Input Enhancement Strategies in an EFL Learning Context: How are high-tech strategies employed by Japanese college students?

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Abstract

This study explored how Japanese college students obtain English input using various kinds of strategies because input is indispensable for improving English proficiency. For that purpose, the 40-item questionnaire, the Style and Input Enhancement Strategies Inventory (SIESI), was developed through the rigid validity and reliability confirming processes. Participants were 112 female Japanese college students, who were asked to answer the SIESI. Based on the results of factor analysis and descriptive statistics, it was found that learners used strategies needed to accomplish course assignments or to prepare for the class, and they did not utilize strategies to use High-tech Media to expand their input. Learners seemed to just follow the class schedule and reflect teachers' classroom teaching. It is suggested that teachers use more variety of teaching strategies in class to show the efficiency of the technology-use strategies, and that learners need to be instructed about how to expand their preferred strategies or about how to use the Internet for learning English.

1 Introduction

From mid-1970s through the mid-1990s the main input source for Japanese learners of English was a teacher-centered classroom. High school students learned grammar, increased vocabulary, read textbooks, and translated puzzling passages word-for-word. No assistant language teacher (ALT) came to class, and the Internet that can provide learners with worldwide information was not available for general public. The U.S. was a country college students longed for, but studying abroad was an unfinished dream for most of them. Therefore, they sought for exposure to authentic English outside a classroom. For example, they would often listen to English programs on the radio or go to see foreign movies to appreciate their favorite actors' elocution. Female students preferred to correspond with pen pals in foreign countries. These above are specific learner strategies that reflect the 1970s-90s.

Now, how do Japanese learners of English enhance second language (L2) input? With the development of Information and Communication Technology (ICT), various sources of language learning are readily available for the Japanese learners. In addition they have opportunities to have a synchronous computer-mediated communication with a native speaker of English on the Internet (Warschauer, Shetzer & Meloni, 2000). Not a few of natives English speakers teach English at universities and it is common that students study or travel abroad during their college life. It can be said that the present Japanese language learners are blessed with more opportunities to increase L2 input than those forty years ago. However, they have to select appropriate strategies on their own. Since Japan is in an EFL (English as a foreign language) context where the amount of input and output

are small in quantity, strategy choice is a key to a successful learner. Therefore, we assume that Japanese college students need to use more input enhancement strategies (IESs) than when they are in an ESL context. Furthermore, it would be useful to know to what extent ICT influences their language learning.

To acquire languages — whether it is first or a second/foreign language — learners inevitably need to be exposed to the target language that is comprehensible and contains just a step beyond one's level (i+1, Krashen, 1982). Prior information, gestures, and context information are helpful to make input comprehensible. How, then, should EFL learners obtain comprehensible input to compensate for the lack of authentic materials by employing what learner strategies?

2 Literature Review

2.1 Learner Strategy

Learner strategies have been in the limelight since the 1970s when studies on individual differences were conducted. They are keys to facilitating more effective language learning. Rubin (1981) suggests two types of learner strategies : direct and indirect. O'Malley and Chamot (1990) classify three types : cognitive, metacognitive, and socio-affective and Oxford (1990) proposes six groups : memory, cognitive, compensation, metacognitive, affective, and social. She states, "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" (p. 8). Stern (1975) lists ten characteristics of successful language learners, one of which is "a personal style or positive learning strategies." He reveals that good language learners will strive to discover their preferred learning

strategies so as to make their learning more efficient, whereas poor language learners do not develop any effective study styles. Successful learners use a large number of strategies more frequently than poor learners do (Cohen, 2011; Green & Oxford, 1995). Furthermore, good language learners tend to employ metacognitive strategies that help them manage and regulate their learning process. Cohen (2011) points out that use of metacognitive strategies leads to better language learning. Brown (2007) regards the term "metacognitive" as "executive" function. In other words, good language learners develop their skills at monitoring their performance while they use the target language (Stern, 1975). Ellis (1995) argues that the role of noticing in L2 learning is significant because it promotes the process of acquisition by which explicit knowledge becomes implicit knowledge. According to Cohen (2011), conscious learning cannot take place without strategies. In this sense, learner strategies can be harnessed to enhancing language learning process.

2.2 EFL Settings

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English as a foreign language (EFL) refers to language use within classroom, in a context where English is not widely used in a community. On the other hand, English as a second language (ESL) refers to the use of English in a community for daily communication by people of different native languages. Countries such as Japan, China, and Russia are EFL environments. Several studies on EFL settings have been conducted. Lai (2009) investigates learner strategies employed by EFL learners in Taiwan. He reports that compensation (communication) strategies were most frequently used, while social strategies such as interacting with others using English were least frequently used. He also claims that authentic language

input and opportunity for communication in English are unavailable in an EFL learning environment. Therefore, EFL learners use learner strategies related English in everyday life less frequently than ESL learners. Lo-Castro (1994) finds that Japanese learners of English used mainly memory strategies, followed by strategies of listening to radio and TV program, or those of watching videos of movies. She maintains that learners thought they had to learn English outside the regular language class if they really wanted to improve English proficiency. According to Ehrman and Oxford (1995), Hispanics employed more social, interactive strategies, whereas Asians chose more rote memorization strategies. They conclude that test-oriented educational system might make teachers and learners focus on grammar or vocabulary, not on developing communication skills. Thus, learning contexts such as EFL and ESL affect the choice of learner strategies.

2.3 Research Question

Considering what is mentioned above, our interest focused on the strategy use of EFL learners. Therefore, from our experiences and the previous research, our research question addresses the following: What kinds of strategies are employed by Japanese college students to enhance English input in an EFL learning context?

3 Method

3.1 Instruments

In order to reveal a strategy-structure of Japanese college students to get input in an EFL environment, a questionnaire entitled the Style and Input Enhancement Strategies Inventory (SIESI) was developed through the

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following several steps. As the first step, we collected and pooled input enhancement strategies that learners are likely to use in Japan. With regard to learning style, we simply borrowed the items - 14 items - from validated questionnaire, the Multiple Intelligence questionnaire (Brown, 2002) and translated from English into Japanese while paying attention to its reliability. However, we decided not to discuss style in this article because of page limitations. Therefore, hereafter, only Input Enhancement Strategies (IES) will be discussed. Following the guidelines by Dörnyei and Taguchi (2010), the first version of the SIESI was produced, which compounded 42 items. A pilot study was administrated to 21 female senior college students on January 10, 2013. Based on the data and feedback from the participants, we discussed its construct, content and face validity and calculated and checked Cronbach's α to confirm reliability of the questionnaire. Several items that were incomprehensible for the participants or had low reliability were revised or eliminated. Through the dense discussion among us, the SIESI was finalized, which had 40 items in total. These items are answered on a 6-point Likert scale from 0 point ("I never use it") to 5 point ("I always use it").

Part A comprises five items about Low-tech Media Strategy. They are traditional IESs that do not need any special technological techniques or tools, such as "I study English by using paper and a pencil" (item No. 5). Part B includes nine items on High-tech Media Strategy. Contrary to Part A, they are strategies that need technology such as "I use a learning website of English on the Internet" (item No. 28). Part C is composed of six items about Input using Communication Strategy. They are strategies to obtain input from interaction between people such as "I talk with foreign friends in English" (item No. 30). Part D with six items consists of

strategies that Japanese learners of English have to use to accomplish course assignments or to prepare for the class such as "I read materials written in English for a presentation in a class" (item No. 38). This part also includes IESs for the Study of TOEIC such as "I study a work book of TOEIC" (item No. 35). Part E, composed of four items, asks how the learners increase English vocabulary such as "I memorize English vocabulary by writing the words again and again" (item No. 43): Vocabulary Input Strategy. Part F that contains five items focuses on strategies of controlling the learners' feelings and increasing their motivation (Affective Strategy) such as "To study English, I choose a place where I feel relaxed (item No. 46). Finally, Part G comprises five items about Metacognitive Strategy: Learners look back their own learning behaviors and attitudes toward English learning, such as "I review my errors of the English test and make good use of them for improvement" (item No. 53).

3.2 Participants and Procedures

Participants of this study were 112 female Japanese college students majoring in English. They were sophomores or juniors and their age ranged from 20 to 22. The questionnaire SIESI was conducted on January 17, 2013 in the class of *Foreign Language Learning and Teaching* with the consent of the course instructor and the students. They were given a brief explanation about the intent of the questionnaire and the instruction for answering the questionnaire. The approximate time for answering the SIESI was 10 minutes.

The data were collected and analyzed with SPSS 20.0. First, reliability of the SIESI was calculated, and then, factor analyses were performed to see what factors constructed the questionnaire. After that, in order to

answer the research question, descriptive statistics of each factor was computed, and the most and least frequently used strategies were examined.

4 Results and Discussion

4.1 Factor Analysis and Reliability of the SIESI

To investigate the structure of the SIESI, a maximum likelihood (ML) factor analysis with promax rotation was conducted. The factor loadings were more than .35 (see Table 1). As a result, six factors were extracted, and five items were not included.

Factor 1 obtained eight items (items 46, 44, 42, 45, 47, 43, 49 and 48) and was represented by "I memorize English words aloud" (item No. 44) and "I set up a goal to elevate motivation for learning English" (item No. 47). Because these items were from Part E (Vocabulary Input Strategy) and Part F (Affective Strategy), Factor 1 was labeled as Vocabulary and Motivational Strategy (VM).

Factor	Strategy	Acronym	Number of items	Crombach's $lpha$
Factor 1	Vocabulary and Motivational strategy	VM	8	.871
Factor 2	Output and cooperative strategy	OC	9	.867
Factor 3	EFL specific strategy	FL	7	.811
Factor 4	Class obligatory strategy	CO	4	.851
Factor 5	Metacognitive strategy	MC	5	.893
Factor 6	TOEIC strategy	TO	2	.877
Unclassified			5	/
Total			40	.942

Table 1. Extracted factors and their reliabilities (Cronbach's α)

Factor 2 obtained nine items (items No. 30, 40, 20, 29, 31, 21, 34, 33 and 32) and was represented by "I talk with Japanese friends in English" (item

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No. 31). These items were related to communication in L2. Therefore, this factor was named Output and Cooperative Strategy (OC).

Eight items (items No. 3, 22, 17, 24, 15, 25, 18 and 23) were loaded on Factor 3. They were represented by "I watch foreign dramas or movies in English" (item No. 22) or "I listen to foreign music" (item No. 24). They were EFL specific strategies that Japanese students of English tend to use. This factor was, therefore, termed EFL Specific Strategy (FL).

Four items (items No. 39, 37, 38 and 19) were loaded on Factor 4. These items were concerned with Part D such as "I read English materials for class" (item No. 37). Since these are strategies that learners need to use to accomplish the course assignments or to prepare for the class, this factor was labeled as Class Obligatory Strategy (CO)

Five items (items No. 51, 50, 54, 52 and 53) were gathered on Factor 5, and all of the items matched Part G. Therefore, this factor was labeled as Metacognitive Strategy (MC).

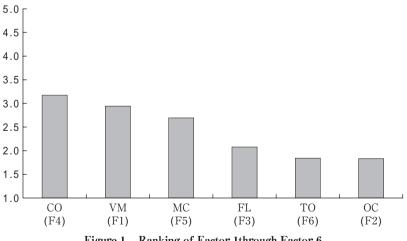
Finally, two items (items No. 35 and 36) were loaded on Factor 6: loaded two items, "I study a workbook of TOEIC" (item No. 35) and "I study a vocabulary book of TOEIC" (item No. 36). Because these items were associated with TOEIC, the factor was named TOEIC Strategy (TO).

Unclassified strategies were 5 items (items No. 16, 28, 41, 26 and 27), and these items were not dealt with in this study.

Table 1 also shows the reliability of the SIESI. Cronbach's α for overall SIESI was .942 and those of each factor were : .871 (Factor 1), .867 (Factor 2), .811 (Factor 3), .851 (Factor 4), .893 (Factor 5) and .877 (Factor 6). As can be seen, the high Cronbach's α proved that the SIESI is a reliable questionnaire to investigate into input enhancement strategies

4.2 Descriptive Statistics: Responding to the Research Question4.2.1 Descriptive Statistics of Factor 1 through Factor 6

Figure 1 shows the frequency of strategy use. CO (Factor 4) was the most frequently used strategy, followed by VM (Factor 1). On the other hand, OC (Factor 2) was the least frequently used strategy. As to CO, students tended to use IESs to do assignments from teachers, which implies that they lacked autonomy with regard to selecting their own strategies. In other words, they rely on their teachers and do not seek for their preferred input. They thought that the strategies their teachers recommended were the best ones. An interesting point was that students made use of VM to regulate their learning an MC to enhance their motivation intentionally. As Stern (1974) stated, metacognitive strategy plays an important role in EFL contexts, use of MC is notable in this study.





4.2.2 Most Frequently Used Strategy

With respect to individual strategies, Figure 2 reveals the most frequently

used strategy. The most frequent strategy was "I use an electronic dictionary" (item No. 26). The second was "I listen to the foreign music" (item No. 24), and the third was "I study English where I feel relaxed" (item No. 46). Other strategies were "I study English by means of paper, pencils, and pens" (item No. 19), "I watch foreign dramas and movies in English" (item No. 22), and "I set my goal to learn English" (item No. 47). These results point to the fact that students make a point of their interest and handy things.

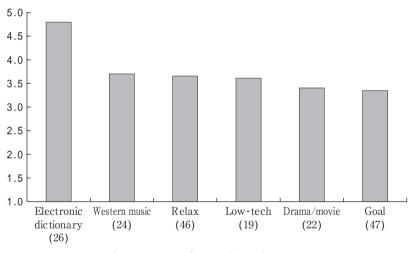


Figure 2. Most frequently used strategy

Contrary to what had been expected, no items related to High-tech Media Strategy were frequently used. Even in factor analysis, no factors were found in relation to this category. For the participants of this study, using the Internet might be still time-consuming and need efforts. "Easyto-use" strategy would be the frequently used. This issue will be discussed more in detail later.

It is an interesting tendency, as item 46 shows, that students seek their favorite places to maintain or improve their motivation. In regard to this, they might crave additional value. For instance, they go to coffee shops to study English. There are two reasons why they chose the place : One thing is that it is a comfortable place to study; and the other is that they can drink coffee or eat some foods in addition to learning. Especially for college students, just learning does not appeal, but also they need to have other values.

4.2.3 Least Frequently Used Strategy

Figure 3 shows the less frequently used strategy. The least frequently used strategy was "I use a paper dictionary" (item No. 18).

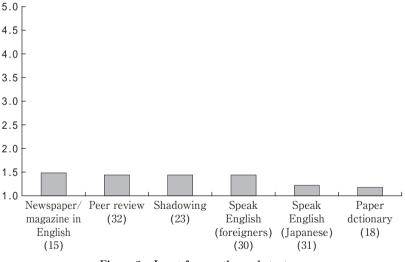


Figure 3. Least frequently used strategy

Today it is common and convenient for students to use an electronic dictionary, so it might be reasonable. The second was "I speak English with my Japanese friends" (item No. 31) and the third was "I speak English with foreign friends" (item No. 30). Other strategies were "After I write a paper in English, I ask my peer to review it" (item No. 32), "I do shadowing practice with foreign dramas movies" (item No. 23), and "I read newspaper, magazines, and articles in English" (item No. 15). The characteristics of these results can be summarized that participants did not use strategies which include output or interaction. To compensate for the inputpoor situation (EFL), learners do not want to have English conversation practice with their peers or do not look for people with who they can talk in English. This is the influence of Japanese collectivism culture (Hofstede, 2005) as well as the one of the EFL context.

4.2.4 Use of High-Tech Strategy

As shown in Figure 4, surprisingly there were few students who used High-tech Media strategies.

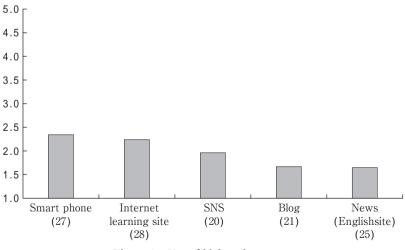


Figure 4. Use of high-tech strategy

Nowadays most of the students have their own high-tech devices such as

a smart phone and a personal computer. However, they did not utilize the stuff well. High-tech strategy to enhance input did not prevail among the students. They preferred low-tech strategy to high-tech strategy. There might be several reasons for that. Low-tech stuff cost less money and are portable. Students can use them anywhere and anytime. On the other hand, high-tech learning styles might be unfamiliar to them. Therefore, they might be doubtful about its efficiency. Although there were many English learning websites on the Internet, they were too much for them to select the best one : They might not know how to use them or finding and access to the target website might be not so easy. It is clear that participants did not make use of High-tech Media strategy as their daily continuous way of learning, although Internet-based learning is expected to be beyond the EFL/ESL boundaries.

The results of this study imply that learners stick to the traditional and easy-to-use IESs rather than effective strategies with some difficulties. Classroom teaching styles to use paper-based textbooks or low-tech media such as CDs might have affected learners' choice of strategies. This study also implies that students wait for teachers' advice on how to enhance English input without thinking on their own. Besides teaching English in the classroom, training learners to be able to use High-tech Media or to cooperate with others to enhance input and output can be great responsibilities of language teachers today. Turning our attention to the Internet, learners can access vast amount of English media for free represented by Massive open online course (MOOC). With the development of the technology, teachers need to suggest new IESs so that learner can improve their English proficiency with the vast amount of English input.

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5 Conclusion

5.1 Findings

The following were the main findings of our research:

- (1) The most frequently used strategy was CO, and it reveals that teachers were indispensable for students. Students were greatly influenced by teachers in class. It stood for strong relationship between teachers and students. In other words, teachers always teach English *per se*, and do not teach how to learn English or how to enhance English input. As a result, learners' autonomy is not facilitated.
- (2) It was common to utilize traditional strategies instead of new ones. Students persisted familiar strategies and did not challenge high-tech one because it is difficult for them to find interesting and suitable sites. In addition, the Internet learning site has problems: it does not show global picture. By comparison, ordinary learning texts can make learners feel realization and plan a goal.
- (3) Students chose input enhancement strategy not only to study English but also to gain extra value. Extrinsic elements were connected to mental stability, and the stability led up to keeping and increasing motivation to study English.
- (4) Students did not often use interactive strategies. It is because they do not have affluent opportunities to use English in EFL contexts, but Japanese people's mentality that they prefer to speak English without loosing face might be the real reason. As a result, they cannot be accustomed to speaking English.

5.2 Limitation of This Study

The limitation was that all the participants in this study were female college students, and the majority of them belonged to English Department. In order to generalize the findings of this study, coeducational university students and non-English major students should be desirable in further study.

6 Implications

As mentioned above, female Japanese college students tend to choose low-tech strategies and depend on teachers in class. In order to facilitate autonomy, which is essential for learners to go on learning on their own, teachers should encourage students to employ various kinds of strategies. It is suggested that teachers use more variety of teaching strategies in class to show the efficiency of the technology-use strategies, and that learners need to be instructed about how to expand their preferred strategies or about how to use the Internet for learning English. This study implies that using technology-use strategies needs planned and precise instruction so that learners can independently use them.

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Appendix

英語学習スタイルとストラテジーに関する質問紙

(SIESI : Style and Input Enhancement Strategies Inventory) Version 0.1b

Developed by Saito, Murahashi, Takizawa & Wakamoto (2013)

(研究に実際に利用した質問紙のルーブリックなどは省略した)

第1部

- 1. 英単語を覚えるのが好きだ
- 2. 日本語や英語の文法を学ぶのが好きだ
- 3. グラフや図を作るのが好きだ
- 4. 劇やロールプレイをするが好きだ
- 5. 歌を歌うのが好きだ
- 6. グループ活動・ペア活動が好きだ
- 7. 日記を書いて(インターネットの日記も含む)自分のことを振り返るのが好きだ
- 8. 単語ゲームやクロスワードパズルが好きだ
- 9. 何かの問題を解決するタイプの練習(例えば、指示をもとに宝のありかを探 すようなタスク)が好きだ
- 10. 映画やビデオで英語の勉強をするのが好きだ
- 11. 歩きながら考えるのが好きだ
- 12. リズムや歌に合わせて体を動かすのが好きだ
- 13. 会話練習は一対一の方が好きだ
- 14. ふだんの自分の行動を振り返って考えるのが好きだ

第2部

Part A

- 15. 英語の新聞や雑誌、論文を読む
- 16. 図書館で読みたい英語の本を探す
- 17. 好きな英語の本を読む

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- 18. 紙の辞書を引く
- 19. 紙と鉛筆・ペンを使って英語学習をする

Part B

- 20. SNS (Twitter や Facebook など) で、外国人と友達になろうとする
- 21. 英語でブログや SNS (Twitter や Facebook など) を書く
- 22. 海外ドラマや洋画(日本語吹き替えを除く)を観る
- 23. 海外ドラマや映画の英語字幕を使ってシャドーウィングする
- 24. 洋楽を聴く
- 25. 英語サイトでニュースを読む
- 26. 電子辞書を利用する
- 27. スマートフォンのアプリを利用して英語学習をする
- 28. インターネットの英語学習サイトを利用する

Part C

- 29. 外国人の先生と英語で話す
- 30. 外国人の友人と英語で話す
- 31. 日本人の友達と英語で話す
- 32. 英語で文章を書いた時、友達に見てもらう
- 33. 友達と協力して英語学習をする
- 34. 英語がわからない時、外国人の先生に違う表現に言い換えてもらう

Part D

- 35. TOEIC の問題集を学習する
- 36. TOEIC の語彙集を学習する
- 37. 授業の英文資料 (テキスト・ハンドアウトなど) を読む
- 授業でのプレゼンテーションのために英文資料(テキスト・インターネット など)を読む
- 39. 授業の宿題の英文資料(テキスト・ハンドアウトなど)を読む
- 40. 外国人の先生の授業で分からないところを質問する

Part E

- 41. 英語の単語帳や単語カードを作る
- 42. イメージと音を結びつけて英単語を覚える
- 43. 英単語を繰り返し書いて覚える
- 44. 英単語を声に出して覚える

Part F

- 45. 自分を励まして英語学習をする
- 46. 自分の落ち着く場所で、リラックスしながら英語学習をする
- 47. 自分の中で目標を立てて、英語学習のモチベーションを上げる
- 48. 英語で目標を達成できたら、自分にごほうびを与える
- 49. 英語のテストや授業で、緊張や不安を感じたら自分を落ち着かせる

Part G

- 50. 英語学習の計画を立てる
- 51. 英語学習の途中で計画通りできているか見直す
- 52. 英語の問題を解き終えてどのくらいできているか、自己評価する
- 53. 英語のテストでの自分の間違いを見直して、今後の学習に生かす
- 54. 自分に合った英語学習法を探す