

論文

A Study of Language Learning Strategies and Their Relationship to Achievement in EFL Listening Comprehension¹

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ABSTRACT

This study is an attempt to (1) establish the relationship between the self-reported frequency of language learning strategy (LLS) use and English as a foreign language (EFL) listening comprehension ability through the use of stepwise multiple regression procedure, and (2) give suggestions for strategy training, based on the results of the empirical study. Participants of this study were 151 Japanese first-year college students of English. The listening section of the Comprehensive English Language Test (CELT; Form A) was used to measure the participants' listening comprehension ability in English. To measure the frequency of the use of LLSs, an original 55-item strategy inventory was administered. A detailed report of the statistical analysis, discussion, and suggestions are given in the last three sections of this article respectively.

INTRODUCTION

Learners' attempts to exploit available information to improve their second/foreign language competence are called Language Learning Strategies (LLSs: e.g., Rigney, 1975; Bialystok, 1978). LLSs have been considered to be an important factor in second and foreign language acquisition, especially by adult learners. Many studies have been conducted on the identification/classification of LLSs, and on the learner/environmental variables affecting the use of LLSs (Oxford, 1989; O'Malley & Chamot, 1990; Takeuchi, 1991a). As we will see below, however, only a handful of studies have been conducted to investigate the possible relationships between the use of LLSs and second and foreign language acquisition.

Bialystok & Fröhlich (1978), in their study of 157 high school students learning French as a second language, reported

that the use of three LLSs combined (functional practicing, inferencing, and monitoring) influenced achievement on reading, listening, and grammar tests ($p < .05$ to $.01$). The use of LLSs, however, was not related to the results of a writing test. This null finding about writing skills, according to the authors, may be attributed to the nature of the writing test used. Bialystok (1979) investigated individually the effects of the three LLSs in Bialystok & Fröhlich (1978). She found that the functional practicing strategy was most responsible for achievement on the tests, while inferencing was least related.

Cohen & Aphek (1980) gave a brief lecture on the use of a mnemonic strategy (association) to 26 American students of Hebrew, and had them make associations in memorizing Hebrew vocabulary. In a five-week period, three recall tests were

given, and their results indicated that words remembered with associations were retained more successfully than those with no association (retention rate: 86% vs. 72%).

Politzer & McGroarty (1985) studied 87 graduate students in an eight-week intensive English course. They administered three tests twice at an eight-week interval, and sought the relationships between the score gains on the tests and the results of a questionnaire examining the subjects' use of LLSs. Their findings are (1) a significant but relatively weak ($r=.37$) correlation between a test of communicative ability and interactional strategies ($p<.05$), and (2) a positive but not significant correlation between a test of communicative ability and the use of individual study strategies (i.e., strategies about what learners do when they are by themselves and study English).

O'Malley (1987) and his colleagues divided 75 Hispanic and Asian high school students of ESL into three groups (metacognitive, cognitive, and control groups)². They then gave training on LLSs in vocabulary, listening, and speaking for fifty minutes a day over eight days in the natural classroom environment. More specifically, the metacognitive group was instructed mainly in the use of metacognitive strategies, and the cognitive group was instructed mainly in the use of cognitive strategies³. The control group received no instruction. Teacher effects were controlled, and explicit directions and cues for using strategies for the two experimental groups were "faded" on successive days of the treatment.

The results showed that no effect was

found for the strategy training in either vocabulary, or in listening. An effect of the training for speaking was found between the two experimental groups and the control group ($\bar{X}=3.60$, $SD=0.88$ for metacognitive group; $\bar{X}=3.04$, $SD=0.80$ for cognitive group; $\bar{X}=2.88$, $SD=0.73$ for control group; $p=.008$; neither F nor T values were supplied in this study.).

O'Malley and his associates ascribed the null findings in the vocabulary and listening training to the facts that (1) Asian subjects showed no interest in the strategies taught in the vocabulary training, but stuck instead to their own familiar ways; (2) the explicit directions and cues which encouraged the use of the strategies taught were planned to be faded too quickly in the training; and (3) the listening training task was beyond the subjects' ability.

Padron & Waxman (1988), who were interested in the use of reading strategies by 82 Hispanic ESL school pupils, found that the results of a post-test of reading comprehension were significantly related to the adverse effects of two negative reading strategies: thinking about something else while reading, and saying the main idea over and over (stepwise R square=6%, $F=17.77$, $p<.001$, and R square=1%, $F=6.70$, $p<.05$, respectively) No relationship, however, was established between positive LLSs for reading and the results of the post-test⁴.

Takeuchi (in press) examined the relationships between the frequency of LLSs use as measured by the Strategy Inventory for Language Learning (SILL: Oxford, 1990) and EFL ability as measured by the Comprehensive English Language

Test (CELT-Form B: Harris & Palmer, 1986). His subjects were 78 female Japanese college students of English. In this study, he found that the self-reported frequency of some LLS use was positively related to proficiency of English, although the number of LLSs that were related positively to the proficiency was rather small. He also ascertained that the use of some LLSs was negatively related to proficiency of English. This means, as he pointed out in the article, the use of some LLSs, depending on the conditions, could be detrimental to language learning.

The studies reviewed above indicate the possibility that the use of some LLSs does facilitate second and foreign language acquisition, while the use of other LLSs could be harmful to language learning. Our knowledge on this topic, however, is still rather rudimentary, and the whole picture of the relationships between LLSs and second and foreign language acquisition is far from being clear. More research, therefore, should be directed to the empirical validation of the relationships.

PURPOSE

This study is an attempt to (1) establish the relationship between the frequency of LLS use and EFL listening comprehension ability through the use of stepwise multiple regression procedure, and (2) give suggestions for strategy training, based on the results of the empirical study. (For strategy training, see Holec, 1981; Chamot & O'Malley, 1987; Rubin, 1989; Oxford, Crookall, Cohen, Lavine, Nyikos, & Sutter, 1990; Sinclair & Ellis, 1992; among others.)

SUBJECTS

Subjects of this study were 151 Japanese first-year students of English at Doshisha Women's College, Kyoto, Japan. They had studied the language for at least six years before being admitted to the college. All the subjects were between 18 and 20 years old.

The reason a female-only subject group was chosen is that a growing body of evidence indicates the use of LLSs by female learners is significantly different from that by male counterparts (Politzer, 1983; Oxford, Nyikos, & Ehrman, 1988; Ehrman & Oxford, 1989; Oxford & Nyikos, 1989; among others). To control the influence of the sex difference variable on the results, therefore, a female-only subject group was chosen for this study. In addition, to control the influence of the ethnic variable on the use of LLSs, all the subjects in this study were Japanese. (See, for instance, Politzer & McGroarty, 1985, and O'Malley, 1987 on the influence of the ethnic variable.)

METHOD

To measure the subjects' listening comprehension ability in English, the listening section of the Comprehensive English Language Test (Form A; henceforth CELT-LS) was administered to the subjects. Detailed information on the test can be found in Harris & Palmer (1986).

To assess the frequency of the use of LLSs, a 55-item self-reporting strategy inventory (henceforth SI) was given to the subjects. (See Appendix for the SI.) In the SI, subjects are given, in non-technical terms, a list of LLSs identified so far, and asked to indicate, one by

one, the degree of their use in language learning activity. In answering, a frequency scale of zero (never) to four (whenever possible) is used.

Self-reporting inventories can be readily administered to a large population, and the data collected are amenable to statistical analysis. However, it is said that the data collected through self-reporting inventories CAN be subject to the influence of other factors, such as subjects' intelligence, their desire to give the "right" answer, to please the teacher, and so forth (Oller & Perkins, 1978)⁵.

In the analysis of the relationships, stepwise multiple regression in the SPSS statistical package was used. The critical value was set at .05. A relationship was sought between the score of each strategy in the SI and the CELT-LS score.

In using stepwise multiple regression, caution is in order in two respects. First, the problem of multicollinearity (i.e., possible high correlations among the score of each strategy in the SI) should be dealt with properly and carefully (Norusis, 1988; Hatch & Lazaraton, 1991). In this analysis, therefore, in order to minimize the effect of multicollinearity, the value of tolerance was set at more than .01. Second, because multiple regression is a kind of correlational approach, direct cause-effect claims should not be made (Norusis, 1988; Hatch & Lazaraton, 1991).

RESULTS

Table 1 shows the results of the CELT-LS administration. The table indicates that the standard deviation (SD) was rather large. It also shows that the highest score obtained was 90 out of 100 points

possible, while the lowest score obtained was 28.

In Table 2, we can see the results of the SI administration. The most frequently used LLS was #37 (i.e., When I watch a video program or listen to an audio tape in English, I try to watch or listen to the parts that I do not understand many times: $\bar{X}=3.40$; $SD=0.81$). The least frequently used LLS, on the other hand, was #26 (i.e., I use an English-English dictionary; $\bar{X}=0.75$; $SD=1.05$). Generally speaking, the results show that the subjects used LLSs moderately (Overall $\bar{X}=2.02$; $SD=0.695$).

Table 1 Descriptive statistics: CELT-LS

\bar{X}	SD	Min.	Max.
52.33	11.46	28	90

Range: 0-100

Max: Maximum value observed

Min: Minimum value observed

Table 2 Descriptive statistics: SI

Strategy	\bar{X}	SD
1	2.87	.76
2	2.78	1.05
3	1.08	.92
4	1.11	1.02
5	1.39	1.02
6	3.00	.88
7	2.86	.95
8	2.88	.75
9	2.43	.77
10	1.39	.70
11	2.84	1.10
12	2.46	1.03
13	3.30	.67
14	2.07	.97
15	2.72	1.03
16	1.46	1.05
17	1.81	1.06
18	1.73	.94
19	1.05	1.02
20	1.26	.95

21	1.22	1.03
22	1.99	1.03
23	1.87	1.18
24	1.44	.88
25	1.20	1.00
26	.75	1.05
27	2.62	1.12
28	2.69	1.00
29	1.90	1.12
30	1.77	1.20
31	1.86	1.10
32	1.09	.97
33	2.70	.97
34	2.29	1.06
35	1.17	1.02
36	2.79	.98
37	3.40	.81
38	2.74	1.00
39	2.05	1.03
40	1.60	1.30
41	2.40	1.15
42	1.62	.99
43	1.82	1.09
44	2.03	1.15
45	1.13	1.37
46	2.09	1.23
47	1.79	1.14
48	3.14	.92
49	1.71	1.15
50	2.89	1.05
51	1.96	1.24
52	2.10	1.18
53	1.41	1.43
54	2.89	1.04
55	1.03	1.02

In order to establish the relationships, the results of the CELT-LS and those of the SI were analyzed through the use of stepwise multiple regression procedure. Table 3 shows the results of the regression. There are seven LLSs which were significantly related to the results of the CELT-LS. Among them, four (#19, 51, 18, 5 in the order that each LLS entered in the regression equation) were positively related, while three (#28, 4, 38) were negatively related. (See the minus values of the B slope in the table.)

DISCUSSION

Strategy #19 (i.e., I try to think in English whenever possible) was the first LLS which entered the regression equation (R^2 increment = 8.731%; $p < .0034$). Follow-up interviews with some 30 subjects indicate that they considered strategy #19 to be "trying to avoid translation".⁶ By "trying to avoid translation", they meant "trying to avoid thinking first in Japanese and then translating the ideas and speaking/writing them in English." One subject, who had rated this strategy four (whenever possible), said, "I thought #19 meant the avoidance of translation.

Table 3 Results of multiple regression

Strategy	B	SE B	Beta	R ²	F	Sig. F
19	2.66058	.89213	.23580	.08731	8.894	.0034
51	1.84588	.74708	.20026	.12574	6.105	.0147
28	-1.92654	.89591	-.16835	.15839	4.624	.0332
18	2.40514	.97207	.19682	.18251	6.122	.0145
4	-2.00969	.84346	-.17905	.20643	5.677	.0185
5	2.21297	.88438	.19694	.22721	6.262	.0135
38	-2.24772	.90566	-.19579	.25912	6.160	.0142
(Constant)	52.24426	3.07962			287.794	.0000

R^2 increment for each strategy can be calculated by subtracting the R^2 of the strategy above it from the R^2 of the strategy.

I always try to think in English when I use the language. Translation prevents me from speaking and listening efficiently in English. That's why I rated it four." (Translation of the subject's comments is mine.) We, therefore, can say that the use of the LLS that refers to the avoidance of translation was positively related to the subjects' listening comprehension ability.

Strategy #51 (i.e., I try to maintain conversations in English) refers to the efforts to maintain interaction in the target language. A significant positive relation (R^2 increment=3.843%; $p<.0147$) between the use of this strategy and the CELT-LS scores is in line with the finding reported by Takeuchi (1991b) in which a strategy referring to the efforts to maintain interaction in the target language characterizes the group of EFL students whose listening comprehension ability is high.

Strategy #18 (i.e., I review and practice difficult items) is the third LLS which was found to be positively related to EFL listening comprehension ability (R^2 increment=2.412%; $p<.0145$). This significant relation confirms the finding in Takeuchi (1991b), which ascertained a strategy for reviewing and practicing difficult items was a characteristic of good EFL listeners.

Strategy #5 (i.e., I volunteer answers in class even if I am not sure whether they are correct) refers to the risk-taking attitude in language learning (Rubin, 1975; Beebe, 1983; Ely, 1985). This attitude is generally believed to be related to speaking skills (e.g., Ely, 1986). However, a significant, positive relation (R^2 incre-

ment=2.078%; $p<.0135$) between strategy #5 and EFL listening comprehension ability suggests that it might be related to other language skills. More research should be done on this issue.

In this study, four LLSs were found to be negatively related to EFL listening comprehension ability. Strategy #28 refers to the attempt to ask advice on language learning from good language learners and/or language teachers. A significant, negative relation (R^2 increment=3.265%; $p<.0332$) might indicate that every learner has to find one's own way of learning if one wants to be successful in language learning.

Strategy #4 (i.e., I try to look for patterns/rules concerning grammar, word-formation, and/or sound changes in English) was also found to be negatively related to EFL listening comprehension ability (R^2 increment=2.392%; $p<.0185$). Follow-up interviews with some of the subjects suggest that those who rated this strategy high tend to pay attention to some portions of the input they receive, and often miss the global meaning. This strategy, however, might be positively related to the grammar/structure ability of EFL students (e.g., Oxford, 1990).

Unexpectedly, strategy #38 (i.e., I try to imitate and practice English pronunciation, intonation, and/or rhythm) had a significant, negative relation with EFL listening comprehension ability (R^2 increment=3.191%; $p<.0142$). This finding runs counter to the common belief of language teachers in which practicing intonation and rhythm contribute to the improvement of listening comprehension ability. One possible interpretation of

this finding is that the use of this strategy can be positively related to EFL listening comprehension ability depending on the students' proficiency (e.g., positively related to the listening comprehension ability of beginning students). Another possible explanation is that imitating and practicing intonation and rhythm is, in fact, related mainly to speaking skills (and not to listening skills).

In this study, about 26% of the variance was explained by the seven LLSs discussed above. (See the R^2 of Strategy #38 in Table 3.) This explanation rate is in line with that reported in, for example, Bialystok (1979) and Hayashi (1991)⁷.

CONCLUDING REMARKS

Before concluding, some limitations and shortcomings of the study should be pointed out. First, the SI used in this study has not been examined rigorously from a psychometric viewpoint. For further use of this inventory, therefore, its reliability and validity should be established⁸.

Second, the subjects of this study were highly homogeneous in terms of age, ethnicity, and language learning background. The homogeneous nature of the subjects might have had some influence on the results of the study.

Third, there is a possibility that any effects that the use of LLSs might have will become apparent mainly at some point after the high frequency of the LLSs has been observed. Thus, a research design which relates the use of LLSs and EFL/ESL achievement at the same point in time might not be productive⁹. Time-lagged designs, therefore, should be

adopted in future studies¹⁰.

Due to the limitations and shortcomings described above, the results obtained in this study should be generalized with caution. In addition, before putting the results to any practical use, they should be reconfirmed through more rigorous, larger-scale studies.

In conclusion, this study ascertained that the self-reported frequency of four LLSs was positively related to EFL listening comprehension ability. It also confirmed that the self-reported frequency of three LLSs had a negative relationship with EFL listening ability. This means that the frequent use of some LLSs could be detrimental to the improvement of EFL listening comprehension ability depending on the conditions. Future LLS research, therefore, needs to determine the conditions in which the use of LLSs can have an adverse effect on the improvement of listening comprehension ability.

The results obtained in this study indicate that those who are providing strategy training should be very cautious in implementing their training. In order to ensure the beneficial effects of their training, they should take into account empirical studies that investigate the relationships between LLS use and second and foreign language acquisition, and improve their training accordingly. Otherwise, their training could have unfavorable effects on language learning. (1993. 1. 15)

NOTES

1. This is a revised version of a paper presented by the author at the Language Laboratory Association (LLA) Kansai Chapter Annual Spring Conference, Osaka, Japan on June 15, 1991. A portion of this

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2. More precisely, about one third of the subjects were from Spanish-speaking countries, another third from Asian countries, and the rest from various language backgrounds.
3. Metacognitive strategies include strategies concerning either (a) thinking about or using the knowledge of the learning process, or (b) planning for learning, manipulating learning opportunities, monitoring the performance, and evaluating how well one learned. Cognitive strategies, on the other hand, include strategies involving mental manipulation or transformation of materials to enhance comprehension or retention. (See O'Malley & Chamot, 1990; Oxford, 1990 for more explanation and examples.)
4. See also Knight, Padron, & Waxman (1985) for supplementary information.
5. The argument that self-reporting data are reliable can be found in Ericsson & Simon (1980) and Gardner (1985). As to the discussion of LLS data collection methodology, see Takeuchi (1991a).
6. I first thought that this strategy meant "seeking opportunities to use English" (Takeuchi, 1991a). Follow-up interviews, however, proved that this interpretation was not right.
7. See Takeuchi (in press) for the unusually high explanation rate and its interpretations.
8. To the best of my knowledge, Oxford (1990: 255-256) has been the only psychometric analysis of a strategic inventory conducted so far.
9. The same possibility has been pointed out for the studies which tried to explain the morpheme accuracy order as a function of the frequency of the same morphemes in the input (e.g., Larsen-Freeman, 1976). The discussion of this so-called "delayed impact" issue on the morpheme accuracy order can be seen in Moerk (1980), and

Wells (1985) for L1 acquisition research, and Lightbown (1983) for L2 acquisition research.

10. By time-lagged designs, I mean (a) Time 1 LLS use & Time 2 Achievement correlations; and (b) Time 1 LLS use & Time 1 - Time 2 Gain correlations.

REFERENCES

- Beebe, L. M. 1983. Risk-taking and the language learner. In H. W. Seliger & M. H. Long (Eds.) *Classroom oriented research in second language acquisition*. Rowley: Newbury House.
- Bialystok, E. 1978. A theoretical model of second language learning. *Language Learning* 28, 69-83.
- Bialystok, E. 1979. The role of conscious strategies in second language proficiency. *The Canadian Modern Language Review* 35, 372-394.
- Bialystok, E. & Fröhlich, M. 1978. Variables of classroom achievement in second language learning. *The Modern Language Journal* 62, 327-335.
- Cohen, A. D. & Aphek, E. 1980. Retention of second language vocabulary over time: Investigating the role of mnemonic associations. *System* 8, 221-235.
- Ehrman, M. & Oxford, R. 1989. Effects of sex differences, career choice, and psychological type on adult language learning strategies. *The Modern Language Journal* 73, 1-13.
- Ely, C. 1986. An analysis of discomfort, risktaking, sociability, and motivation in the L2 classroom. *Language Learning* 36, 1-25.
- Ericsson, K. A. & Simon, H. A. 1980. Verbal reports as data. *Psychological Review* 87, 215-251.
- Gardner, R. C. 1985. *Social psychology & second language learning*. London: Edward Arnold.
- Hatch, E. & Lazaraton, A. 1991. *The research manual: Design and statistics for applied linguistics*. New York: Newbury House.
- Harris, D. P. & Palmer, L. A. 1986. *CELT: Examiner's instructions and technical manual*. New York: McGraw-Hill.
- Hayashi, H. 1990. On the variety of learning strategy use among the ESL learners. Paper presented at the Rokko English Linguistics Circle Bi-Monthly Meeting, Kobe, Japan.
- Holec, H. 1981. *Autonomy and foreign language learning*. Oxford: Pergamon.
- Knight, S. L., Padron, Y. N. & Waxman, H. C. 1985. The cognitive reading strategies

- of ESL students. *TESOL Quarterly* 19, 789-792.
- Larsen-Freeman, D. 1976. An explanation for the morpheme acquisition order of second language learners. *Language Learning* 26, 125-134.
- Lightbown, P. 1983. Exploring relationships between developmental and instructional sequences in L2 acquisition. In H. W. Seliger & M. H. Long (Eds.) *Classroom oriented research in second language acquisition*. Rowley: Newbury House.
- Moerk, E. 1980. Relationships between parental input frequencies and children's language acquisition: A reanalysis of Brown's data. *Journal of Child Language* 7, 105-118.
- Norusis, M. J. 1988. *SPSS/PC+ Ver. 2.0 base manual*. Chicago: SPSS.
- Oller, J. W. & Perkins, K. 1978. Intelligence and language proficiency as a source of variance in self-reported affective variable. *Language Learning* 28, 85-97.
- O'Malley, J. M. 1987. The effects of training in the use of learning strategies on learning English as a second language. In A. Wenden & J. Rubin (Eds.) *Learner strategies in language learning*. Englewood Cliffs: Prentice/Hall International.
- O'Malley, J. M. & Chamot, A. U. 1990. *Learning strategies in second language acquisition*. Cambridge: Cambridge University Press.
- Oxford, R. 1989. Use of language learning strategies: A synthesis of studies with implications for strategy training. *System* 17, 235-247.
- Oxford, R. 1990. *Language learning strategies: What every teacher should know*. New York: Newbury House.
- Oxford, R. & Nyikos, M. 1989. Variables affecting choice of language learning strategies by university students. *The Modern Language Journal* 73, 291-300.
- Oxford, R., Nyikos, M. & Ehrman, M. 1988. Viva la difference?: Reflections on sex differences in use of language learning strategies. *Foreign Language Annals* 21, 321-329.
- Oxford, R., Crookall, D., Cohen, A., Lavine, R., Nyikos, M. & Sutter, W. 1990. Strategy training for language learners: Six situational case studies and a training model. *Foreign Language Annals* 22, 197-216.
- Padron, Y. N. & Waxman, H. C. 1988. The effect of ESL students' perceptions of their cognitive strategies on reading achievement. *TESOL Quarterly* 22, 146-150.
- Politzer, R. L. 1983. An exploratory study of self-reported language learning behaviors and their relation to achievement. *Studies in Second Language Acquisition* 6, 54-68.
- Politzer, R. L. & McGroarty, M. 1985. An exploratory study of learning behaviors and their relationship to gains in linguistic and communicative competence. *TESOL Quarterly* 19, 103-123.
- Rigney, J. W. 1975. Learning strategies: A theoretical perspective. In H. F. O'Neil Jr. (Ed.) *Learning strategies*. New York: Academic Press.
- Rubin, J. 1975. What the 'good language learner' can teach us? *TESOL Quarterly* 9, 41-51.
- Rubin, J. 1989. The language learning disc. In W. F. Smith (Ed.) *Modern technology in foreign language education*. Lincolnwood: National Textbook.
- Sinclair, B. & Ellis, G. 1992. Survey: Learner training in EFL course books. *ELT Journal* 46, 209-225.
- Takeuchi, O. 1991a. Language learning strategies in second & foreign language acquisition. *Bulletin of the Institute for Interdisciplinary Studies of Culture* 8, 64-83.
- Takeuchi, O. 1991b. A study of EFL students' use of language learning strategies. *Goho Kenkyu To Eigo Kyōiku* 13, 59-65.
- Takeuchi, O. in press. Language learning strategies and their relationship to achievement in English as a foreign language. *Language Laboratory* 30.
- Wells, G. 1985. *Language development in the preschool years*. Cambridge: Cambridge University Press.

APPENDIX

Strategy Inventory

*This inventory was originally written in Japanese so that the subjects could answer it with precision. Note that the following are not exact but rough translations of the original.

*The strategies listed in this inventory are derived mainly from the work of Oxford, Rubin, O'Malley, Chamot, Naiman, Fröhlich, Stern, Carver, Wenden, Politzer, Cohen, Bialystok, and Reiss (in random order). See O'Malley & Chamot (1990) and Takeuchi (1991 a) for summaries of these works.

1. In class, I try to prepare answers to the teacher's questions, even if they are not directed to me.
2. I try to guess what the lecturer wants to say through his/her gestures, facial expressions, and so on.
3. In class, if I find some words, phrases, or sentences I do not comprehend, I ask the teacher to repeat them.
4. I try to look for patterns/rules concerning grammar, word-formation, and/or soundchanges in English.
5. I volunteer answers in class even if I am not sure whether they are correct.
6. In class, I try to guess what the speaker/writer wants to say from the context.
7. I try to guess what the writer wants to say through the use of background knowledge (e.g., knowledge about the topic, the world, and the language).
8. I actively practice newly introduced items.
9. I prepare for class.
10. I review often.
11. I read words, phrases, or sentences aloud many times when I try to learn them.
12. I try to guess the meanings of unfamiliar words or phrases before I consult a dictionary.
13. I use a dictionary often.
14. When I consult a dictionary, I pay attention to not only the meaning of a word but also its usage and sample sentences containing it.
15. When I try to learn new words or phrases, I pay attention to their pronunciation and stress patterns.
16. I use mnemonics (e.g., association, categorization) when I try to learn new words or phrases.
17. I go back to review the words or phrases I learned earlier.
18. I review and practice difficult items.
19. I try to think in English whenever possible.
20. I try to express in English the things that I see or do.
21. I arrange my schedule so that I can study and practice English consistently in my free time.
22. I pay special attention to English pronunciation, intonation, and rhythm.
23. I try to increase my knowledge of the world, and/or of the various topics by reading a lot (in both English and Japanese).
24. I make consistent efforts to increase my English vocabulary.
25. I try to seek practice opportunities in which I am pushed to speak/listen/write/read a little bit beyond my ability.
26. I use an English-English dictionary.
27. I try to understand difficult sentences by analyzing them grammatically.
28. I ask advice on language learning from good language learners and/or language teachers.
29. I try to make learning enjoyable.
30. I ask teachers/good language learners questions about what I do not understand/know about English.
31. In language learning, I am aware of the differences between my native language and English.
32. I try not to use Japanese in English classes.
33. In language learning, the global understanding of meanings is more important to me than the understanding of grammatical details.
34. I cooperate with my friends in language learning.
35. I try to make opportunities to evaluate the progress and the efforts I have made in language learning.
36. In listening comprehension, I make use of whatever knowledge I have (e.g., knowledge about the language).
37. When I watch a video program or listen to an audio-tape in English, I try to watch or listen many times to the parts I do not understand.
38. I try to imitate and practice English pronunciation, intonation, and/or rhythm.
39. When I try to learn a new word/phrase, I make a sentence containing it and memorize the whole sentence.
40. I transcribe English songs.
41. I listen to and sing English songs.
42. I seek specific details in what I hear.
43. I try to gather information/knowledge on the possible topics before I attend lectures in English, watch TV programs, or read books/newspapers/magazines.
44. If I fail to get across what I want to say in a conversation, I try to explain it again in a different way.
45. I try to make friends with native speakers of English.
46. If I do not understand what another person says, I ask him/her to say it again in a different way.
47. In conversation, I try to use words/phrases/expressions that I have learned recently.

48. I pay attention to the other person's facial expressions and gestures in conversation.
49. I look for opportunities to use English as much as possible.
50. Getting across meaning is more important to me than speaking accurately in conversation.
51. I try to maintain conversations in English.
52. I listen for pleasure in English.
53. I write for pleasure in English.
54. I have positive feelings toward English-speaking people.
55. I read for pleasure in English.