentional strategies.

The second problem concerns the classification of strategies. Learner strategies can be classified into three main groups, that is, learning strategies (LLS), production strategies (PS) and communication strategies (CS). According to Tarone (1980), learning strategies can be defined as "an attempt to develop linguistic and sociolinguistic competence in the target language."<sup>1</sup> The main characteristic of LLS, which distinguishes from PS and CS, is that "the primary purpose of LLS is not to communicate but to learn."<sup>2</sup>

To put it more precisely, as Tarone (1980)<sup>3</sup> rightly summarizes, PS are employed in order to use L2 knowledge, which has been already acquired, effectively, with minimum effort. CS are employed when requisite meaning structures do not seem to be shared, such as using mime, language switch. On the other hand, LLS are employed in order to acquire L2 knowledge effectively. But it seems to be almost impossible to distinguish the three groups of strategies strictly, as Tarone

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<sup>1</sup> Elaine Tarone, "Communication Strategies, Foreigner Talk, and Repair in Interlanguage," *Language Learning* 30 (1980): 418.

<sup>2</sup> Tarone 418.

<sup>3</sup> Tarone 418.

(1980)<sup>1</sup> herself recognizes. The main reason is that some strategies could work both as CS and as LLS. For example, paraphrase and circumlocution, which are usually categorized as CS, may also facilitate learning, though their main purposes are to overcome the communication difficulties and to maintain communication, as is the same with PS and LLS. Therefore in this research,

(3) LLS may overlap with CS and PS in some cases.

Thus we have noted from (1) to (3), the definition of LLS in this study is as follows:

The LLS we deal with are not universal processing strategies but are specific actions or techniques taken by the learner intentionally as they attempt to complete a learning or communication task, which may overlap with CS and PS in some cases.

### 1.3 The Rationale of LLS Study

Next, let us consider why LLS research is necessary and important in the first place.

First, LLS can be considered to be one of the causes of success or failure of L2 learners, as Wenden (1985) describes:

Learner strategies are a source of insight into the difficulties of unsuccessful L2 learners. ... Their apparent inability to learn is assumed to be due to their not having an appropriate repertoire of learning

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<sup>1</sup> Tarone 421.

strategies.<sup>1</sup>

In a nutshell less successful learners might not progress because they are employing less effective and inappropriate LLS.

Secondly, we cannot overlook the fundamental shift of research from teaching methodology to learners or how learners learn, which was mentioned in the introduction. There are two things related to this matter. One is that significant effects of some teaching methodology over another teaching methodology could not be found. The other, which is more important, is expressed best by Skehan (1991) when he says: "...it could well be that those learners who benefit from a particular methodology are cancelled out by those for whom it is inappropriate."<sup>2</sup> That is, to borrow his phrase, "those studies lumped all learners together."<sup>3</sup> This gives a rationale for paying attention to learners themselves, especially characteristics of learners. The point is that all successful teaching depends upon both learners and learning. In addition learners do not start from scratch, but they have predispositions to learn language, or their own way of

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<sup>1</sup> Anita Wenden, "Learner Strategies," *TESOL Newsletter* 19 (1985): 7.

<sup>2</sup> Peter Skehan, "Individual Differences in Second Language Learning," *Studies in Second Language Acquisition* 13 (1991): 295.

<sup>3</sup> Skehan 295.

learning, through certain learning strategies. Thus knowing about how learners actually learn will help the teacher to make any teaching method more effective.

Thirdly, although some school teachers believe that they know learners very well, in fact they don't know as much as they think they do about learners. O'Malley and Chamot (1990)<sup>1</sup> interviewed high school students and their teachers about LLS which students were employing. As a result, students clearly scored 33.6 LLS in average, but there were only 25.4 LLS mentioned in teacher interviews. Moreover, teaching strategies were included among those strategies. As a matter of fact, it is assumed that the actual number of LLS that teachers know are far smaller. As Naiman, et al. (1978)<sup>1</sup> describes, good language teachers have an intuitive understanding of language learning, but they are lacking the systematic understanding of it. LLS research may have the possibility to open the avenue to such systematic understanding of language learning and learners.

Fourth, let us consider the relationship between LLS and other factors which induce individual differences. Jackbovits

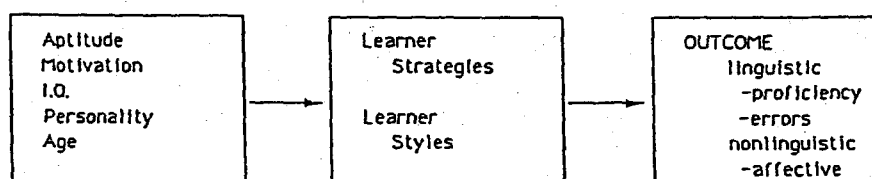
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<sup>1</sup> J. Michael O'Malley and Anna Uhl Chamot, *Learning Strategies in Second Language Acquisition* (New York: Cambridge University Press, 1990) 118.

<sup>1</sup> N. Naiman, M. Fröhlich, H. H. Stern, and A. Todesco, *The Good Language Learner* (Toronto: The Ontario Institute for Studies in Education, 1978) Preface vii.

(1970),<sup>1</sup> for example, proposes one model in which various factors and their percentages accounting for the outcome of achievement are shown. In his model, aptitude accounts for 33%, intelligence 20%, perseverance or motivation 33% and others accounts for 14% of the outcome. While this model gives us a rough explanation of the causes of individual differences, it cannot explain the interactions between factors. Skehan (1991)<sup>2</sup> proposes another model like Figure 1.

Figure 1 Influences on Language Learning



(Skehan, 1991: 277)

As Skehan shows, LLS has an intermediate position between variables such as intelligence and aptitude, on the one hand, and outcome on the other. While LLS are assumed to be included in 'others' and its influencing role will be rather small in Jakobovits' model, strategies and styles will play an important role to mediate the influence of variables like aptitude in Skehan's model. In other words, strategies and styles will interact with the factors of the first box and be expected to

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<sup>1</sup> Leon A. Jakobovits, *Foreign Language Learning* (Massachusetts: Newbury House, 1970) 98.

<sup>2</sup> Skehan, "Individual Differences" 277.



influence them positively. For instance, when some learners might not have good language aptitude, LLS can be considered to complement its deficiency and to improve outcome. Thus, LLS promise to play an important role as a medium between variables and outcome.

Finally, it is important to bear in mind that LLS are essential to learner autonomy. Wenden (1985) describes it as follows:

Learner strategies are the key to learner autonomy. . . . In other words, they are the means or the tools that enable learners to take on responsibility for their own language learning - to be autonomous.<sup>1</sup>

However it should be asked whether learner autonomy is really necessary for language learning in the first place. The autonomous learner becomes important especially when teachers are not around them. In an EFL circumstance, like in Japan, there are usually four hours of English lessons at school in a week. The total hours that junior high students will learn English at school are estimated at most to be 144 hours in a year and 432 hours in three years, which turn out to be just 27 days.<sup>2</sup> On the other hand, staying in an ESL circumstance like in America and attending schools there, the total hours will be 1268 hours in a year and 3804 hours in three years, which will

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<sup>1</sup> Wenden, "Learner Strategies" 5.

<sup>2</sup> Hironori Kubo, *Survival English: For Staff and Students of Itami City High School* (Unpublished: 1990) Preface.

be converted into 237.6 days.<sup>1</sup> It is 8.8 times as much as the amount of English input in Japanese public junior high schools. This fact indicates that self-directed learning other than English lessons in school, may be indispensable for improving English communicative proficiency in an EFL context like Japan and, what is more important, is the kind of LLS employed in self-directed learning. Thus learners cannot be completely spoon-fed by the teacher and need to learn by themselves.

So far we have considered several rationales of investigating learning strategies. Thus learning strategies seem to hold much promise for facilitating learning English for both more effective and less effective learners. In the next chapter we will review the main previous studies and try to identify the findings and yet unanswered questions.

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<sup>1</sup> Hideyuki Takashima, "How Do We Make Use of TV and Radio Programs and Materials?" *Handbook on Early English Teaching*, ed. Tadahisa Goshima (Tokyo: Kyobundo, 1990) 111.

## Chapter 2

### Previous Studies

#### 2.1 Research History

Over the past ten years a considerable number of studies have been made on LLS. Now we will begin by looking back at several main previous studies. One of the pioneers of LLS research in second language learning is Naiman, *et al.*, who made the "Good Language Learner (GLL)" study in 1970's. In the research, they identified five strategies. For instance, good language learners actively involve themselves in the language learning task (active task approach), or they develop and exploit an awareness of language as a means of communication and interaction.<sup>1</sup> Their research can be rewarded with great success, but also it has defects and limitations. For one thing Skehan (1989)<sup>2</sup> criticizes that they interviewed only colleagues from the university environment who were assumed to be extremely successful learners and did not make a comparison with less successful learners. Those strategies, then, are the strategies of highly educated people and there is a possibility that less successful learners might not utilize those identified strategies. From the less successful learners standpoint, their source of difficulties, what is lacking and

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<sup>1</sup> Naiman, *et al.* 13.

<sup>2</sup> Skehan, *Individual Differences* 80.

what is really necessary to do, is not revealed from their research. What is more, their subjects of research were all adults, which suggests less implications for school education.

The next research to be discussed is Rubin's work. She identified eight strategies and even more noteworthy is that she proposed a classification scheme which categorized strategies into "direct" and "indirect" strategy groups.<sup>1</sup> Memorization, practice and guessing, for example, are contained in direct strategies. In indirect strategies, creating opportunities for practice and using production tricks like circumlocution when the precise expression is not known are included. To gather data and to elicit LLS, she used classroom observation as well as students self-reports in which students made note about what they did to learn English. She says that classroom observation is not so productive because of the difficulty of discerning which LLS students are using.<sup>2</sup> She achieved success by directed self-reports in which specific LLS were focused. There is, however, a defect in that the rate of forgetting rises unless students make notes immediately after the events.

Thirdly, O'Malley and Chamot, made several descriptive studies in 1980's. In one of their research studies, they tried

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<sup>1</sup> Joan Rubin, "Study of Cognitive Processes in Second Language Learning," *Applied Linguistics* 11 (1981): 117-31.

<sup>2</sup> Rubin 121.

to identify the range and frequency of LLS used by ESL high school students who were in the beginning and intermediate levels.<sup>1</sup> The research revealed 638 instances of strategy use by retrospective interviews, which were then classified into 'Cognitive', 'Metacognitive' and 'Socio-affective' strategies. Among the identified LLS, familiar LLS such as repetition (66 occurrences) and note taking (63 occurrences) were most frequently employed in both levels and the highest frequencies of strategy use were reported for discrete language tasks such as vocabulary learning (17 percent) and pronunciation (14 percent). But from this study the differences in strategy use between more effective and less effective learners could not be identified, for only the participants who were high in academic ability were selected. But in another study,<sup>1</sup> both the more effective and ineffective learners learning Spanish as a foreign language were chosen for the participants. In the research they discovered that major differences existed in the range of LLS and the way LLS were employed. That is, the more effective learners employed LLS more often and had a greater variety of repertoire of LLS than did ineffective learners.

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<sup>1</sup> J. Michael O'Malley, Anna Uhl Chamot, Gloria Stewner-Manzanares, Rocco P. Russo and Lisa Kuppa, "Learning Strategy Applications of English as a Second Language," *TESOL Quarterly* 19 (1985): 557-84.

<sup>1</sup> Anna Uhl Chamot, Lisa Kupper, "Learning Strategies in Foreign Language Instruction," *Foreign Language Annals* 22 (1989): 13-24.

Furthermore more effective learners used LLS that were appropriate to the task, while ineffective learners used inappropriate ones. To gather data, they used retrospective interviews and think-aloud in which students were asked to think aloud while actively working on a language task.

How we get the information about LLS is an essential issue in LLS research. In fact, the investigation as to the appropriateness of strategy use as stated above, would have been impossible without think-aloud or retrospective interviews. With respect to the verbal report, Cohen (1987)<sup>1</sup> mentions the following three types: self-report, self-observation and self-revelation.

According to him, the first type, self-report, refers to a description of general behaviors. In other words, it refers to "learner's description of what they do, characterized by generalized statements about learning behavior."<sup>2</sup> And it is not based on inspection of any specific event, but on beliefs or concepts that the learners have about the way of learning. The interviews used by Naiman, *et al.* (1978)<sup>3</sup> or questionnaires are included in this type.

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<sup>1</sup> Andrew D. Cohen, "Using Verbal Reports in Research on Language Learning," *Introspection in Second Language Research*, eds. Claus Færch and Gabriele Kasper. (Clevedon: Multilingual Matters Ltd, 1987) 84-86.

<sup>2</sup> Cohen 84.

<sup>3</sup> Naiman, *et al.* 5-25

The second type, self-observation, refers to an observation of specific event. That is, it is "the inspection of specific language behavior, either while the information is still in short-term memory, i.e. introspectively, or after the event, i.e. retrospectively."<sup>1</sup> Rubin's directed self-report and the retrospective interviews of Chamot, *et al.* (1989)<sup>2</sup> are contained in this type. It must be noted, however, that the amount of forgetting increases right after the event, so that the immediate self-observation will identify the mental processing more correctly. On the other hand, the third type, self-revelation, consists of think-aloud which taps the conscious mental process while the information is being attended to. Chamot used this type of think-aloud as mentioned above. However as Cohen indicates, learners are requested to use language to do certain tasks and at the same time are requested to use language to describe how they did these tasks.<sup>3</sup> These three types of verbal report have advantages and disadvantages. The most crucial thing is to choose the method which is most appropriate for the objective of the research and to interpret the data with care. In addition we must not forget what kind of steps should be taken before and after the verbal

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<sup>1</sup> Cohen 84.

<sup>2</sup> Chamot, *et al.* 22-24.

<sup>3</sup> Cohen 89.

report. For example, some pretraining and specific instructions are necessary before think-aloud and deliberate assessment of LLS from the transcripts by more than one coder is requested to maintain reliability in the case of interviews.

With respect to the easiness of LLS assessment, Oxford developed a questionnaire, the Strategy Inventory for Language Learning (SILL), which contains 121-items with extremely high validity and reliability.<sup>1</sup> It can be easily available to inspect and assess the range and frequency of learner's strategy use. On its basis there is comprehensive classification of LLS, which results in six strategy groups such as memory, cognitive, compensation, metacognitive, affective and social strategies. In the next section we will consider the classification of LLS.

## 2.2 Classification of LLS

With regard to the classification of LLS, four criteria, that is, cognitive, metacognitive, affective and social strategies are generally recognized,<sup>2</sup> though some discrepancy exists. Cognitive strategies can be defined as "the steps or operations used in learning or problem-solving that require

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<sup>1</sup> Oxford, *Language Learning Strategies* 255. Content validity is .96; internal consistency reliability is .96 for a 1200-person university sample and .95 for a 483-person military sample.

<sup>2</sup> Skehan, "Individual Differences" 287.



direct analysis, transformation, or synthesis of learning materials."<sup>1</sup> Examples of these are repetition, translation and taking notes. Oxford (1990)<sup>2</sup> further derives memory strategies from cognitive strategies. Several examples are using keywords and grouping.

Metacognitive strategies are "beyond-the-cognitive strategies used to provide executive control over the learning process."<sup>3</sup> Wenden (1991)<sup>4</sup> refers to them as "self-management strategies." They are indirect strategies, which are used mainly for arranging, planning, monitoring and evaluating one's learning. O'Malley and Chamot (1990) emphasizes the importance of metacognitive strategies as follows:

Students without metacognitive approaches are essentially learners without direction and ability to review their progress, accomplishments, and further learning directions.<sup>5</sup>

In other words, metacognitive strategies are important especially for 'autonomous learners', who have responsibility

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<sup>1</sup> Joan Rubin, "Learner Strategies: Theoretical Assumptions, Research History and Typology," *Learner Strategies in Language Learning*, eds. Anita Wenden and Joan Rubin. (Hertfordshire: Prentice-Hall, 1987) 23.

<sup>2</sup> Oxford, *Language Learning Strategies* 37-43.

<sup>3</sup> Rebecca Oxford and David Crookall, "Research on Language Learning Strategies: Methods, Findings, and Instructional Issues," *The Modern Language Journal* 73 (1989): 404.

<sup>4</sup> Anita Wenden, *Learner Strategies for Learner Autonomy* (Hertfordshire: Prentice-Hall, 1991) 25-30.

<sup>5</sup> O'Malley and Chamot, *Learning Strategies* 99.

on their own and try to learn even without teachers.

Affective strategies, referring to emotions, attitudes, motivations and values are also assumed to be indirect strategies. "Language learners can gain control over those factors through affective strategies."<sup>1</sup> Examples of these are saying or writing positive statements to oneself for encouraging oneself or pushing oneself to take risks. Lowering anxiety is important and necessary for language acquisition as Krashen points out in affective-filter hypothesis.<sup>2</sup>

Finally social strategies refer to "interacting with another person to assist learning,"<sup>3</sup> such as asking for clarification or verification and cooperating with others. Social strategies are also indispensable because learning a language involves other people and communication between and among people. Comparing the two representative schemes of O'Malley and Chamot (1990) and Oxford (1990), the major difference only lies in Oxford's compensation strategies, most of which are assumed to be communication strategies.

### 2.3 Unanswered Questions of Previous Studies

Let us turn now to unanswered questions of previous

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<sup>1</sup> Oxford, *Language Learning Strategies* 140.

<sup>2</sup> Stephen D. Krashen, *Principles and Practice in Second Language Acquisition* (Oxford: Pergamon Press, 1982) 30-32.

<sup>3</sup> O'Malley and Chamot, *Learning Strategies* 139.

studies. The final goal of the strategy research is, as mentioned earlier, to present the effective LLS which lead to good achievement with less effective learners. Therefore the initial goal should be to identify the effective LLS. However, they have not thoroughly identified for the present, as Skehan (1991) indicates that "we also need to know more about the typical strategies used by good language learners."<sup>1</sup> This is the first and most important unanswered question which is the central problem of our study.

The second issue is concerned with strategy training which is the final goal of the strategy research. O'Malley, *et al.* (1985)<sup>2</sup> conducted research to see if there was a significant effect of strategy training in vocabulary learning, listening comprehension and speaking. They separated the subjects into three groups: metacognitive group where the subjects were taught metacognitive, cognitive and social/affective strategies; cognitive group where the subjects received instruction on cognitive and social/affective strategies; and a control group where the subjects were asked to work on language learning tasks as the same way they usually do and did not get any special strategy instruction. As a consequence, statistically significant effects were observed only in

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<sup>1</sup> Skehan, "Individual Differences" 288.

<sup>2</sup> O'Malley, *et al.*, "Learning Strategy Applications" 568-84.

speaking and a part of the listening tests. The metacognitive group scored highest and the cognitive group scored higher than the control group. That is, the more the learner got the strategy training, the more their achievement improved. While O'Malley and Chamot assessed these results very positively, Skehan (1989) is prudent as can be seen in the following quotation: "The effects that have been found tend to have been very slight, so that one cannot really speak of the efficiency of learning being transformed."<sup>1</sup>

So far, strategy training has been controversial as the studies of strategies are in its infancy and only few attempts have been made on strategy training. The time strategy training takes and the period it needs, as well as a selection of LLS should be taken into account as requirements. However Skehan himself remarks: "...it would be premature to discount the possibility of effective training in the future."<sup>2</sup>

Finally, let us consider some related problems of cause-and-effect (causality) between strategy and proficiency. With respect to causal relationship, it is unknown whether the use of LLS leads to higher proficiency (causal) or higher proficiency just permits use of a wider range of LLS (caused). In this respect Skehan (1989) states:

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<sup>1</sup> Skehan, *Individual Differences* 139.

<sup>2</sup> Skehan, *Individual Differences* 139.

We do not know whether the strategies came first, and had brought about the proficiency level, or that those who are more proficient, for whatever reason, accordingly had the potential to use strategies.

The solution to this problem would be worked out only by strategy training and longitudinal research. This is because the monitoring of changes in proficiency over time as a result of strategy training will demonstrate the causal relationship between proficiency and strategy.<sup>1</sup>

Having said all this about unanswered questions, we will deal with the first unanswered ones in our study. Thus the research questions would be as follows:

1. What are the differences in strategy use between more effective and less effective learners? What kinds of LLS are most frequently employed by more effective learners and what sorts of LLS are least frequently used by less effective learners?

2. Are there any specific relationships between strategy use and language tasks? What is the most frequently used LLS in listening, reading and writing?

3. What are the differences in strategy use between sexes or between grades? Comparing males with females, what kinds of differential characteristics can be observed?

We will attempt to find answers to these questions by conducting an empirical study in the next chapter.

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<sup>1</sup> Skehan, *Individual Differences* 97.

## Chapter 3

### The Study

In this chapter we will build upon the review of previous studies presented in Chapter 2 and describe a study that we performed, with participants who are learning English in an EFL context, by using a questionnaire.

#### 3.1 Objectives

The major purposes of this descriptive study are: (1) to identify the most and least frequently used LLS by junior high school students; (2) to determine differences in strategy use between more effective and less effective learners, that is, to identify the most typically used LLS by effective learners as well as the problematic aspects of less effective learners' strategy; (3) to identify the link between LLS and tasks; (4) to determine differences in strategy use between males and females; and (5) to determine differences in strategy use between Grade 7 (aged 13) and Grade 8 (aged 14).

#### 3.2 Subjects

The participants in this study were 475 junior high school students who took the Test of Practical English Proficiency (STEP test)<sup>1</sup> on January 25, 1992. For students to

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<sup>1</sup> STEP is an abbreviation of Society For Testing English Proficiency.

participate in the test is optional. Of all the participated students, 348 students are in the 7th grade and 127 students in the 8th and from five public junior high schools in Kyoto Prefecture, one public junior high school in Toyama Prefecture and one private school in Kyoto City.

There are several reasons for adopting testees of STEP test as subjects of this descriptive study. The main reason is that we can get a clear and valid image of what the effective learners are by utilizing the STEP test. In some of the previous studies, the image of good language learners has not always been obvious. For instance, in the study of O'Malley, *et al.* (1985),<sup>1</sup> the subjects judged by their ESL teachers to be high in academic ability are selected as good language learners. However it is doubtful whether the teacher's judgement of their academic ability has any objectivity and furthermore it is questionable whether their academic ability is linearly related to communicative proficiency in English. The STEP test, in this respect, is optimal as it is a standardized test in which more than two million people participate every year in all parts of Japan and is supposed to measure examinees' proficiency for communication.<sup>2</sup>

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<sup>1</sup> O'Malley, *et al.*, "Learning Strategy Applications" 563.

<sup>2</sup> The Society for Testing English Proficiency, INC. *Step Bulletin* 3 (1991): 130-33.

### 3.3 Method

#### 3.3.1 Instruments

Two instruments were used to gather data for this study: (1) the STEP test (listening comprehension, written test and the total score); and (2) a questionnaire on LLS which contains 55 items.

The STEP test generally has two parts: part one is listening comprehension test and written test; part two is interview test where examinees' speaking ability is mainly tested. However in the beginning level (5th Grade and 4th Grade test), the latter part is not included in the test, so that we have no definite information on learners' speaking proficiency

In the written test, the following tasks, pronunciation, vocabulary, grammar, composition and reading comprehension, are included. Except for scores in the listening comprehension section, all the other scores in other sections (vocabulary, grammar) are combined as written test scores (see Appendix A).

To gather information on LLS, we utilized Strategy Inventory for Language Learning (SILL) developed by Oxford (1990)<sup>1</sup> which we translated into Japanese and modified the expressions without changing any meanings so that even junior high school students can understand easily. But we deleted questions about compensation strategies which are obviously

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<sup>1</sup> SILL Version for Speakers of Other Languages Learning English and Version for English Speakers Learning a New Language: Oxford, *Language Learning Strategies* 277-300.



assumed to be communication strategies.<sup>1</sup> And we added the following two items to the original manuscripts.

B10. I learn English sentences by heart.

B12. I read aloud English textbooks.

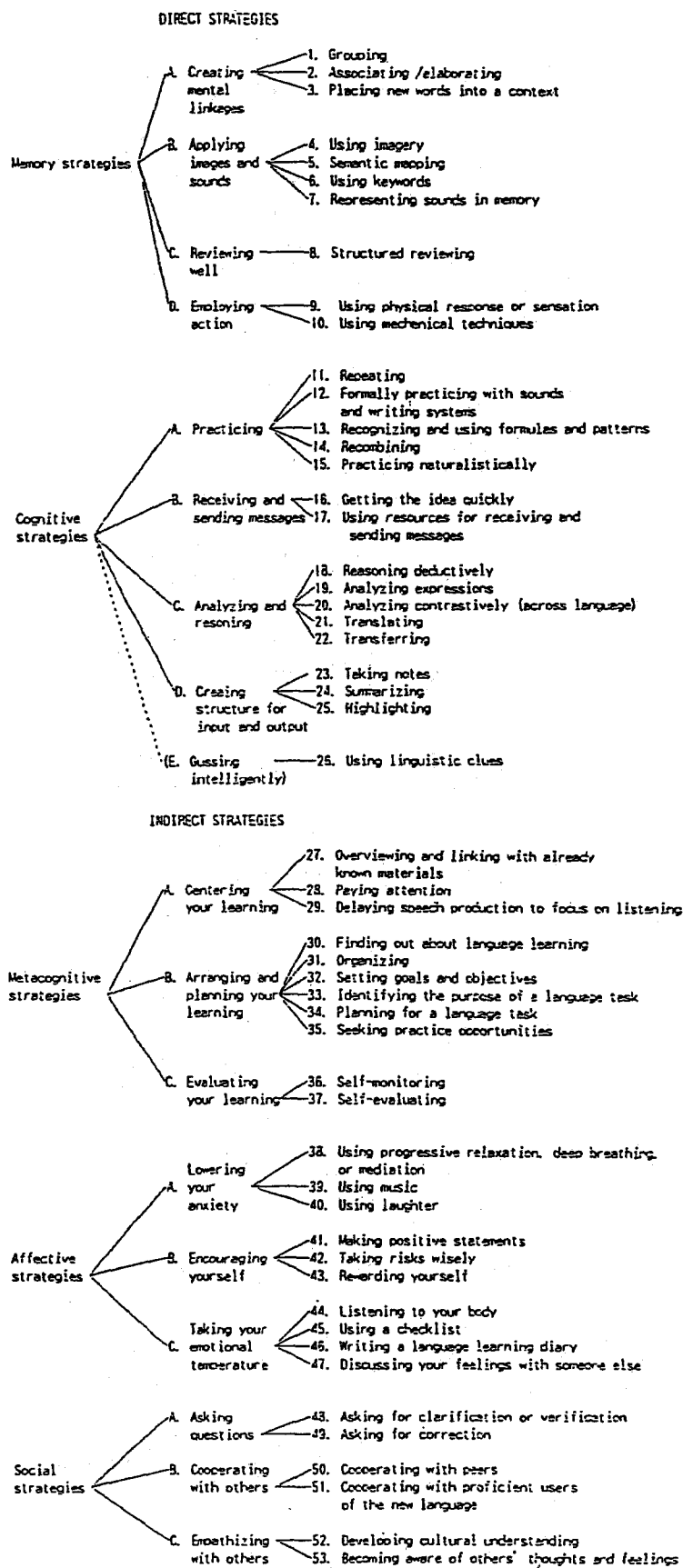
All the directions and questions were given in Japanese. Part A corresponds to 'Memory', Part B to 'Cognitive', Part C to 'Metacognitive', Part D to 'Affective' and Part E to 'Social strategies'. Subjects responded to each on a four-point Likert scale indicating "never true of me", "seldom true of me", "somewhat true of me", "always true of me". These categories were assigned values of 1, 2, 3 and 4 respectively (see Appendix B). Thus higher scores indicated greater use of the LLS. For participants to be able to rate their LLS as honestly as possible, they were guaranteed that the SILL scores would never have any relation to the STEP test or performance evaluation in each school, which would probably contribute to the apparent honesty of the respondents. About thirty or forty minutes were needed to answer the questionnaire. The data was analyzed by using MANOVA<sup>1</sup> and LLS classification scheme developed by Oxford was adopted except compensation strategies (see page 5). LLS classification is shown in Figure 2 on the next page.

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<sup>1</sup> As we mentioned in chapter 1, we are dealing with language learning strategies, not with communication strategies, so that we deleted question items related to communication strategies. We also excluded compensation strategies from the classification scheme.

<sup>1</sup> The abbreviation of Multivariate Analysis of Variance.

Figure 2 Diagram of the Strategy System



(Adapted from Oxford, 1990:18-21)

### 3.3.2 Criteria for Dividing Levels

All the students were divided into three groups according to the respective scores of listening comprehension test, written test and the total scores which are the sum of both listening comprehension and written tests. The top group was assigned to the top one-third in each score and the bottom group the lowest one-third scores, disregarding the middle group, in each grade. Next the two top groups of each grade were combined and categorized as more effective learners and the bottom two groups of each grade were also combined and categorized as less effective learners. To sum up, we will analyze the following groups:

(1) GROUP 1: more effective and less effective learners based on listening comprehension test.

(2) GROUP 2: more effective and less effective learners based on written test.

(3) TOTAL: more effective and less effective learners based on the total score.

Table 1. Mean Scores

	GROUP 1	GROUP 2	TOTAL
TOP	17.7	24.3	41.4
MIDDLE	15.5	19.8	34.9
BOTTOM	12.3	14.4	27.6

Table 1 shows the mean scores of more effective, middle

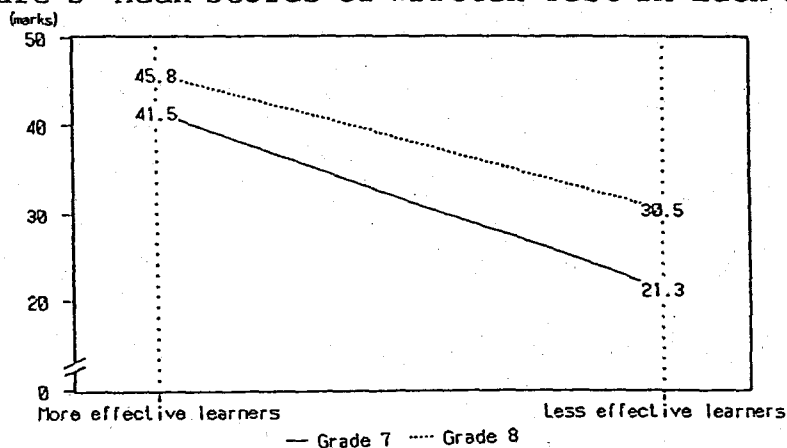
group, and less effective learners of GROUP 1 and 2, and TOTAL. ANOVA was performed on the scores. The differences of mean scores between more effective and less effective learners in each GROUP and TOTAL were significant below .01 level:  $F(2,472)=103.51$  in GROUP 1;  $F(2,472)=28.4$  in GROUP 2.;  $F(2,472)=92.97$  in TOTAL (see Appendices C and D).

### 3.4 Results

#### 3.4.1 Interaction

To begin with, the possibility of significant interactions among independent variables was examined: interactions among levels (more effective and less effective learners), grades (7th and 8th) and sexes (males and females) in each GROUP (see Appendix E). No statistically significant interactions were observed except between grades and levels in GROUP 2 (based on written test) ( $p < .01$ ), as Figure 3 shows.

Figure 3 Mean Scores of Written Test in Each Grade<sup>1</sup>



<sup>1</sup> The scores of Grade 7 were increased by 2.5 times in order to fit them to the scores of Grade 8. Full marks of written test in Grade 7 are 20, whereas they are 50 in Grade 8.

Therefore we must be careful in analyzing GROUP 2, as the grade might interfere with the level.

### 3.4.2 The Most and Least Frequently Used Strategies

Next let us identify the most and least frequently used LLS by junior high school students.

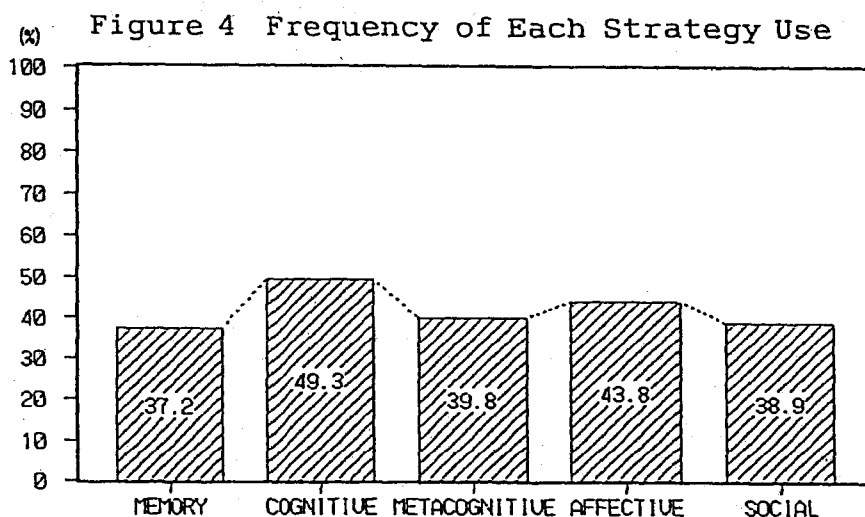
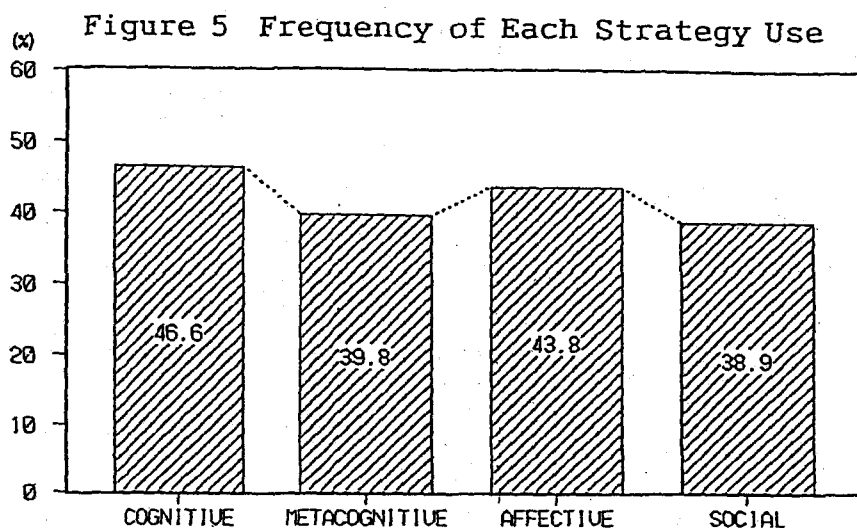


Figure 4 shows that the most frequently used LLS by whole participants were cognitive strategies (49.3%). While memory strategies look rather unpopular (37.2%), memory strategies could be included in cognitive strategies as many other researchers like O'Malley and Chamot classifies. Thus we see that the most unpopular LLS was social strategies as Figure 5 indicates.

In cognitive strategies, the most frequently used LLS was repetition (83.3%) which was also the most popular strategies of all the LLS. Among social strategies, the unpopular strategies were 'Developing cultural understanding' (15.2%)

and 'Cooperating with peers' (17.9%).



The least frequently employed strategies of all the LLS were 'Practicing naturalistically' like attending and participating in out-of-class activities where the new language is spoken (5.9%) and 'Seeking practice opportunities' like looking for people to talk to in English (7.8%).

With regard to characteristics of other categories of strategies, 'Placing new words into a context' (70.9%) was most popular in memory strategies. Among metacognitive strategies 'Self-monitoring' was most popular (65.9%). In affective strategies 'Encouraging yourself' (66.3%) was most frequently employed.

In the next section, we will see the differences in strategy use between more effective and less effective learners in every GROUP and TOTAL, between males and females and between Grades 7 and 8. To assess those differences, MANOVA was performed on the data. Table 2 shows the overview of those differences.

Table 2 Differences in Strategy Use

	GROUP 1 (M/L)	GROUP 2 (M/L)	TOTAL (M/L)	Sex (M/F)	Grade (7, 8)
Memory	N. S.	N. S.	N. S.	**	**
Cognitive	**	**	**	**	N. S.
Metacognitive	N. S.	**	**	**	N. S.
Affective	N. S.	N. S.	N. S.	**	N. S.
Social	**	**	**	**	N. S.

(\*\* = statistically significant below .01 level;  
 \* = below .05 level; N.S. = no significance; M = more effective  
 learners; L = less effective learners)

### 3.4.3 Differences Between Grades 7 and 8

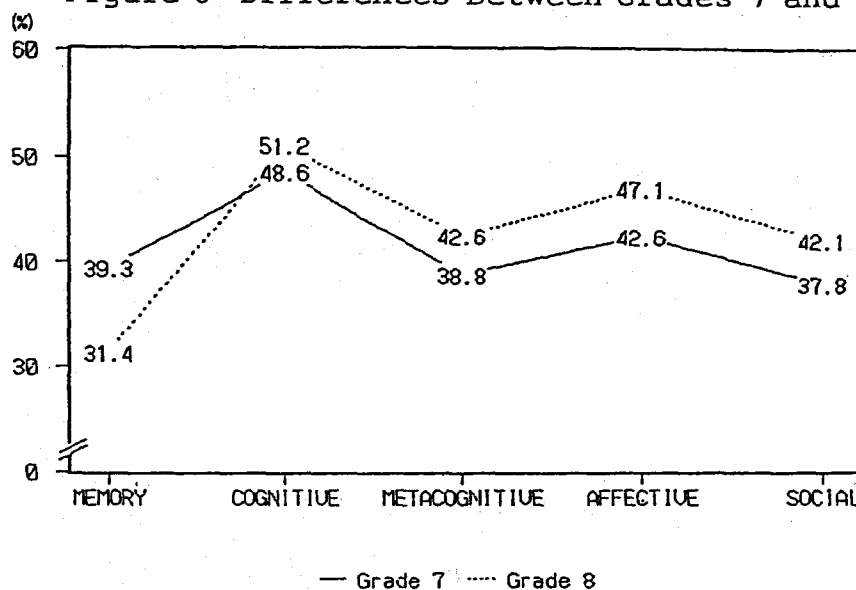
The effect for the Grades was significant only on memory strategies,  $p < .01$ : Grade 7 students were employing them more frequently than Grade 8 students as Figure 6 indicates. In the individual strategies, students in each grade frequently reported using familiar strategies like repetition. Grade 7 students, however, are characterized by using 'Placing new words into a context' (=A3) more frequently than Grade 8 (statistically significant:  $p < .05$ )<sup>1</sup>; 73.6% of Grade 7 students reported using it. On the other hand, Grade 8 students are marked by more frequent use of 'Recognizing and using formulas

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<sup>1</sup> It was the fifth popular strategy in Grade 7, although it was the thirteenth one in Grade 8; 64.1% of students were using it.

and patterns' (=B18) than Grade 7 (statistically significant:  $p < .01$ )<sup>1</sup>; 81.1% of Grade 8 students are using it (Appendix F).

Figure 6 Differences Between Grades 7 and 8



#### 3.4.4 Sex Differences

With respect to the differences between males and females, we could observe the statistically significant differences in all categories of strategies. Females were using LLS more frequently in all categories of LLS than males as Figure 7 indicates.

In terms of individual LLS, we could observe significant differences in 25 questionnaire items (see Appendix G). Females reported more frequent uses of LLS than males in all 25 items. Especially, the following three items were the notable

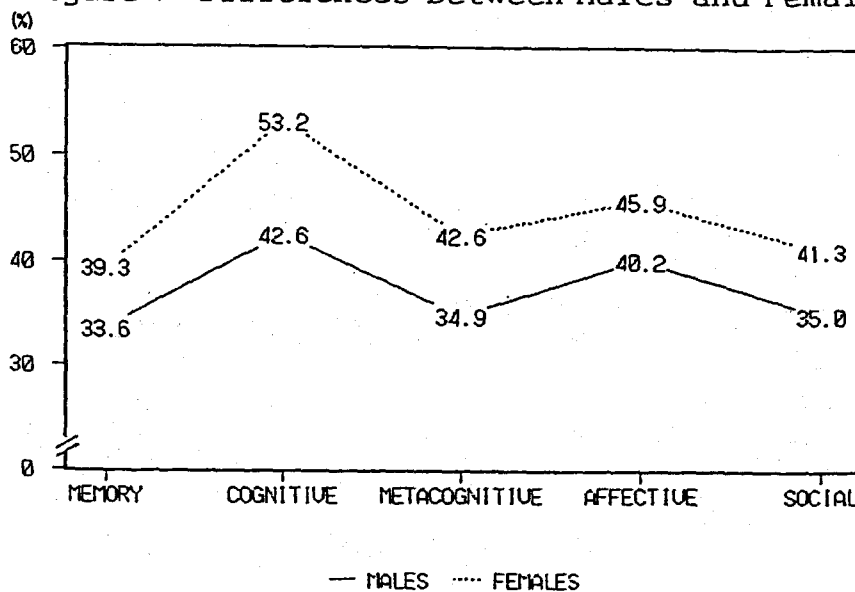
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<sup>1</sup> It was the fifth popular strategy in Grade 8, although it was the eleventh one in Grade 7; 63.8% of Grade 7 students reported to use it.



characteristics of it.

Figure 7 Differences Between Males and Females



B11. To practice pronouncing English words correctly.

( $p < .01$ ): (LLS-12<sup>1</sup>).

B12. To read aloud English textbooks ( $p < .01$ ): (LLS-12).

B22. To write diaries, poems or messages in English

( $p < .01$ ): (LLS-15).

Furthermore in the scores of STEP test, females were superior to males both in listening comprehension and written tests and the total scores (see Appendix H). So far we have been looking at the differences between Grades 7 and 8, and between sexes.

In the next section we will turn to the differences between more effective and less effective learners in GROUP 1 and 2, and

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<sup>1</sup> This number corresponds to the number of Figure 2 on page 27.

TOTAL. Table 3 presents survey of those differences in terms of individual strategies.

Table 3 Survey of Differences in Strategy Use

STRATEGY		GROUP 1		GROUP 2		TOTAL	
Memory	A7			*	W		
Cognitive	B12						
	B13	*		**		**	C
	B14	*	L				
	B15	**		**		**	C
	B16	**	L				
	B17	**	L			*	
	B18	**		**		**	C
	B19			*	W		
	B20			*	W		
	B21	**	L				
	B23			*	W		
	B24	*		**		**	C
	B30	**		**		**	C
	B31	**		**		**	C
Metacognitive	C37	**		**		**	C
	C38	**		**		**	C
	C40			*	W	*	
	C41	**	L				
	C42			**	W	**	
Affective	C43			**	W	**	
	D46					*	T
	D49	*	L			*	
	E51	*		*		**	C
	E53					*	T
	E54	**		**		**	C
	E55	**	L			*	
Total		17	7	17	7	18	12

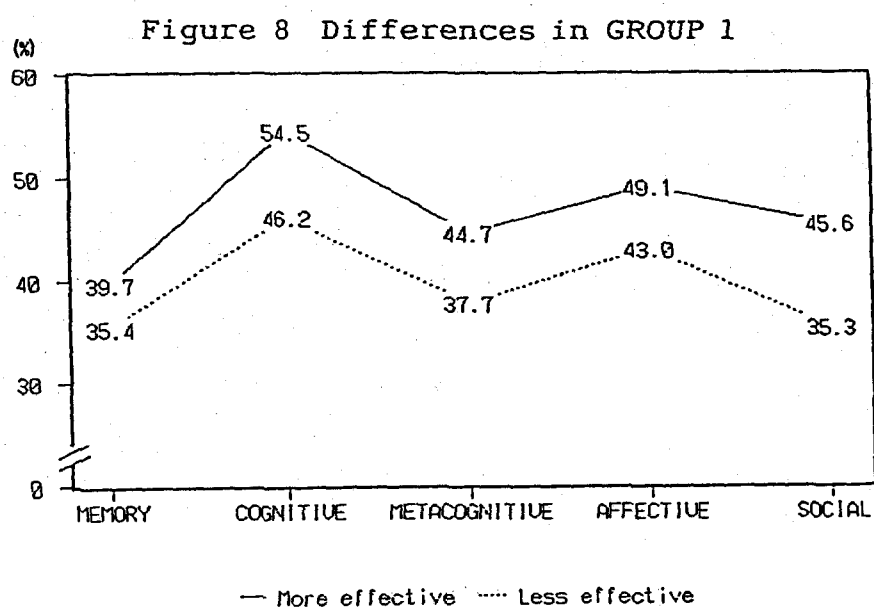
(\*\* = statistically significant below 0.1 level; \* = below .05 level; L = differences only in GROUP 1<sup>1</sup>; W = differences only in GROUP 2; T = differences only in GROUP 3; C = differences common to GROUP 1 and 2 and TOTAL)

#### 3.4.5 Differences in GROUP 1

First let us examine the differences in GROUP 1, which is

<sup>1</sup> In some cases (B17, C40, C42 and C43), differences overlap with TOTAL, as the total scores are the sum of listening and written test scores.

based on the scores of listening comprehension test. We could find statistically significant differences between more effective and less effective learners in cognitive ( $p < .01$ ) and social strategies ( $p < .01$ ) (see Appendix I). More effective learners were employing those categories of strategies more frequently than were those in less effective learners as Figure 8 indicates.



In terms of individual strategies, significant differences were seen in 17 questionnaire items (see Appendix J). Of those items, the next seven items were significant only in GROUP 1.

B14 To watch English language TV or movies spoken in English or to listen to English language radio programs ( $p < .05$ ): (LLS-15).

B16 To try to think in English ( $p < .05$ ): (LLS-15).

B17 To attend and participate in out-of-class events where English is spoken ( $p < .01$ ): (LLS-15)

B21 To read English books or magazines for pleasure

( $p < .01$ ): (LLS-15).<sup>1</sup>

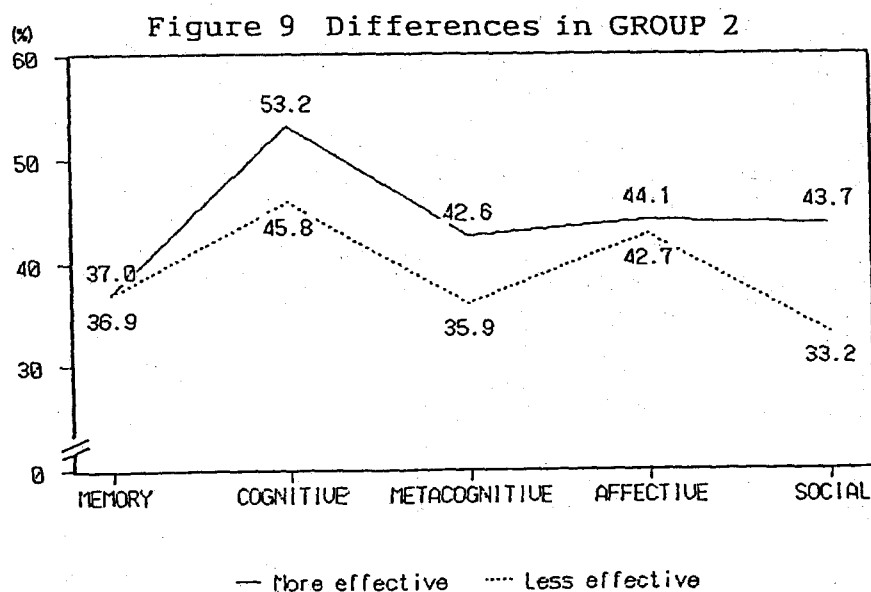
C41 To look for opportunities to listen to English as much as possible ( $p < .01$ ): (LLS-35).

D49 To talk to someone else about how I feel when I am learning English ( $p < .05$ ): (LLS-47).

E55 To try to learn about the culture of English speakers ( $p < .01$ ): (LLS-52).

### 3.4.6 Differences in GROUP 2

Secondly let us move our attention to GROUP 2, which is based on written test scores. Differences between more effective and less effective learners were significant in cognitive ( $p < .01$ ), metacognitive ( $p < .01$ ) and social strategies ( $p < .01$ ).



<sup>1</sup> More than one questionnaire items are presented by Oxford for the LLS which include variations of strategies.

More effective learners were employing those categories of strategies more frequently than were those in less effective learners as Figure 9 shows.

With regard to individual strategies, significant differences were observed in 17 questionnaire items (see Appendix K). Of those items, the next seven were significant only in GROUP 2.

A7 To use rhythm to remember new English words

( $p < .05$ ): (LLS-7).

B19 To skim an English passage first, then go back and read carefully ( $p < .01$ ): (LLS-16).

B20 To use reference materials such as dictionaries or reference books to help me use English ( $p < .01$ ): (LLS-17).

B23 To apply general rules (grammar) to new situations when reading and listening to English ( $p < .01$ ): (LLS-18).

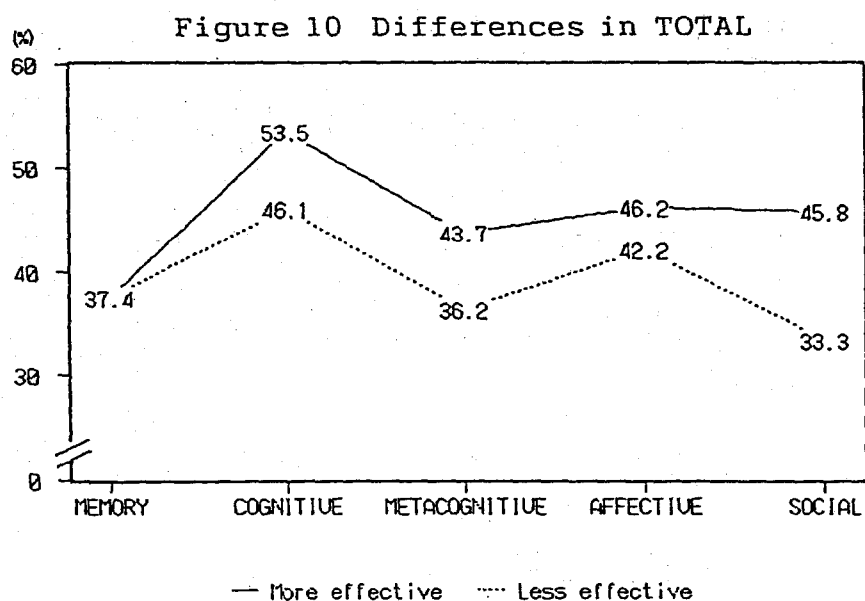
C40 To look for opportunities to read English as much as possible ( $p < .05$ ): (LLS-35)

C42 To try to notice errors of English and find out the reasons for them ( $p < .01$ ): (LLS-36).

C43 To learn from my mistakes in using English ( $p < .01$ ): (LLS-36).

### 3.4.7 Differences in TOTAL

Thirdly we will examine the differences in TOTAL, which is based on the total scores. Except for memory and affective strategies, differences between more effective and less effective learners were statistically significant in cognitive ( $p < .01$ ), metacognitive ( $p < .01$ ) and social strategies ( $p < .01$ ). More effective learners were employing those categories of strategies more frequently than were those in less effective learners as Figure 10 shows.



In terms of individual strategies, significant differences were found in 18 questionnaire items (see Appendix L). Of those items, the following two were significant only in TOTAL.

D46 To encourage myself to speak English even when I am afraid of making mistakes ( $p < .05$ ): (LLS-42).

E53 To work with language learners to practice, review or share information ( $p < .05$ ): (LLS-50).

And the following 10 items were statistically significant in both two GROUP 1 and 2 and the TOTAL.

B13 To use the English words and idioms in different combinations to make new sentences ( $p < .05$ ): (LLS-14).

B15 To talk like native English speakers ( $p < .01$ ): (LLS-12).

B18 To try to find patterns in English ( $p < .01$ ): (LLS-13).

B24 To find the meaning of a word by dividing it into parts which I understand ( $p < .01$ ): (LLS-19).

B30 To make summaries of information what I've heard or read in English ( $p < .01$ ): (LLS-24).

B31 To understand unfamiliar English words, I make guesses ( $p < .01$ ): (LLS-26).

C37 To arrange the physical environment to promote learning; for instance, to find a quiet, comfortable place to review ( $p < .01$ ): (LLS-31).

C38 To have clear goals for improving my English skills ( $p < .01$ ): (LLS-32).

E51 To ask the other person to slow down or say it again, if I do not understand something in English ( $p < .05$ ): (LLS-48).

E54 To ask questions in English ( $p < .01$ ): (LLS-51).

In the next chapter these results will be discussed in detail and be compared with previous studies.

## Chapter 4

### Discussion

#### 4.1 Frequencies of Strategy Uses

One of the important objectives of our descriptive study was to discover what kinds of LLS were frequently used and what kinds of LLS were not frequently employed by EFL junior high school students. We found that about half of the students (49.3%) reported using cognitive strategies on the average. While they used retrospective interviews as data collection, O'Malley, *et al.* (1985)<sup>1</sup> also found that cognitive strategies were the most popular LLS with EFL high school and college students. The main reason for this is that cognitive strategies are essential in learning a new language.<sup>2</sup> In terms of information processing, cognitive strategies refer to mental steps or operations, which have four functions as Wenden (1991)<sup>3</sup> states: select input; comprehend input; store input; retrieve input. In this respect it seems reasonable to suppose that cognitive strategies are the most directly involved in the target language and language acquisition.

For the individual strategies, we discovered that repetition was most frequently employed, which corresponds with

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<sup>1</sup> O'Malley, *et al.*, "Learning Strategy Applications" 566.

<sup>2</sup> Oxford, *Language Learning Strategies* 43.

<sup>3</sup> Wenden, *Learner Strategies for Learner Autonomy* 19-32.



the results of O'Malley, *et al.*<sup>1</sup> As they suggest, repetition or translation is easy to employ because it requires little conceptual processing.<sup>2</sup> Our results show that translation was also popular in the case of reading comprehension (69.9%), although it is not the case in listening comprehension (55.2%). Turning now to unpopular LLS, we could observe that 'Practicing naturalistically' and 'Seeking practice opportunities' were least frequently employed. 'Practicing naturalistically' can be defined as "practicing the new language in natural, realistic settings."<sup>3</sup> Oxford uses the latter LLS 'Seeking practice opportunities' in the sense of seeking out or creating opportunities to practice the new language in naturalistic situations.<sup>4</sup> In this respect, a distinct separation of those terms seems to be unnecessary; thus we use 'Practicing naturalistically' to cover 'Seeking practice opportunities'. Of the ten least frequently employed LLS, six of them were classified into 'Practicing naturalistically'. To sum up, 'Practicing naturalistically' was the most unpopular LLS with

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<sup>1</sup> J. Michael O'Malley, Anna Uhl Chamot, Gloria Stewner-Manzanares, Lisa Kupper, and Rocco P. Russo, "Learning Strategies Used by Beginning and Intermediate ESL Students," *Language Learning* 35 (1985): 32-41.

O'Malley, *et al.*, "Learning Strategy Applications" 566-68.

<sup>2</sup> O'Malley and Chamot, *Learning Strategies* 121.

<sup>3</sup> Oxford, *Language Learning Strategies* 45.

<sup>4</sup> Oxford, *Language Learning Strategies* 139.

the EFL junior high school students. Oxford, et al. (1989)<sup>1</sup> supports our findings. They made a descriptive study with EFL university students and found that the 'Practicing naturalistically' was the least frequently employed of all the strategies. This issue will be further discussed later. Let us now turn to the discussion of the difference between the Grades.

#### 4.2 Strategy Use by Grades 7 and 8

We could confirm the fact that years spent studying English will have an influence on the choice of LLS, as Oxford and Nyikos point out.<sup>1</sup> Chamot, et al. (1987)<sup>3</sup> [cited by Oxford, 1989] found that the use of cognitive strategies would decrease and the use of metacognitive strategies would increase as the foreign language level goes up. We could not, however, observe a significant increase of metacognitive strategies' use in Grade 8 as Chamot, et al. discovered. Instead we could find significant differences in memory strategies. In terms of individual LLS as well, we found the significantly frequent use

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<sup>1</sup> Rebecca Oxford and Martha Nyikos, "Variables Affecting Choice of Language Learning Strategies by University Students," *Modern Language Journal* 73 (1989): 293.

<sup>2</sup> Rebecca L. Oxford, "Use of Language Learning Strategies: A Synthesis of Studies with Implications for Strategy Training," *System* 17 (1989): 236-37.

<sup>3</sup> Anna Uhl Chamot, O'Malley, J. Michael, Lisa Kupper and M.V. Impink-Hernandes, *A Study of Learning Strategies in Foreign Language Instruction: First Year Report* (Rosslyn, VA: InterAmerica Research Associates, 1987).

of 'Placing new words into a context' (memory strategies) by Grade 7 students. On the other hand, Grade 8 students were marked by 'Recognizing and using formulas and patterns'. It seems reasonable to suppose that learners rely too much on memory in the beginning phase of learning English. As for Grade 8 students, Anderson (1985) [cited by O'Malley and Chamot, 1990] acutely suggests that "experts learn to perceive recurring patterns in a problem and to link their solution to their patterns."<sup>1</sup> In other words, we may say that students are rather easily able to detect the patterns and utilize them as they come to know the nature of learning English and get accustomed to English.

#### 4.3 Differences Between Males and Females

Sex differences in strategy use were far greater than first thought. Compared with males, females showed significantly more frequent use of strategies in all categories of LLS as well as all 25 questionnaire items which were found to be significantly different. Oxford and Nyikos (1989)<sup>1</sup> discovered females' frequent use of social strategies like 'Asking for clarification or verification' or 'Asking for correction' by using former versions of SILL. In another study, Ehrman and

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<sup>1</sup> John R. Anderson, *Cognitive Psychology and its implications* 2nd ed. (New York: Freeman, 1985).

<sup>1</sup> Oxford and Nyikos 291-300.

Oxford (1988)<sup>1</sup> also found that the females were employing LLS more frequently in 'Practicing naturalistically' and Metacognitive strategies than males. Interestingly, females have consistently showed greater use of LLS than males in every study, including ours.

Oxford, *et al.* (1988)<sup>1</sup> suggests women's social orientation may be responsible for this phenomenon, which means that women are by nature more directed toward interpersonal relationships and more cooperative than men. In our study the most remarkable characteristics were observed in 'writing diaries, poems or messages in English' (=B22) (Practicing naturalistically), which might not be welcomed by majority of males, especially in junior high school level. We may assume that females have some special preferences to LLS or language behavior. However it leaves much room for a variety of explanations, as only little research exists.

Let us turn now to the discussion of effective strategies specific to tasks like listening, which is also one of our major research questions.

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<sup>1</sup> Madeline Ehrman and Rebecca Oxford, "Effects of Sex Differences, Career Choice, and Psychological Type on Adult Language Learning Strategies," *The Modern Language Journal* 72 (1988): 253-65.

<sup>1</sup> Rebecca Oxford, Martha Nyikos, and Madeline Ehrman, "Vive la Difference? Reflections on Sex Differences in Use of Language Learning Strategies," *Foreign Language Annals* 21 (1988): 321-29.

#### 4.4 Strategy Use by Type of Task

In chapter 3, we observed various differences of strategy use between more effective and less effective learners in GROUP 1 and 2. Although they revealed effective strategies relating to listening and written tests, it is still obscure whether they are definitely associated with tasks like listening comprehension.

Let us now look more carefully into the distribution of more effective and less effective learners in GROUP 1 and 2.

Table 4 Distribution of Learners in GROUP 1 and 2

		G R O U P 1				
		Level	Top (M)	Middle	Bottom(L)	Total
G R O U P 2	Top (M)		92	52	14	(158)
	Middle		42	67	50	(159)
	Bottom(L)		24	40	94	(158)
	Total		(158)	(159)	(158)	(475)

(M = more effective learners; L = less effective learners)

As Table 4 indicates, the number of more effective learners in Group 1, for example, is 158. Of them ninety-two learners are at the same time more effective learners in GROUP 2, which occupies 58.2% (92/158) of them. The same is true with less effective learners. That is, 59.4% (94/158) of less effective learners in GROUP 1 are also the less effective learners in

GROUP 2. These facts suggest the possibility that the effective strategies identified to be specific to listening and written tests might be common to both GROUP 1 and 2.

We will compare the following two groups in order to determine LLS which are more specific to tasks, in addition to the results obtained in Chapter 3:

(1) GROUP 1a (24 subjects): learners who were judged as more effective in listening (GROUP 1), though less effective in written test (GROUP 2).

(2) GROUP 2a (14 subjects): learners who were judged as more effective in written tests (GROUP 2), though less effective in listening (GROUP 1).

In the next section we will discuss the differences between GROUP 1a and 2a as well as the results identified in Chapter 3.

#### 4.4.1 Effective LLS Specific to Listening

In terms of listening specific strategies, we could observe significant differences in seven questionnaire items in Chapter 3. We can classify them into the following three learning strategy clusters:

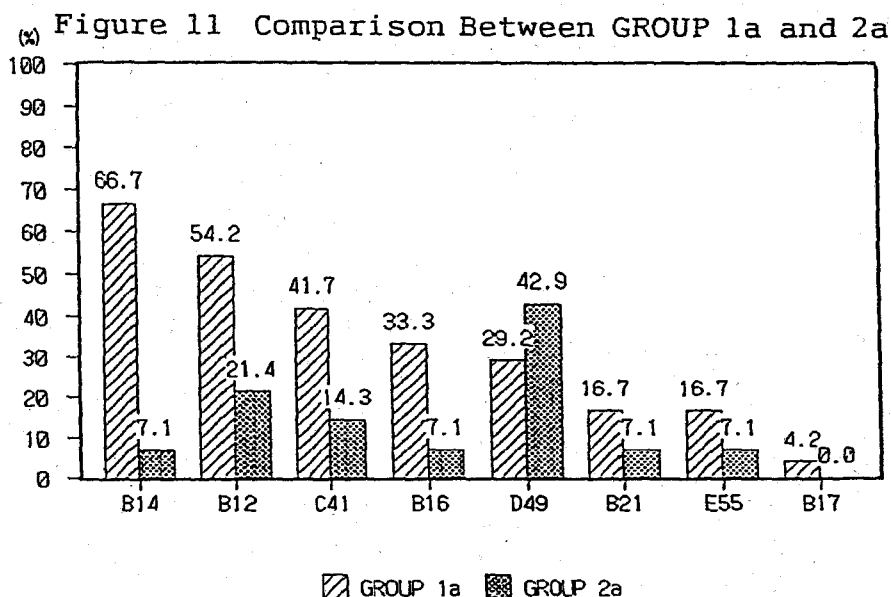
(1) Practicing naturalistically (LLS-15): B14, B16, B17, B21, C41.

(2) Discussing your feelings with someone else (LLS-47): D49.

(3) Developing cultural understanding (LLS-52): E55.

On the other hand, Figure 12 indicates differences between GROUP 1a and 2a. Significant differences were seen only in B14 as a result of MANOVA (below .01 level) (see Appendix M).

As Figure 11 reveals, the learners who reported using B14 in GROUP 1a was 66.7%, whereas the number was only 7.1% in GROUP 2a.



The same thing can be said in C41 and B16: 41.7% in GROUP 1a, 14.3% in GROUP 2a (C41); 33.3% in GROUP 1a, 7.1% in GROUP 2a (B16), although we could find no statistical significance. Taking the results of Chapter 3 into account, these facts make it clear that the first cluster 'Practicing naturalistically' like B14 (possibly with C41 and B16 as well), are the crucial LLS for listening comprehension. In other words, it is especially essential to increase the opportunities and quantities to listen to English through English language radio

or TV programs (cf. Krashen (1982)<sup>1</sup>). Besides we must not overlook the fact that these GROUP 1a learners reported to employ these LLS outside the English lessons at school. From the GROUP 2a learners' point of view, it seems reasonable to suppose that their poor performance only in listening comprehension test is due to the fact that they have too limited practice to listen to English.

With respect to other clusters (2) and (3), it is unsure whether they are really specific LLS to listening; differences between GROUP 1a and 2a are small, and some are converse, and none of them are statistically significant.

On the other hand, B12 ('Reading aloud') was not observed to be significant LLS in Chapter 3, although here half of the GROUP 1a learners employed it and the difference between GROUP 1a and 2a was appealingly big (32.7%). Thus 'Reading aloud' is a very familiar strategy in junior high school students and assumed to be helpful, although we cannot conclude it to be specially useful in listening. This issue needs further descriptive research and consideration.

#### 4.4.2 Effective LLS Specific to Written Test

In terms of specific LLS to written test, seven questionnaire items were observed to be significant in Chapter

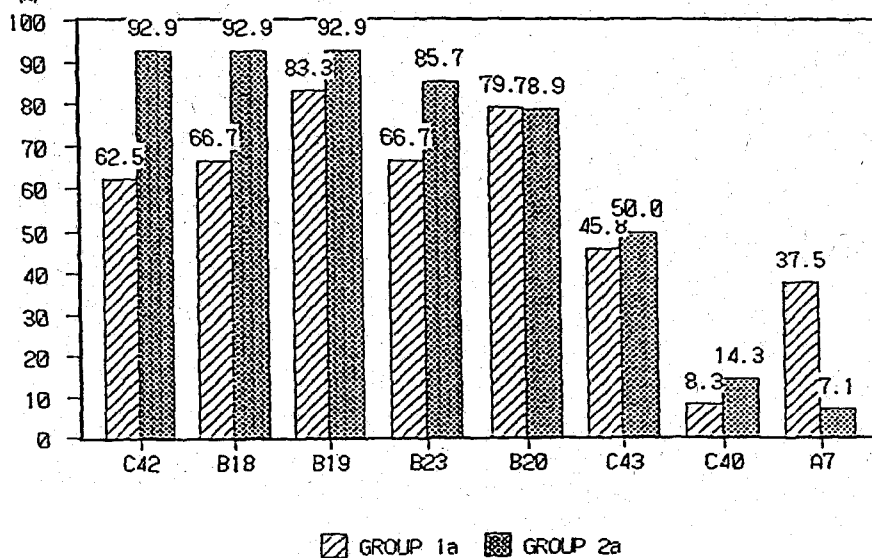
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<sup>1</sup> Krashen 20-30.



3. Of the seven items, only one was also statistically significant (below .05 level) by the comparison between GROUP 1a and 2a: To try to notice language errors and to find out the reasons for them (C42: Self-monitoring) (see Appendix M).

(%) Figure 12 Comparison Between GROUP 1a and 2a



The percentage of learners who reported using C42 in GROUP 2a was 92.9%, whereas the number was 62.5% in GROUP 1a. Figure 12 shows those differences.

Bialystok (1981)<sup>1</sup> found that 'Monitoring' had a significant effect on aural grammar task which needs attention to form, and that listening tasks were not greatly affected by monitoring. Our written test also includes tasks related to grammar which have same features of requiring attention to form. Furthermore written tests allow more sufficient time than aural or oral

<sup>1</sup> Bialystok 34.

task, as Krashen (1982)<sup>1</sup> suggests that time is another condition for monitoring work. Observation in these facts will show that self-monitoring is exactly the specific LLS to written test.

With respect to other six items identified in Chapter 3, they have not achieved statistical significance in the comparison between Group 1a and 2a. Interestingly, nevertheless, 'Reasoning deductively' (B23; LLS-19) and 'Getting the idea quickly' (B19; LLS-16) were found to be used by an extremely high proportion of GROUP 2a learners: 92.9% in B19; 85.7% in B23. 'Recognizing and using formulas and patterns' (B18; LLS-13) also had noticeably high use (92.9%), although it was commonly significant in every GROUP and TOTAL in the analyses in Chapter 3. We may assume that these three LLS are also rather specific for tasks included in written test.

In the next section we will discuss our last research question, that is, differences in the strategy use between more effective and less effective learners, which are common to every task.

#### 4.5 Effective LLS Common to Every Task

First let us look at the strategies which were identified

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<sup>1</sup> Krashen 15-20.

to be statistically significant only in TOTAL (based on the total scores) in Chapter 3. We could observe two LLS:

- (1) Taking risks wisely (D46: affective strategies)
- (2) Cooperating with others (E53: social strategies)

With regard to the first strategy, Rubin (1975)<sup>1</sup> indicates that the good language learner is willing to make mistakes in order to communicate and to learn. Naiman, et al. (1978)<sup>1</sup> also states that the good language learner will overcome inhibition to speak and be able to laugh at their own mistakes. We may say that this affective strategy is important especially for practicing for communication, although the influence might be indirect. The second strategy has importance as well for practicing for communication, as cooperating with others such as pair works or group activities are indispensable for communication.

Now let us turn to the ten LLS which achieved significant differences common to GROUP 1 and 2, and TOTAL in Chapter 3. Here, however, we shall confine our attention to strategies which relate to practicing, as "strategies for practicing are among the most important cognitive strategies"<sup>1</sup> and cognitive strategies are assumed to be most directly involved in language

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<sup>1</sup> Joan Rubin, "What the Good Language Learner Can Teach Us," *TESOL Quarterly* 9 (1975): 47.

<sup>1</sup> Naiman, et al. 14.

<sup>3</sup> Oxford, *Language Learning Strategies* 43.

learning.

Practicing strategies can be subdivided into five LLS, according to Oxford (1990)<sup>1</sup>: (1) Repeating, (2) Formally practicing with sounds and writing systems, (3) Recognizing and using formulas and patterns, (4) Recombining and (5) Practicing naturalistically. Bialystok (1981)<sup>2</sup> also argues about practicing and divides it into two types: formal practice and functional practice. Formal practice focuses on "the language code for the sake of mastering the rule system." Functional practice "occurs when the language learner increases his opportunity to use the language for communication such as going to movies, reading books or talking to native speakers."<sup>3</sup>

Oxford's strategies (1), (2) and (3) are included in formal practice and (5) is contained in functional practice. Remaining (4) is supposed to take an intermediate position between two strategies, as they are concerned with language forms as well as the content or meaning.

#### 4.5.1 Practice Strategies

Table 5 (see next page) indicates how more effective and less effective learners in each GROUP and TOTAL are employing

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<sup>1</sup> Oxford, *Language Learning Strategies* 43-47.

<sup>2</sup> Bialystok 25-28.

<sup>3</sup> Bialystok 25.

practice strategies.

We will see that less effective learners in each GROUP and TOTAL are employing some familiar practice strategies like repetition. Nevertheless, they stick to employing usual LLS and dare not to step forward using other LLS which are employed by more effective learners. We may say that this is exactly the reason why less effective learners remain ineffective despite the fact that they themselves believe they are studying hard.

Table 5 Differences in Practicing

Bialystok	Formal Practice						Intermediate	Functional Practice								
Oxford	1. Repetition		2. Formally		3. Pattern		4. Recombine	5. Naturalistically								
Q. Items	8	9	10	11	12	15	18	13	14	16	17	21	22	40	41	
GROUP 1 (M)	[no significance]		[no significance]		[no significance]		[no significance]	[no significance]						Δ	Δ	[no significance]
GROUP 2 (M)	[no significance]		[no significance]		[no significance]		[no significance]	[no significance]						Δ	Δ	Δ
TOTAL (M)	[no significance]		[no significance]		[no significance]		[no significance]	[no significance]						Δ	Δ	Δ
GROUP 1 (L)	[no significance]		[no significance]		[no significance]		[no significance]	[no significance]						Δ	Δ	[no significance]
GROUP 2 (L)	[no significance]		[no significance]		[no significance]		[no significance]	[no significance]						Δ	Δ	Δ
TOTAL (L)	[no significance]		[no significance]		[no significance]		[no significance]	[no significance]						Δ	Δ	Δ

( M = more effective learners, L = less effective learners;

[no significance] = no significance: both M & L employ frequently; [filled] = significantly employed;

[empty] = significantly unemployed; Δ = non-significantly unemployed: both M & L employ infrequently )

So far as strategies are concerned, their poor performance can be attributed not so much to how long they are learning as to what kind of strategies they employ.

On the other hand, more effective learners in each GROUP and

TOTAL are commonly employing the following three LLS in addition to familiar LLS like repetition.

(1) To talk like native English speakers (B15): This LLS refers to phonetic practice beyond the individual word level. For example, learners "record themselves so they hear and compare their own voices with native speaker's voice."<sup>1</sup> Although learners do not create any sentences by themselves, this LLS is indispensable for real communication. And we should notice that even less effective learners are also doing practice at the word level.

(2) Recognizing patterns (B18): This LLS refers to being aware of unanalyzed patterns like "It's time to ...."<sup>2</sup> It is convenient for comprehension and production.

(3) Recombining (B13): 'Recombining' can be defined as "constructing meaningful sentences or longer expressions by putting together known elements in new ways."<sup>3</sup> Learners start expressing themselves by filling the blanks of patterns (underlined part) with alternative words like "It's time to go to bed." Thus its role is to step forward for communication using patterns or formulas as an underpinning. In this sense, 'Recombining' and 'Recognizing patterns' should be used in

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<sup>1</sup> Oxford, *Language Learning Strategies* 72.

<sup>2</sup> Oxford, *Language Learning Strategies* 45.

<sup>3</sup> Oxford, *Language Learning Strategies* 74.

combination.

It follows from what has been said that the difference between more effective and less effective learners in strategy use is that more effective learners are doing practice for communication in addition to familiar formal practice. In other words, they are preparing or prepared for communication using formal practice or intermediate strategies like 'Recombining'.

#### 4.5.2 Further Discussion

Finally, let us look at practicing strategies from another perspective. Wenden (1991)<sup>1</sup> argues that the major purpose of employing practice strategies is to facilitate the development of automatic and appropriate retrieval of information, which is evidence of acquisition. By using formal practice, learners will become able to retrieve specific words, patterns, formulas or grammatical items separately. On the other hand, learners will become able to recall them quickly and automatically in accordance with the conditions of communication by employing functional practice. Therefore we may say that functional practice is absolutely necessary for communication and that formal practice should be regarded as a basis for functional practice.

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<sup>1</sup> Wenden, *Learner Strategies for Learner Autonomy* 21-23.

In the descriptive study for ESL high school students in Canada, Bialystok (1981)<sup>1</sup> found that the functional practice had a crucial role in language learning. Huang and Van Naerssen (1987)<sup>2</sup> also supports her findings in an EFL context in China. With respect to the role of formal practice, Bialystok states that "additional formal practice after a particular point no longer facilitates performance."<sup>3</sup> This is just what we have discovered as to less effective learners. Less effective learners in every GROUP and TOTAL continued to employ formal practice in greater amounts without this additional effort improving performance. To sum up, formal practice is necessary, but it has limitations as to its usefulness, so that after some formal practice, functional practice should be employed or encouraged.

It follows that less effective learners should shift their use of practicing strategy to a functional direction like 'Recombining'.

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<sup>1</sup> Bialystok 24-35.

<sup>2</sup> Xiao-Hua Huang and Margaret Van Naerssen, "Learning Strategies for Oral Communication," *Applied Linguistics* 8 (1987): 287-307.

<sup>3</sup> Bialystok 33.



## Chapter 5

### Conclusion

In this paper we have discussed various differences in using learning strategies. Especially locating differences between effective and less effective learners has been our most central and biggest research questions. We can conclude, from what has been discussed in previous chapters, that more effective learners are employing a wider variety of LLS in combination. Furthermore, they are practicing for communication using functional practices. On the other hand, repertoires of less effective learners are smaller and limited to familiar strategies of formal practice. They continue to use them and do not try to step forward to other strategies. This is the decisive difference between more effective and less effective learners. We can assume that the poor performances of less effective learners might be due to their not having and using an appropriate repertoire of LLS in a more functional way.

However we do not yet know why less effective learners do not use effective strategies like 'Recombining', which has been identified in this study. We can imagine two possibilities: one is that they just don't know the efficiency of such strategies; the other is that they cannot use it although they are trying to do so. These are, however, the questions to be solved by subsequent research, that is, strategy training

studies following after our descriptive study.

The implications of our strategy research for English education will, of course, lie in strategy training in which successful LLS will be taught for less effective learners to help them learn English more efficiently. Furthermore, we can take an innovative view of learning and teaching English in an EFL context. For teachers as well as learners, the source of difficulties of learning English seems very complicated as there seem to be too many problems to be solved; most of the teachers are trying to get over them by improving their teaching methods looking at the reactions of the students. We believe their attitude is fundamentally right. But what is learnt by the learner may not be the same as what is taught by the teacher.<sup>1</sup> By grasping LLS which learners are actually engaged, teachers can tap what is going on and what is not happening on the learners' side. Thus, teachers can look at the source of difficulties from the view of LLS which are actually engaged by the learners. And teachers can make use of LLS as teaching strategies. That is, strategy training can be integrated into usual English classes and effective strategies will be presented with the students intentionally by their teachers. Thus, teachers "will be able to incorporate learning

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<sup>1</sup> Rod Ellis, *Second Language Acquisition & Language Pedagogy* (Clevedon: Multilingual Matters, 1991) 118.

strategies into teaching methodologies."<sup>1</sup> And by assessing the students' current LLS using SILL, for instance, it would be possible to instruct LLS in accordance with individual learners' use of LLS. This may be a more effective way of improving their teaching methodologies.

As we mentioned in Chapter 1, we can observe a growing number of students who have despaired and are dropping out of the English class. And everyone is at a loss where to start and how to break the deadlock. However all learners still have hopes and dreams of being able to speak English to communicate with foreigners. It might be that learners just do not know how to learn English, or how to be more effective learners.

The most important thing is not to embarrass learners by giving them a whole set of strategies, but to lead them forward, step by step, by giving appropriate and effective LLS according to individual differences.

LLS can give us insight into the possibility of how to be efficient in learning and also teaching English. LLS can give us a starting point and we, teachers and learners, can start from language learning strategies to be more effective learners and more effective teachers. Thus in this sense we teachers may have to be more effective learners first.

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<sup>1</sup> Rubin, "What the Good Language Learner" 50.

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APPENDIX A

Excerpts from the STEP test (Grade 7; 5th Grade test).  
 <written test>

1 次の(1)から(5)までの( )に入れるのに最も適切なものを、1,2,3,4の中から一つずつ選び、その番号のマーク欄をぬりつぶしなさい。

- (1) I am ( ) TV.  
 1 looking    2 reading    3 watching    4 doing
- (2) ( ) time do you get up every morning?  
 1 When    2 How    3 Whose    4 What
- (3) ( ) is the second month of the year.  
 1 January    2 February    3 March    4 April
- (4) My mother is a doctor. She works at a ( ).  
 1 hospital    2 station    3 museum    4 post office
- (5) “( ) are you going?”  
 “To the park.”  
 1 What    2 Who    3 Where    4 Why

5 次の会話文を読んで、下記の(1)と(2)の問いに対する答えとして最も適切なものを、1,2,3,4の中から一つずつ選び、その番号のマーク欄をぬりつぶしなさい。

Tomoko Meets Nancy

Tomoko: Oh, hi, Nancy. How are you?  
 Nancy: Fine, thank you. And you?  
 Tomoko: Fine, too, thank you.  
 Nancy: And how's your sister Junko?  
 Tomoko: She's fine. She is living in New York now. She is studying English there.  
 Nancy: Oh, that's my hometown. Is she a college student?  
 Tomoko: Yes, she is. She likes English and studies it very hard every day.  
 Nancy: Do you like English, too?  
 Tomoko: Yes, but I like history better.  
 Nancy: Really? I like it, too. Let's talk about history sometime.  
 Tomoko: That's a good idea.

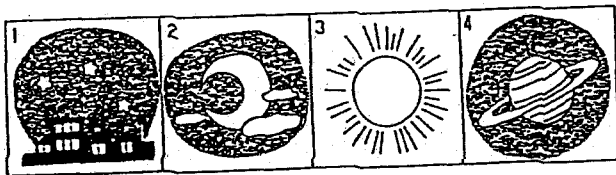
- (1) Where is Junko living now?  
 1 She is studying English.  
 2 She is living in New York.  
 3 She is going to college.  
 4 She is living in Tomoko's hometown.
- (2) Is Junko studying English or history in New York?  
 1 She is studying history there.  
 2 Yes, she is.  
 3 No, she isn't.  
 4 She is studying English there.

<listening comprehension test>

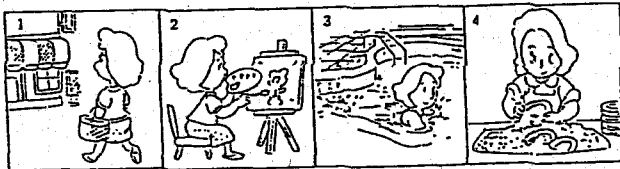
<第3部> (No. 11~No. 15)

- (1) 英文が二語放送される。  
 (2) その英文の内容を最もよく表している絵を、1,2,3,4の中から一つ選ぶ。

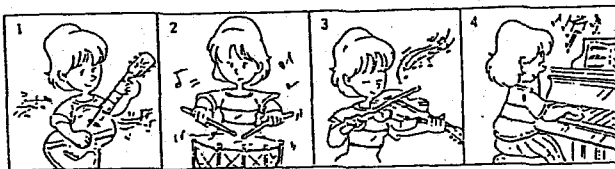
<例題3>



Question No. 11



Question No. 12



<第4部> (No. 16~No. 18)

- (1) 絵についての質問が三題、それぞれ二語ずつ放送される。  
 (2) その質問の答えとして最も適切なものを、1,2,3,4の中から一つずつ選ぶ。



Question No. 16

- 1 In the river.  
 2 On the bridge.  
 3 Under a tree.  
 4 Near the house.

Question No. 17

- 1 Three.  
 2 Four.  
 3 Five.  
 4 Six.

Question No. 18

- 1 Yes, she is.  
 2 She is running.  
 3 No, she isn't.  
 4 She is looking at the birds.

Excerpts from the STEP test (Grade 8; 4th Grade test).  
<written test>

3 次の(1)から(5)までの( )に入れるのに最も適切なものを、1,2,3,4の中から一つずつ選び、その番号のマーク欄をぬりつぶさない。

- (1) My mother is cooking something in the ( ) now.  
1 bathroom    2 kitchen    3 bedroom    4 living room
- (2) A ( ) has seven days.  
1 month    2 year    3 week    4 minute
- (3) Mr. Brown has two ( ). One is a girl and the other a boy.  
1 sons    2 brothers    3 daughters    4 children
- (4) I was very ( ), so I went to bed early.  
1 strong    2 tired    3 big    4 pretty
- (5) Sam can buy a new computer because he has ( ) money.  
1 lots of    2 little    3 a few    4 no

5 次の(1)から(5)までの( )に入れるのに最も適切なものを、1,2,3,4の中から一つずつ選び、その番号のマーク欄をぬりつぶさない。

- (1) Look at the cars in this picture. ( ) are beautiful.  
1 That    2 It    3 They    4 Their
- (2) Masao practices karate a lot, but Ken ( ).  
1 does    2 doesn't    3 is    4 isn't
- (3) Bob and Helen ( ) on the same team last year.  
1 was    2 are    3 is    4 were
- (4) What time ( ) you eat breakfast this morning?  
1 were    2 did    3 are    4 does
- (5) This letter is ( ) in English.  
1 wrote    2 to write    3 written    4 writing

7 次の(1)から(5)までの日本語の語彙を訳すのに、( )の中の1,2,3,4の語または言葉をかえて、( )の中で1番目と3番目にくるものの番号のマーク欄をぬりつぶさない。ただし、( )の字では文頭にくるべき最も小文字で示してあります。

- (1) 辞書を何冊持っていますか。  
(1 do    2 many    3 dictionaries    4 how) you have?
- (2) あなたは何をするつもりですか。  
What (1 going    2 to    3 you    4 are) do tomorrow?
- (3) そのころ、私は毎日バイオリンを練習していました。  
I (1 practicing    2 was    3 violin    4 the) every day at that time
- (4) トムはたった今、部屋から出て行きました。  
Tom (1 the room    2 of    3 out    4 walked) just now.
- (5) 先生は、私たちにおもしろい本をくださいました。  
Our teacher gave (1 books    2 interesting    3 us    4 some).

9 次の手紙文を読んで、下記の(1)から(5)までの問いに対する答えとして最も適切なものを、1,2,3,4の中から一つずつ選び、その番号のマーク欄をぬりつぶさない。

Dear Betty,

April 28, 19

Thank you very much for your letter and pictures.  
It's spring here in Japan now. It's warm and everything looks green. I went to the ocean three days ago. My mother usually gets up at six in the morning, but that morning she got up one hour earlier. My mother and sis made lunch for us.  
We drove to the ocean. There were many other cars on the road, so father had to drive very slowly. When we got to the ocean, we were very tired. But we walked along the ocean and played volleyball. We had a good time there. On our way home, we ate dinner at a restaurant near our house. I arrived home at eight in the evening.  
I bought a small present for you at a store near the ocean. I'll send it to you later.  
I hope to hear from you soon.

Your friend,

Chieko

- (1) When did Chieko go to the ocean with her family?  
1 On April 25.    2 On April 26.  
3 On April 27.    4 On April 28.
- (2) What time does her mother usually get up in the morning?  
1 At four.    2 At five.  
3 At six.    4 At seven.
- (3) Who made lunch for Chieko?  
1 Chieko's parents did.    2 Chieko's father and sister  
3 Chieko's mother and sister did.    4 Chieko and her sister did
- (4) Why did Chieko's father drive so slowly?  
1 Because there were many other cars on the road.  
2 Because he had to buy Betty a present.  
3 Because he wanted to play volleyball.  
4 Because he wanted to get to the ocean soon.
- (5) Where did Chieko and her family eat dinner?  
1 At home.    2 At a restaurant near their  
3 Near the ocean.    4 At a store near their house

<listening comprehension test>

4級ヒアリングテストについて

- 1 このテストは、筆記試験終了後に放送で行われます。
- 2 第1部 (No. 1~No. 5) と第2部 (No. 6~No. 10) のそれぞれのテストの前に、例題が放送されます。
- 3 試験の方法は以下の通りです。  
(1) まず英文 (第1部では文段、第2部では会話) が放送され、その内容についての質問が出される。この英文と質問はもう一度くり返される。  
(2) その質問の答えとして最も適切なものを、1,2,3,4の中から一つずつ選び、その番号のマーク欄をぬりつぶす。
- 4 No. 10のあと15秒すると試験終了の合図がありますので、筆記用具を置いてください。なお、試験監督者が「解答」の指示を出すまでは話を聴いてください。

<第1部>

- <例題 1> 1 Japan.  
2 New York.  
3 Fukuoka city.  
4 Two years ago.

- No. 1 1 The basketball team.  
2 The same school.  
3 They are both members.  
4 They go to the same school.

- No. 2 1 Hiroshima Station.  
2 Tokyo Station.  
3 Last Friday.  
4 Their trip to Hiroshima.

<第2部>

- <例題 2> 1 Yes, he is.  
2 No, he doesn't.  
3 Yes, he does.  
4 No, he isn't.

- No. 6 1 Two.  
2 Three.  
3 Four.  
4 Five.

- No. 7 1 To the right.  
2 To the corner.  
3 To the left.  
4 To the hospital.

## APPENDIX B

The questionnaire presented for the students was given only in Japanese. English translation is added for the appendix.

英語学習についての調査

この調査は、英検の成績とは関係ありません。英語教育をよくしようとするための調査です。思った通りの事をていねいに、そのまま答えて下さい。回答の方法は、各質問に対して次の要領で1～4の記号で、回答用紙に答えて下さい。

- 1 = 全く当てはまらない。(Never true of me.)  
 2 = どちらかといえば、当てはまらない。(Seldom true of me)  
 3 = どちらかといえば、当てはまる。(Somewhat true of me)  
 4 = よく当てはまる。(Always true of me)

練習 では、実際に始める前に、2つだけ練習をしてみましょう。

- 例1. ラーメンは、好きだ。  
 例2. 毎朝、歯をみがく。

\*なお、先生が、1つ、1つ質問を読んでくださいますから、自分で勝手に先へ進まないよう気を付けて下さい。では、はじめます。

## PART A

1. 新しい単語をおぼえる時に、単語をグループに分けておぼえる。  
 たとえば、家族に関する単語 (father, mother, brother, sister,...) や体の部分に関する単語 (eye, nose, mouth, head, hair, hand,...) のように整理して。  
 I place the new words in a group with other words that are similar in some way.
2. 新しい単語をおぼえる時に、すでに習って、知っている単語と結び付けておぼえる。たとえば、woman (女の人) という単語を覚えるのに、man (男の人) という単語と結びつけておぼえる。  
 I create associations between new materials and what I already know.
3. 新しい単語や熟語 (a lot of ~, get upなど) は、文と一緒に覚える。  
 I use new words in a sentence so I can remember them.
4. 新しい単語をおぼえる時に、日本語と英語を結びつけるのではなく、単語をそのイメージや絵、情景と結び付けて覚える。  
 I connect the sound of a new English word and an image or picture of the word to help me remember the word.
5. 習った単語は、3日後、4日後というふうに何度もくりかえし練習しておぼえる。  
 I schedule my reviewing so that the review sessions are initially close together in time and gradually become more widely spread apart.
6. 新しい単語をおぼえる時に、単語カードを使って覚える。  
 I use flashcards to remember new English words.
7. 新しい単語をおぼえる時に、moon, noon, soon ; lunch, bench, French のようにリズムカルに覚える。  
 I use rhythm to remember new English words.

## PART B

8. 新しい英単語や熟語をおぼえるとき、何度も書いて覚える。  
 I write new English words and idioms several times.
9. 新しい英単語や熟語をおぼえるとき、声に出して覚える。  
 I say new English words and idioms several times.
10. 英文は、暗唱 (おぼえる) するようにしている。  
 I memorize the English sentences.
11. 家庭学習 (塾は、のぞく) の中で、正しく発音できるように、単語の発音練習をする。

- I practice pronouncing English words correctly.
12. 家庭学習（塾は、のぞく）の中で、教科書を何度も、音読（声に出して練習する事を）する。  
I read aloud English textbooks.
13. 家庭学習（塾は、のぞく）の中で、習った単語や熟語で文を作ったり、言ったりする。  
I use English words and idioms in different combinations to make new sentences.
14. 英語で話されるテレビ、ラジオの番組（テレビやラジオの英語講座もふくむ）や、映画を見る。  
I watch English language TV or movies spoken in English or listen to English language radio program.
15. 英語を母国語としている人（たとえば、アメリカ人、イギリス人）の話し方をまねるようにしている。  
I try to talk like native English speakers.
16. 日常生活の中で、英語で考えるようにしている。  
I try to think in English.
17. 授業以外で、英語が話されるような行事や活動（E S Sクラブ、英会話学校など、塾はのぞく）に参加している。  
I attend and participate in out-of-class events where English is spoken.
18. 英語の中で、There is a ~==~がある、How many ~==~いくつ、のように決まった表現を見つけるようにしている。  
I try to find patterns in English.
19. 英語の文章を読むとき、最初にざっと読んで大体何が書いてあるかつかんで、次に注意深く読む。  
I skim an English passage first, then go back and read carefully.
20. 参考書や辞書を家庭での英語の学習の中で使うようにしている。  
I use reference materials such as dictionaries or reference books to help me use English.
21. 自分の楽しみや娯楽のために英語の本や雑誌を読む。  
I read English books or magazines for pleasure.
22. 英語で、日記や詩、メッセージを書く。  
I write diaries, poems or messages in English.
23. 英語を読んだり聞いたりするときには、Do~?だから疑問文（1年生）、Ken is taller than Taro. だから比較級（2年生）など文法のルールを活用して文の意味を理解するようにしている。  
I apply general rules (grammar) to new situations when reading and listening to English.
24. 'classroom' = 'class' + 'room' だから「教室」、のように英語の意味を理解するのに、すでに知っているいくつかの部分に分けて考える。  
I find the meaning of a word by dividing the word into parts which I understand.
25. 英語を聞いたり読んだりするとき、日本語と似ている（または、日本語になっている）英語を利用する。たとえば、cake（ケイク）→ケーキ、notebook（ノートブック）→ノートなど。  
I look for words in Japanese, that are similar to new words in English.
26. 文の作りや語句の並び方など、英語と日本語の違いや、似ている所に気をつけるようにしている。  
I look for similarities and contrasts between English and Japanese.
27. 文（文章）を読む時は、一つ一つの単語を順番に日本語に訳して理解するようにしている。  
I try to understand when I read without translating it word-for-word into Japanese.
28. 文（文章）を聞く時は、一つ一つの単語を順番に日本語に訳して理解するようにしている。  
I try to understand what I have heard without translating it word-for-word into Japanese.
29. 英語を聞くとき、メモを取るようにしている。  
I take notes when I listen to English.
30. 英語で聞いたり読んだりした内容は、大体どんな事を言っていたかを要約する（まとめる）ようにしている。  
I make summaries of information that I heard or read in English.
31. 辞書がない時に、知らない英単語がでてきたら、前後の関係などからその意味を推測する。  
To understand unfamiliar English words, I make guesses.

## PART C

32. 英語を聞いているとき、何を言おうとしているのかに集中し、関係のないところは、無視する。  
When someone is speaking English, I try to concentrate on what the person is saying and unrelated topics out of my mind.
33. どうしたらもっと英語ができるようになるか、よい英語の学習方法を発見しようと、本や雑誌を見たり、友達や先生と話したりする。

- I try to find out how to be a better learner of English.
34. 英語を勉強する十分な時間がとれるようにスケジュールを組む。  
I plan my schedule so I will have enough time to study English.
35. 週ごとに、またその日にここまでは英語の勉強をしようと、計画を立てる。  
I plan what I am going to accomplish in learning English each day or each week.
36. テスト前でなくとも、英語の勉強を計画的にするようにしている。  
I arrange my schedule to study and practice English consistently, not just when there is the pressure of a test.
37. 能率よく勉強できる場所で英語を学習するようにしている。  
I arrange my physical environment to promote learning; for instance, I find a quiet, comfortable place to review.
38. 何のために英語を勉強するのか、はっきりとした目標がある。  
I have clear goals for improving my English skills.
39. 英語で話しが出来る人（たとえば、AETの先生、近くに住んでいる外国の人、アメリカなどからの観光客）を探して英語を話すようにしている。  
I look for people I can talk to in English.
40. 英字新聞など、英語を読めるような、できるだけ多くの機会を探すようにしている。  
I look for opportunities to read English as much as possible.
41. 自宅で英語のカセットなど、英語を聞けるように、できるだけ多くの機会を探すようにしている。  
I look for opportunities to listen to English as much as possible.
42. 自分の英語の誤りに気をつけ、なぜ間違えたのか考えるようにしている。  
I try to notice my language errors and find out the reasons for them.
43. 英語が上手になるように、自分の英語の誤りから学び、それを生かすようにしている。  
I learn from my mistakes in using English.
44. 英語の力が伸びたかどうか考える。  
I think about my progress in learning English.

#### PART D

45. 英語を話すとき、リラックスするようにしている。  
I try to relax whenever I feel afraid of using English.
46. 誤りをするかもしれないけれど、思い切って英語を話すように自分自身を励ます。  
I encourage myself to speak English even when I am afraid of making mistakes.
47. 英語でうまくいった時（うまく話せた時、テストで良い点数が取れたとき、英検に合格したときなど）には、自分自身を心の中でほめるようにしている。  
I give myself a reward or treat when I do well in English.
48. 英語を話したり聞いたりしているとき、自分自身が緊張したり固くなっていないか気をつける。  
I notice if I am tense or nervous when I am studying or using English.
49. 英語を学習している時にうれしく感じた事やつらく感じた事を、誰かに話す。  
I talk to someone else about how I feel when I am learning English.

#### PART E

50. 英語の授業や自分で学習する中で出てくる疑問点や分からないところは、そのままにしないで、友達や先生にたずねて解決するようにしている。  
I ask other people to clarify what I could not understand or verify what I have understood.
51. 英語が理解できなかったとき、ゆっくり言ってもらったり、もう一度言ってもらうように頼む。  
If I do not understand something in English, I ask the other person to slow down or say again.
52. 英語を読んだり話しているとき、発音などの誤りを直してもらう。  
I ask other people to correct my pronunciation.
53. 授業中でも休み時間でもいいが、友達どうしや、グループで英語の勉強をする。  
I work with language learners to practice, review or share information.
54. AETや外国人の先生の場合に、英語で質問をする。  
I ask questions in English.
55. 英語を話す人々の文化を学ぼうとしている。  
I try to learn about the culture of English speakers.

回答用紙

中学校	年 組	氏名	男・女	
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<u>練習</u>	<u>Part A</u>	<u>Part B</u>	<u>Part C</u>	<u>Part D</u>	
例1. _____	1. _____	8. _____	20. _____	32. _____	45. _____
例2. _____	2. _____	9. _____	21. _____	33. _____	46. _____
	3. _____	10. _____	22. _____	34. _____	47. _____
	4. _____	11. _____	23. _____	36. _____	48. _____
	5. _____	12. _____	24. _____	37. _____	49. _____
	6. _____	13. _____	25. _____	38. _____	
	7. _____	14. _____	26. _____	39. _____	<u>Part E</u>
		15. _____	27. _____	40. _____	50. _____
		16. _____	28. _____	41. _____	51. _____
		17. _____	29. _____	42. _____	52. _____
		18. _____	30. _____	43. _____	53. _____
		19. _____	31. _____	44. _____	54. _____
					55. _____

～ご協力ありがとうございました～

APPENDIX C

\*\*\* ANALYSIS OF VARIANCE \*\*\*

GROUP 1 (based on scores of listening comprehension test)

Source	D. F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	2	2272.7413	1136.3707	103.5112	.0000
Within Groups	472	5181.7302	10.9782		
Total	474	7454.4716			

Multiple Range Test

LSD Procedure Ranges for the .01 level - 3.66 3.66

The ranges above are table ranges.

The value actually compared with Mean(J)-Mean(I) is..

$$2.3429 * \text{Range} * \sqrt{1/N(I) + 1/N(J)}$$

(\*) Denotes pairs of groups significantly different at the .01 level

G G G  
r r r  
p p p

Mean	Group		
12.3291	Grp 3 (=Less effective learners)		3 2 1
15.4717	Grp 2 (=Middle group)	*	
17.6646	Grp 1 (=More effective learners)	**	

GROUP 2 (based on scores of written test)

Source	D. F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	2	7897.4980	3948.7490	28.4060	.0000
Within Groups	472	65613.2094	139.0110		
Total	474	73510.7074			

The value actually compared with Mean(J)-Mean(I) is..

$$8.3370 * \text{Range} * \sqrt{1/N(I) + 1/N(J)}$$

(\*) Denotes pairs of groups significantly different at the .01 level

G G G  
r r r  
p p p

Mean	Group		
14.3608	Grp 3 (=Less effective learners)		3 2 1
19.7610	Grp 2 (=Middle group)	*	
24.3481	Grp 1 (=More effective learners)	**	

TOTAL (based on total scores)

Source	D. F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	2	15209.0680	7604.5340	92.9652	.0000
Within Groups	472	38609.5131	81.7998		
Total	474	53818.5811			

The value actually compared with Mean(J)-Mean(I) is..

$$6.3953 * \text{Range} * \sqrt{1/N(I) + 1/N(J)}$$

(\*) Denotes pairs of groups significantly different at the .01 level

G G G  
r r r  
p p p

Mean	Group		
27.5759	Grp 3 (=Less effective learners)		3 2 1
34.9182	Grp 2 (=Middle group)	*	
41.4430	Grp 1 (=More effective learners)	**	

## APPENDIX D

7:

Mean scores of Grades 7 and 8 students in listening comprehension, written tests and the total score.

## 1. Grade 7

	Top	Middle	Bottom
Listening	19.3	17.4	14.3
Written test	16.6	12.5	8.5
Total	35.3	29.8	23.5

Full marks are 20 in listening comprehension test; also 20 in written test; 40 in total.

## 2. Grade 8

	Top	Middle	Bottom
Listening	13.3	10.2	6.9
Written test	45.8	39.3	30.5
Total	58.5	48.7	38.8

Full marks are 15 in listening comprehension test; 50 in written test; 65 in total.



## APPENDIX E

## 1. &lt;GROUP 1 (listening comprehension test)&gt;

## EFFECT .. GRADE BY SEX BY GRP1

Multivariate Tests of Significance (S = 1, M = 1 1/2, N = 151 )

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.00979	.60122	5.00	304.00	.699
Hotellings	.00989	.60122	5.00	304.00	.699
Wilks	.99021	.60122	5.00	304.00	.699
Roys	.00979				

## EFFECT .. SEX BY GRP1

Multivariate Tests of Significance (S = 1, M = 1 1/2, N = 151 )

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.01881	1.16560	5.00	304.00	.326
Hotellings	.01917	1.16560	5.00	304.00	.326
Wilks	.98119	1.16560	5.00	304.00	.326
Roys	.01881				

## EFFECT .. GRADE BY GRP1

Multivariate Tests of Significance (S = 1, M = 1 1/2, N = 151 )

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.01379	.85023	5.00	304.00	.515
Hotellings	.01398	.85023	5.00	304.00	.515
Wilks	.98621	.85023	5.00	304.00	.515
Roys	.01379				

## EFFECT .. GRADE BY SEX

Multivariate Tests of Significance (S = 1, M = 1 1/2, N = 151 )

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.01656	1.02382	5.00	304.00	.404
Hotellings	.01684	1.02382	5.00	304.00	.404
Wilks	.98344	1.02382	5.00	304.00	.404
Roys	.01656				

## 2. &lt;GROUP 2 (written test)&gt;

## EFFECT .. GRADE BY SEX BY GRP2

Multivariate Tests of Significance (S = 1, M = 1 1/2, N = 151 )

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.00405	.24728	5.00	304.00	.941
Hotellings	.00407	.24728	5.00	304.00	.941
Wilks	.99595	.24728	5.00	304.00	.941
Roys	.00405				

## EFFECT .. SEX BY GRP2

Multivariate Tests of Significance (S = 1, M = 1 1/2, N = 151 )

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.00310	.18882	5.00	304.00	.967
Hotellings	.00311	.18882	5.00	304.00	.967
Wilks	.99690	.18882	5.00	304.00	.967
Roys	.00310				

## EFFECT .. GRADE BY GRP2

Multivariate Tests of Significance (S = 1, M = 1 1/2, N = 151 )

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.04585	2.92138	5.00	304.00	.014 *
Hotellings	.04805	2.92138	5.00	304.00	.014 *
Wilks	.95415	2.92138	5.00	304.00	.014 *
Roys	.04585				

## EFFECT .. GRADE BY SEX

Multivariate Tests of Significance (S = 1, M = 1 1/2, N = 151 )

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.01530	.94444	5.00	304.00	.452
Hotellings	.01553	.94444	5.00	304.00	.452
Wilks	.98470	.94444	5.00	304.00	.452
Roys	.01530				

## 3. &lt;TOTAL (total score)&gt;

## EFFECT .. GRADE BY SEX BY TOTAL

Multivariate Tests of Significance (S = 1, M = 1 1/2, N = 151 )

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.00844	.51742	5.00	304.00	.763
Hotellings	.00851	.51742	5.00	304.00	.763
Wilks	.99156	.51742	5.00	304.00	.763
Roys	.00844				

## EFFECT .. SEX BY TOTAL

Multivariate Tests of Significance (S = 1, M = 1 1/2, N = 151 )

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.00707	.43284	5.00	304.00	.826
Hotellings	.00712	.43284	5.00	304.00	.826
Wilks	.99293	.43284	5.00	304.00	.826
Roys	.00707				

## EFFECT .. GRADE BY TOTAL

Multivariate Tests of Significance (S = 1, M = 1 1/2, N = 151 )

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.03123	1.96021	5.00	304.00	.084
Hotellings	.03224	1.96021	5.00	304.00	.084
Wilks	.96877	1.96021	5.00	304.00	.084
Roys	.03123				

## \* \* ANALYSIS OF VARIANCE -- DESIGN 1 \* \*

## EFFECT .. GRADE BY SEX

Multivariate Tests of Significance (S = 1, M = 1 1/2, N = 151 )

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.03026	1.89721	5.00	304.00	.095
Hotellings	.03120	1.89721	5.00	304.00	.095
Wilks	.96974	1.89721	5.00	304.00	.095
Roys	.03026				

\* = statistically significant below .05 level

APPENDIX F  
<GRADE>

Univariate F-tests with (1, 471) D. F.

Variable	Hypoth. SS	Error SS	Hypoth. MS	Error MS	F	Sig. of F
A1	.40403	80.71260	.40403	.17136	2.35774	.125
A2	.36456	116.29179	.36456	.24690	1.47654	.225
A3	1.25342	94.20764	1.25342	.20002	6.26657	.013 *
A4	1.40583	107.59773	1.40583	.22845	6.15389	.013 *
A5	1.19026	95.16756	1.19026	.20205	5.89080	.016 *
A6	.24163	96.46063	.24163	.20480	1.17983	.278
A7	1.32818	90.21498	1.32818	.19154	6.93425	.009 **
B8	.05699	64.25323	.05699	.13642	.41778	.518
B9	.94538	94.26622	.94538	.20014	4.72360	.030 *
B10	.36113	111.91891	.36113	.23762	1.51977	.218
B11	.48354	92.03072	.48354	.19539	2.47468	.116
B12	1.26655	112.09415	1.26655	.23799	5.32181	.021 *
B13	.22267	84.67624	.22267	.17978	1.23856	.266
B14	.00463	115.88921	.00463	.24605	.01883	.891
B15	.00260	107.63767	.00260	.22853	.01136	.915
B16	.56300	66.72341	.56300	.14166	3.97421	.047 *
B17	.00404	25.84247	.00404	.05487	.07367	.786
B18	2.94778	97.49729	2.94778	.20700	14.24046	.000 **
B19	.57218	68.32034	.57218	.14505	3.94461	.048 *
B20	.62269	79.29712	.62269	.16836	3.69859	.055
B21	.93408	57.14421	.93408	.12133	7.69899	.006 **
B22	.02416	73.19474	.02416	.15540	.15546	.694
B23	1.12936	95.01392	1.12936	.20173	5.59843	.018 *
B24	.21062	113.08879	.21062	.24010	.87720	.349
B25	.07169	96.56062	.07169	.20501	.34969	.555
B26	.08811	114.61567	.08811	.24335	.36208	.548
B27	.29216	97.64620	.29216	.20732	1.40925	.236
B28	.00697	116.82958	.00697	.24805	.02810	.867
B29	1.42643	95.07557	1.42643	.20186	7.06648	.008 **
B30	.58617	113.54027	.58617	.24106	2.43159	.120
B31	.58032	78.67700	.58032	.16704	3.47407	.063
C32	1.45007	117.15559	1.45007	.24874	5.82969	.016 *
C33	.15070	94.62587	.15070	.20090	.75009	.387
C34	.00904	74.53006	.00904	.15824	.05714	.811
C35	.38336	98.41881	.38336	.20896	1.83466	.176
C36	.00931	109.33760	.00931	.23214	.04012	.841
C37	.60815	107.64846	.60815	.22855	2.66087	.104
C38	.06323	116.65104	.06323	.24767	.25532	.614
C39	.12918	33.85346	.12918	.07188	1.79721	.181
C40	.00236	64.16785	.00236	.13624	.01736	.895
C41	.08653	107.50411	.08653	.22825	.37911	.538
C42	1.56900	103.93277	1.56900	.22066	7.11034	.008 **
C43	.04264	115.22162	.04264	.24463	.17430	.677
C44	.15172	116.10202	.15172	.24650	.61551	.433
D45	.00000	117.71554	.00000	.24993	.00001	.998
D46	.00000	116.24734	.00000	.24681	.00000	1.000
D47	.73809	103.54882	.73809	.21985	3.35726	.068
D48	.35788	108.28970	.35788	.22991	1.55656	.213
D49	.05217	92.98955	.05217	.19743	.26423	.607
E50	.01346	91.42407	.01346	.19411	.06932	.792
E51	.84157	113.20352	.84157	.24035	3.50147	.062
E52	.68119	113.44887	.68119	.24087	2.82806	.093
E53	.00002	69.28244	.00002	.14710	.00013	.991
E54	.10126	88.89792	.10126	.18874	.53648	.464
E55	.07856	59.74827	.07856	.12685	.61928	.432

\*\* = statistically significant below .01 level; \* = below .05 level

## APPENDIX G

&lt;SEX&gt;

Univariate F-tests with (1, 471) D. F.

Variable	Hypoth. SS	Error SS	Hypoth. MS	Error MS	F	Sig. of F
A1	.01048	80.71260	.01048	.17136	.06118	.805
A2	.63213	116.29179	.63213	.24690	2.56021	.110
A3	2.76100	94.20764	2.76100	.20002	13.80390	.000 **
A4	.29540	107.59773	.29540	.22845	1.29310	.256
A5	.17769	95.16756	.17769	.20205	.87943	.349
A6	.41288	96.46063	.41288	.20480	2.01601	.156
A7	.22774	90.21498	.22774	.19154	1.18898	.276
B8	.13895	64.25323	.13895	.13642	1.01857	.313
B9	1.42221	94.26622	1.42221	.20014	7.10604	.008 **
B10	3.04016	111.91891	3.04016	.23762	12.79421	.000 **
B11	2.89785	92.03072	2.89785	.19539	14.83076	.000 **
B12	4.03746	112.09415	4.03746	.23799	16.96469	.000 **
B13	.98721	84.67624	.98721	.17978	5.49121	.020 *
B14	1.37886	115.88921	1.37886	.24605	5.60400	.018 *
B15	1.52121	107.63767	1.52121	.22853	6.65650	.010 *
B16	.48684	66.72341	.48684	.14166	3.43659	.064
B17	.13489	25.84247	.13489	.05487	2.45843	.118
B18	.70682	97.49729	.70682	.20700	3.41458	.065
B19	.89997	68.32034	.89997	.14505	6.20436	.013 *
B20	.52333	79.29712	.52333	.16836	3.10844	.079
B21	.59945	57.14421	.59945	.12133	4.94083	.027 *
B22	5.15406	73.19474	5.15406	.15540	33.16581	.000 **
B23	1.73391	95.01392	1.73391	.20173	8.59527	.004 **
B24	.04679	113.08879	.04679	.24010	.19489	.659
B25	.13205	96.56062	.13205	.20501	.64411	.423
B26	1.36466	114.61567	1.36466	.24335	5.60793	.018 *
B27	.86099	97.64620	.86099	.20732	4.15301	.042 *
B28	.10634	116.82958	.10634	.24805	.42873	.513
B29	4.83135	95.07557	4.83135	.20186	23.93430	.000 **
B30	1.91777	113.54027	1.91777	.24106	7.95551	.005 **
B31	.48859	78.67700	.48859	.16704	2.92496	.088
C32	.00124	117.15559	.00124	.24874	.00499	.944
C33	1.92932	94.62587	1.92932	.20090	9.60318	.002 **
C34	.18945	74.53006	.18945	.15824	1.19725	.274
C35	.10784	98.41881	.10784	.20896	.51609	.473
C36	.91851	109.33760	.91851	.23214	3.95671	.047 *
C37	2.22835	107.64846	2.22835	.22855	9.74983	.002 **
C38	1.43793	116.65104	1.43793	.24767	5.80589	.016 *
C39	.01991	33.85346	.01991	.07188	.27695	.599
C40	.32853	64.16785	.32853	.13624	2.41148	.121
C41	3.28253	107.50411	3.28253	.22825	14.38152	.000 **
C42	.17307	103.93277	.17307	.22066	.78432	.376
C43	.55295	115.22162	.55295	.24463	2.26033	.133
C44	.00001	116.10202	.00001	.24650	.00003	.996
D45	.10424	117.71554	.10424	.24993	.41710	.519
D46	.46764	116.24734	.46764	.24681	1.89473	.169
D47	1.23918	103.54882	1.23918	.21985	5.63652	.018 *
D48	.00275	108.28970	.00275	.22991	.01195	.913
D49	2.33093	92.98955	2.33093	.19743	11.80638	.001 **
E50	1.80844	91.42407	1.80844	.19411	9.31674	.002 **
E51	.05585	113.20352	.05585	.24035	.23237	.630
E52	1.68912	113.44887	1.68912	.24087	7.01262	.008 **
E53	.48847	69.28244	.48847	.14710	3.32076	.069
E54	.01845	88.89792	.01845	.18874	.09774	.755
E55	.25442	59.74827	.25442	.12685	2.00560	.157

\*\* = statistically significant below .01 level; \* = below .05 level

## APPENDIX H

Differences between males and females in listening and written tests, and the total score.

		Listening test score	Written test score	Total score
Grade 7	Male	16.2	11.6	27.8
	Female	17.5	13.0	30.5
Grade 8	Male	9.5	38.0	47.5
	Female	10.5	38.8	49.3

(marks)

## APPENDIX I

&lt;GROUP 1 (listening comprehension test)&gt;

EFFECT .. GRP1 (CONT.)

Univariate F-tests with (1, 308) D. F.

Variable	Hypoth. SS	Error SS	Hypoth. MS	Error MS	F	Sig. of F
MEMORY	.64901	592.88622	.64901	1.92496	.33715	.562
COGNITIVE	132.14782	3704.66358	132.14782	12.02813	10.98657	.001**
METACOG.	31.65655	2761.63581	31.65655	8.96635	3.53060	.061
AFFECTIVE	4.46957	677.24345	4.46957	2.19884	2.03269	.155
SOCIAL	14.22427	586.48744	14.22427	1.90418	7.47003	.007**

&lt;GROUP 2 (written test)&gt;

EFFECT .. GRP2 (CONT.)

Univariate F-tests with (1, 308) D. F.

Variable	Hypoth. SS	Error SS	Hypoth. MS	Error MS	F	Sig. of F
MEMORY	.00623	632.69669	.00623	2.05421	.00303	.956
COGNITIVE	240.79145	3573.10045	240.79145	11.60098	20.75614	.000**
METACOG.	107.06290	2523.50861	107.06290	8.19321	13.06727	.000**
AFFECTIVE	5.10011	733.20633	5.10011	2.38054	2.14242	.144
SOCIAL	29.24515	647.10551	29.24515	2.10099	13.91969	.000**

&lt;TOTAL (total score)&gt;

EFFECT .. TOTAL (CONT.)

Univariate F-tests with (1, 308) D. F.

Variable	Hypoth. SS	Error SS	Hypoth. MS	Error MS	F	Sig. of F
MEMORY	.05183	654.60533	.05183	2.12534	.02439	.876
COGNITIVE	183.94198	3732.91988	183.94198	12.11987	15.17689	.000**
METACOG.	100.74474	2715.98689	100.74474	8.81814	11.42472	.001**
AFFECTIVE	7.46264	713.91767	7.46264	2.31791	3.21955	.074
SOCIAL	34.52125	617.42064	34.52125	2.00461	17.22091	.000**

\*\* = statistically significant below .01 level; \* = below .05 level

## APPENDIX J

&lt;GROUP1 (listening comprehension test)&gt;

Univariate F-tests with (1, 314) D. F.

Variable	Hypoth. SS	Error SS	Hypoth. MS	Error MS	F	Sig. of F
A1	.05063	50.98734	.05063	.16238	.31182	.577
A2	.53481	78.46203	.53481	.24988	2.14028	.144
A3	.01266	67.59494	.01266	.21527	.05880	.809
A4	.81013	72.06329	.81013	.22950	3.52995	.061
A5	.53481	68.18354	.53481	.21715	2.46292	.118
A6	.01266	66.02532	.01266	.21027	.06020	.806
A7	.31646	60.40506	.31646	.19237	1.64501	.201
B8	.00316	42.76582	.00316	.13620	.02324	.879
B9	.00000	59.74684	.00000	.19028	.00000	1.000
B10	.81013	75.70886	.81013	.24111	3.35997	.068
B11	.05063	70.39241	.05063	.22418	.22586	.635
B12	.25633	78.58861	.25633	.25028	1.02416	.312
B13	1.14241	58.10759	1.14241	.18506	6.17329	.013 *
B14	1.67405	77.32278	1.67405	.24625	6.79815	.010 *
B15	3.87658	70.79114	3.87658	.22545	17.19490	.000 **
B16	1.67405	42.43671	1.67405	.13515	12.38673	.000 **
B17	.62025	18.11392	.62025	.05769	10.75192	.001 **
B18	2.30696	64.91772	2.30696	.20674	11.15853	.001 **
B19	.01266	46.06329	.01266	.14670	.08629	.769
B20	.38291	51.24684	.38291	.16321	2.34618	.127
B21	1.02532	39.68354	1.02532	.12638	8.11292	.005 **
B22	.53481	49.90506	.53481	.15893	3.36500	.068
B23	.15506	65.47468	.15506	.20852	.74364	.389
B24	1.26582	74.07595	1.26582	.23591	5.36569	.021 *
B25	.07911	67.90506	.07911	.21626	.36583	.546
B26	.38291	76.31013	.38291	.24303	1.57560	.210
B27	.05063	65.98734	.05063	.21015	.24094	.624
B28	.05063	78.63291	.05063	.25042	.20219	.653
B29	.38291	67.60127	.38291	.21529	1.77858	.183
B30	3.87658	73.14557	3.87658	.23295	16.64143	.000 **
B31	2.48101	52.01266	2.48101	.16565	14.97785	.000 **
C32	.01266	78.93671	.01266	.25139	.05035	.823
C33	.71203	66.51266	.71203	.21182	3.36140	.068
C34	.01266	52.20253	.01266	.16625	.07614	.783
C35	.00316	70.10759	.00316	.22327	.01417	.905
C36	.07911	75.04430	.07911	.23899	.33103	.565
C37	1.97785	72.20886	1.97785	.22996	8.60067	.004 **
C38	2.30696	76.61392	2.30696	.24399	9.45502	.002 **
C39	.02848	27.93038	.02848	.08895	.32019	.572
C40	.25633	42.51266	.25633	.13539	1.89326	.170
C41	1.97785	74.71519	1.97785	.23795	8.31216	.004 **
C42	.62025	69.15190	.62025	.22023	2.81640	.094
C43	.45570	75.69620	.45570	.24107	1.89030	.170
C44	.20253	76.31646	.20253	.24305	.83331	.362
D45	.45570	78.49367	.45570	.24998	1.82293	.178
D46	.91456	77.37342	.91456	.24641	3.71149	.055
D47	.11392	69.65823	.11392	.22184	.51354	.474
D48	.05063	75.29114	.05063	.23978	.21116	.646
D49	1.39557	65.04430	1.39557	.20715	6.73708	.010 *
E50	.20253	59.54430	.20253	.18963	1.06803	.302
E51	1.14241	73.52532	1.14241	.23416	4.87880	.028 *
E52	.45570	78.08861	.45570	.24869	1.83239	.177
E53	.25633	46.46203	.25633	.14797	1.73233	.189
E54	2.84810	54.87342	2.84810	.17476	16.29758	.000 **
E55	1.14241	45.57595	1.14241	.14515	7.87071	.005 **

\*\* = statistically significant below .01 level; \* = below .05 level

## APPENDIX K

&lt;GROUP 2(written test)&gt;

Univariate F-tests with (1,314) D. F.

Variable	Hypoth. SS	Error SS	Hypoth. MS	Error MS	F	Sig. of F
A1	.01266	51.02532	.01266	.16250	.07790	.780
A2	.38291	78.58861	.38291	.25028	1.52992	.217
A3	.02848	66.41139	.02848	.21150	.13466	.714
A4	.05063	73.88608	.05063	.23531	.21518	.643
A5	.02848	63.90506	.02848	.20352	.13994	.709
A6	.05063	63.44304	.05063	.20205	.25060	.617
A7	.81013	59.91139	.81013	.19080	4.24593	.040 *
B8	.00316	45.42405	.00316	.14466	.02188	.883
B9	.01266	65.20253	.01266	.20765	.06096	.805
B10	.71203	76.31013	.71203	.24303	2.92983	.088
B11	.20253	67.40506	.20253	.21467	.94347	.332
B12	.01266	78.53165	.01266	.25010	.05061	.822
B13	2.66139	54.53797	2.66139	.17369	15.32285	.000 **
B14	.20253	78.78481	.20253	.25091	.80720	.370
B15	3.24051	70.69620	3.24051	.22515	14.39284	.000 **
B16	.01266	49.82278	.01266	.15867	.07978	.778
B17	.20253	16.77215	.20253	.05341	3.79170	.052
B18	2.13924	64.69620	2.13924	.20604	10.38270	.001 **
B19	.81013	46.54430	.81013	.14823	5.46532	.020 *
B20	.81013	55.86076	.81013	.17790	4.55382	.034 *
B21	.31646	38.98734	.31646	.12416	2.54870	.111
B22	.20253	53.16456	.20253	.16931	1.19619	.275
B23	1.39557	65.82911	1.39557	.20965	6.65676	.010 *
B24	1.67405	74.28481	1.67405	.23658	7.07617	.008 **
B25	.01266	66.02532	.01266	.21027	.06020	.806
B26	.53481	75.80380	.53481	.24141	2.21533	.138
B27	.31646	65.72152	.31646	.20930	1.51194	.220
B28	.45570	77.92405	.45570	.24817	1.83626	.176
B29	.38291	69.72785	.38291	.22206	1.72434	.190
B30	3.04114	74.81646	3.04114	.23827	12.76347	.000 **
B31	3.65823	54.06329	3.65823	.17218	21.24701	.000 **
C32	.07911	78.66456	.07911	.25052	.31579	.575
C33	.71203	65.72785	.71203	.20932	3.40154	.066
C34	.02848	46.68987	.02848	.14869	.19154	.662
C35	.31646	64.89873	.31646	.20668	1.53111	.217
C36	.05063	72.82278	.05063	.23192	.21832	.641
C37	1.67405	72.99367	1.67405	.23246	7.20134	.008 **
C38	1.82278	77.17722	1.82278	.24579	7.41611	.007 **
C39	.02848	22.99367	.02848	.07323	.38893	.533
C40	.62025	41.46835	.62025	.13206	4.69658	.031 *
C41	.53481	72.61392	.53481	.23125	2.31265	.129
C42	3.04114	68.96835	3.04114	.21964	13.84574	.000 **
C43	1.67405	75.34810	1.67405	.23996	6.97631	.009 **
C44	.07911	78.20886	.07911	.24907	.31763	.573
D45	.00316	78.46203	.00316	.24988	.01266	.910
D46	.53481	77.06962	.53481	.24544	2.17894	.141
D47	.15506	72.43671	.15506	.23069	.67217	.413
D48	.02848	71.98101	.02848	.22924	.12424	.725
D49	.15506	63.77848	.15506	.20312	.76342	.383
E50	.71203	64.08228	.71203	.20408	3.48889	.063
E51	1.39557	74.15823	1.39557	.23617	5.90911	.016 *
E52	.71203	76.61392	.71203	.24399	2.91822	.089
E53	.45570	44.31646	.45570	.14114	3.22879	.073
E54	2.13924	55.58228	2.13924	.17701	12.08517	.001 **
E55	.31646	40.39241	.31646	.12864	2.46004	.118

\*\* = statistically significant below .01 level; \* = below .05 level



## APPENDIX L

&lt;TOTAL (total score)&gt;

Univariate F-tests with (1, 314) D. F.

Variable	Hypoth. SS	Error SS	Hypoth. MS	Error MS	F	Sig. of F
A1	.15506	52.63924	.15506	.16764	.92497	.337
A2	.15506	78.81646	.15506	.25101	.61776	.432
A3	.01266	65.20253	.01266	.20765	.06096	.805
A4	.05063	71.65823	.05063	.22821	.22187	.638
A5	.11392	65.92405	.11392	.20995	.54263	.462
A6	.00316	67.22152	.00316	.21408	.01478	.903
A7	.45570	60.26582	.45570	.19193	2.37429	.124
B8	.05063	42.03797	.05063	.13388	.37820	.539
B9	.01266	62.58228	.01266	.19931	.06351	.801
B10	.71203	75.98101	.71203	.24198	2.94252	.087
B11	.31646	68.75949	.31646	.21898	1.44514	.230
B12	.00316	78.96835	.00316	.25149	.01258	.911
B13	2.48101	55.24051	2.48101	.17593	14.10266	.000 **
B14	.02848	78.96835	.02848	.25149	.11325	.737
B15	3.44620	69.14557	3.44620	.22021	15.64970	.000 **
B16	.07911	49.14557	.07911	.15651	.50547	.478
B17	.25633	17.60127	.25633	.05605	4.57282	.033 *
B18	3.04114	66.38608	3.04114	.21142	14.38431	.000 **
B19	.38291	46.33544	.38291	.14757	2.59486	.108
B20	.31646	54.17722	.31646	.17254	1.83411	.177
B21	.38291	39.62658	.38291	.12620	3.03418	.083
B22	.11392	53.25316	.11392	.16960	.67174	.413
B23	.53481	65.90506	.53481	.20989	2.54806	.111
B24	2.66139	72.89241	2.66139	.23214	11.46453	.001 **
B25	.11392	65.92405	.11392	.20995	.54263	.462
B26	.71203	75.62658	.71203	.24085	2.95631	.087
B27	.20253	65.01266	.20253	.20705	.97819	.323
B28	.31646	78.22785	.31646	.24913	1.27023	.261
B29	.31646	69.45570	.31646	.22120	1.43065	.233
B30	2.84810	75.34177	2.84810	.23994	11.86996	.001 **
B31	3.65823	53.01266	3.65823	.16883	21.66810	.000 **
C32	.15506	78.76582	.15506	.25085	.61816	.432
C33	.62025	64.59494	.62025	.20572	3.01509	.083
C34	.01266	49.82278	.01266	.15867	.07978	.778
C35	.05063	65.98734	.05063	.21015	.24094	.624
C36	.01266	74.88608	.01266	.23849	.05308	.818
C37	1.82278	71.59494	1.82278	.22801	7.99434	.005 **
C38	3.04114	75.93038	3.04114	.24182	12.57623	.000 **
C39	.00316	23.01899	.00316	.07331	.04317	.836
C40	.71203	42.05696	.71203	.13394	5.31603	.022 *
C41	.81013	74.08861	.81013	.23595	3.43345	.065
C42	3.04114	70.10759	3.04114	.22327	13.62075	.000 **
C43	2.66139	74.03165	2.66139	.23577	11.28811	.001 **
C44	.05063	77.41772	.05063	.24655	.20536	.651
D45	.00316	78.46203	.00316	.24988	.01266	.910
D46	1.02532	76.70886	1.02532	.24430	4.19703	.041 *
D47	.00316	70.76582	.00316	.22537	.01404	.906
D48	.07911	74.10759	.07911	.23601	.33521	.563
D49	.91456	62.13291	.91456	.19788	4.62188	.032 *
E50	.62025	62.87342	.62025	.20023	3.09764	.079
E51	2.30696	72.81646	2.30696	.23190	9.94811	.002 **
E52	.81013	77.37975	.81013	.24643	3.28742	.071
E53	.71203	47.27215	.71203	.15055	4.72955	.030 *
E54	3.04114	54.15823	3.04114	.17248	17.63200	.000 **
E55	.71203	43.39873	.71203	.13821	5.15167	.024 *

\*\* = statistically significant below .01 level; \* = below .05 level

## APPENDIX M

&lt;GROUP 1a vs GROUP 2a&gt;

Univariate F-tests with (1,36) D. F.

Variable	Hypoth. SS	Error SS	Hypoth. MS	Error MS	F	Sig. of F
A1	.05294	6.81548	.05294	.18932	.27966	.600
A2	.63440	8.83929	.63440	.24554	2.58373	.117
A3	.00031	7.81548	.00031	.21710	.00144	.970
A4	.09054	9.17262	.09054	.25479	.35534	.555
A5	.26347	8.81548	.26347	.24487	1.07594	.307
A6	.32080	6.54762	.32080	.18188	1.76383	.193
A7	.81485	6.55357	.81485	.18204	4.47612	.041 *
B8	.08020	4.26190	.08020	.11839	.67745	.416
B9	.00501	8.54762	.00501	.23743	.02111	.885
B10	.15163	8.69048	.15163	.24140	.62812	.433
B11	.10150	6.21429	.10150	.17262	.58802	.448
B12	.94768	8.31548	.94768	.23099	4.10278	.050
B13	.19580	7.17262	.19580	.19924	.98275	.328
B14	3.13283	6.26190	3.13283	.17394	18.01081	.000 **
B15	.02538	9.05357	.02538	.25149	.10090	.753
B16	.60652	6.26190	.60652	.17394	3.48689	.070
B17	.01535	.95833	.01535	.02662	.57666	.453
B18	.60652	6.26190	.60652	.17394	3.48689	.070
B19	.08020	4.26190	.08020	.11839	.67745	.416
B20	.00031	6.31548	.00031	.17543	.00179	.967
B21	.08020	4.26190	.08020	.11839	.67745	.416
B22	.00031	6.31548	.00031	.17543	.00179	.967
B23	.32080	7.04762	.32080	.19577	1.63869	.209
B24	.22838	7.98214	.22838	.22173	1.03002	.317
B25	.19580	6.67262	.19580	.18535	1.05639	.311
B26	.45238	9.04762	.45238	.25132	1.80000	.188
B27	.22838	7.98214	.22838	.22173	1.03002	.317
B28	.50125	8.76190	.50125	.24339	2.05950	.160
B29	.32080	6.54762	.32080	.18188	1.76383	.193
B30	.00282	8.83929	.00282	.24554	.01148	.915
B31	.10150	6.21429	.10150	.17262	.58802	.448
C32	.06140	9.33333	.06140	.25926	.23684	.629
C33	.00125	9.26190	.00125	.25728	.00487	.945
C34	.42888	5.88690	.42888	.16353	2.62274	.114
C35	.11310	9.38690	.11310	.26075	.43373	.514
C36	.18045	9.21429	.18045	.25595	.70502	.407
C37	.55263	8.00000	.55263	.22222	2.48684	.124
C38	.00783	9.38690	.00783	.26075	.03004	.863
C39	.00501	5.04762	.00501	.14021	.03575	.851
C40	.03133	3.54762	.03133	.09854	.31791	.576
C41	.66291	7.54762	.66291	.20966	3.16188	.084
C42	.81485	6.55357	.81485	.18204	4.47612	.041 *
C43	.01535	9.45833	.01535	.26273	.05843	.810
C44	.11310	9.38690	.11310	.26075	.43373	.514
D45	.02538	9.05357	.02538	.25149	.10090	.753
D46	.03133	9.04762	.03133	.25132	.12465	.726
D47	.00783	9.38690	.00783	.26075	.03004	.863
D48	.02005	8.19048	.02005	.22751	.08813	.768
D49	.16573	8.38690	.16573	.23297	.71137	.405
E50	.10150	6.21429	.10150	.17262	.58802	.448
E51	.30107	9.17262	.30107	.25479	1.18160	.284
E52	.16573	8.38690	.16573	.23297	.71137	.405
E53	.00031	6.31548	.00031	.17543	.00179	.967
E54	.28195	5.42857	.28195	.15079	1.86981	.180
E55	.08020	4.26190	.08020	.11839	.67745	.416

\*\* = statistically significant below .01 level; \* = below .05 level

## Abstract

Individual differences are one of our major concerns in the fields of second language acquisition as well as classrooms at school. There really exist a wide variety of factors related to achievement in learning English as a second language. Skehan (1991), for example, proposes a model in which intelligence, language aptitude, motivation, learning strategies, and learner styles etc. will influence the outcome. Among those factors, our study concentrates on the language learning strategies (=LLS) as less effective learners are supposed to be able to improve their skills through strategy training.

In Chapter 1, first we examine the definition of LLS as there are some criticisms for the ambiguity of the term itself. In our research we define LLS as follows: LLS we deal with are not universal language processing strategies but are specific actions or techniques taken by the learner intentionally as they attempt to complete a learning or communication task, which may overlap with communication strategies and production strategies in some cases. Next we consider why LLS research is necessary and important. Of the five rationales, the major reason is that LLS can be considered to be one of the causes of success or failure of L2 learners. That is, the poor performance of less effective learners is assumed to be due to their not having an appropriate repertoire of LLS.

In Chapter 2, we survey major previous studies of LLS. We

examining Naiman, *et al.*, who made the "Good Language Learner (GLL)" study in 1970's, Rubin who categorized strategies into "direct" and "indirect" strategy groups, and O'Malley and Chamot who made several descriptive studies and training studies in 1980's. In these previous studies, the way of data elicitation turned out to be highly important. Cohen (1987) points out three kinds of verbal reports: self-report like questionnaire, self-observation like introspective and retrospective interviews, and self-revelation like think-aloud. These three types have both advantages and disadvantages. The crucial thing is to choose the method which is most appropriate for the objective of the research and to interpret the data with care. With respect to the easiness of assessment of LLS, Strategy Inventory for Language Learning (SILL) developed by Oxford (1990) is assumed to be appropriate for its high validity and reliability. As for the classification of LLS, four criterion, that is, cognitive, metacognitive, affective and social strategies are generally recognized though some discrepancy exists.

Several unanswered questions could be found through previous studies. One of the central and biggest one is that we have not yet known about the typical LLS used by good language learners and the difference in strategy use between more effective and less effective learners.

In Chapter 3, we examine a descriptive study which was

implemented on January 25, 1992 for the purpose of finding a solution to the unanswered questions mentioned in Chapter 2. The subjects were examinees of the STEP test, who were learning English in junior high schools of Japan in an EFL context. To gather information on students' uses of strategies, SILL was used.

First we examined the most and least frequently used LLS by whole participants. As a result, cognitive strategies were most and social strategies were least frequently employed. With respect to sex difference in strategy use, females showed significantly more frequent use in all categories of LLS. As for the difference between Grades, Grade 7 students showed significantly more frequent use in memory strategies, and Grade 8 students showed frequent use in 'Recognizing and using formulas and patterns'.

In Chapter 4, we discuss the result of the descriptive study in Chapter 3. Especially with respect to LLS which are specific to tasks, 'Practicing naturalistically' like listening to English language radio program was most specific to listening, and 'Self-monitoring' like trying to notice errors of English was most specific LLS to written test of the STEP test.

Differences between more effective and less effective learners could be observed in 10 questionnaire items common to every task. Of them, we especially concentrate on practicing strategies. Less effective learners were found to be mainly

employing familiar formal practice strategies like repetition and dare not to utilize other LLS. On the other hand, more effective learners are employing functional practice strategies like 'To talk like native speakers', 'Recognizing patterns' and 'Recombining', which are supposed to be practicing for communication, in addition to familiar strategies like repetition. We concluded that the reason less effective learners remain ineffective, despite their efforts to learn English, is due to their limited use of LLS. Bialystok (1981), Huang and Naerssen (1987) also found that practice for communication had a crucial role in language learning and repeated formal practice no longer facilitated performance. Therefore, we may say that less effective learners should extend their repertoire of LLS for functional practice.

Finally, in Chapter 5, we talk about the implications of our research for English education. One implication is strategy training in which successful LLS will be presented with less effective learners to help them learn. Furthermore, we can thus take an innovative view of learning and teaching English by grasping these LLS. Teachers can tap what is going on and what is not happening on the learners side. Strategy training can be integrated into the usual English classes.