

# LEARNING STRATEGIES OF HIGH ENGLISH PROFICIENCY STUDENTS MAJORING IN INFORMATION SYSTEMS

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## Abstract

This qualitative exploratory study, utilizing the Strategy Inventory of Language Learning (SILL), examines English learning strategies among 16 high English proficiency students majoring in Information Systems. The research aims to uncover critical insights into their English language learning strategies. The results revealed two primary findings. Firstly, metacognitive strategies emerged as the most highly used strategy, with 57% of respondents using it. Metacognitive strategies, characterized by their indirect nature, enable learners to take charge of their learning process. It highlights the significance of metacognitive reflection and decision-making skills in improving English proficiency. Secondly, within each learning strategy category, three strategy actions demonstrated strikingly similar usage percentages, each at 87.5%. These strategy actions encompass focused listening during English conversations, practicing English phonetics, and creating mental associations with new words in contextual scenarios. This research underscores the significance of metacognitive strategies and practical English language learning techniques among high English proficiency students majoring in Information Systems. Future studies using a variety of research instruments can contribute positively to providing more comprehensive insights into English learning strategies.

**Keywords:** Learning Strategy; EFL; High Proficiency; SILL

## INTRODUCTION

The year 2045 is regarded as the peak moment for the productivity of the Indonesian citizen. To achieve the vision of Golden Indonesia in 2045, the quality of the existing education system has to be elevated (Almubaroq, 2023). One of the most crucial aspects that can boost Indonesian students to succeed in a globalized world is their English language proficiency. Indonesian students must learn and grasp English as a foreign language, particularly in the educational system (Isadaud et al., 2022). Students obtain a competitive qualification by learning English in a globalized society. Higher education in Indonesia has started incorporating English language learning into curricula as the foundation for the students to be more competitive in the global society (Andayani, 2022). One of the study programs that put concern on that matter is the Information Systems Study Program, which plays a significant role in producing superior graduates who will support Indonesia in obtaining the goal of a Golden Indonesia in 2045 (Universitas Bina Sarana Informatika, 2023). The mastery of the English language is one of the critical skills that is emphasized in the creation of outstanding graduates. Regarding the vision of Golden Indonesia in 2045, Information Systems graduates who are proficient in English will become a valuable resource. They play a vital role in the human resource and as the base for Indonesia's growth acceleration. With adequate knowledge of information technology and the ability to build communication in a global society, Information Systems graduates can actively contribute to increasing economic growth, developing innovation for a bright future of Indonesia (Shaturaev, 2021).

Moreover, Information Systems graduates with proficient English can have enormous opportunities to find decent professions, especially in multinational institutions that demand the ability to communicate well in English (Mann et al., 2018). Then, English skills can assist graduates in communicating effectively and interacting easily with colleagues from different countries (University of Michigan-Flint, 2023). Effective English learning strategies are vital to creating superior Information Systems Graduates (Illinois State University, 2023). They will play the role of the agents of change in developing and establishing advanced industries on a global scale (Kim & Bae, 2020) (Ariffin et al., 2021). The Strategy Inventory of Language Learning (SILL) is an instrument created by Rebecca L. Oxford to measure language learning strategies. It is commonly used in educational research, mainly focusing on second/ foreign language learning in many countries (Pawlak, 2021). The SILL was developed according to research on language learning strategies, which then yielded categorization of learning strategies. SILL plays a pivotal role in the success of English learning since it helps language learners identify their effective and ineffective language learning strategies. Learners' awareness can lead them to make selections and adjustments to the application of their learning strategies so that they can achieve better learning outcomes (M. Lestari & Wahyudin, 2020). Besides, for educators, SILL enable teachers and lecturers to gain an overview of students' learning strategies so that they can provide suitable guidance and stimulation for students to apply the learning strategies. Overall, SILL is necessary for both teachers and students to establish successful English learning (Rianto, 2020).

SILL is a self-evaluation instrument that assesses how often foreign or second language learners employ specific language learning strategies. Language learners can examine the preferences of their learning strategies according to SILL classifications. According to (T. M. Lestari & Fatimah, 2020) SILL is categorized into six classifications: memory, cognitive, compensation, metacognitive, affective and social strategies). To be more specific, memory, cognitive and compensation strategies belong to direct strategies which directly involve the target language, which is English. Then, metacognitive, affective and social strategies are included in indirect strategies due to the indirect involvement of the target language, that is, English (Oxford 1990 as cited in (Lavasani & Faryadres, 2011).

Many research studies have already investigated the issue of English learning strategies by using SILL as the research instrument. A study conducted by (Ibrahim et al., 2023) examined 37 non-English students, and the results showed that the non-English students needed to be made aware of the use of the learning strategies because they hardly ever used those learning strategies. Another study conducted on the non-English students of Polytechnic yielded a result that the students have already applied learning strategies. Moreover, the study also reported that the most preferred learning strategies are cognitive and metacognitive (Aziz & Shah, 2020).

Although there is much research that has discussed the issue of English learning strategies by utilizing the SILL instrument, there is still a need for further research that investigates English learning strategies by using SILL in a more varied academic context. The research gap of this study is presenting a new and different population that explores the learning strategies used by high English proficiency students majoring in Information Systems. Thus, to obtain a deeper understanding of those issues, two research questions are formulated:

1. What is the general overview of learning strategies applied by high English proficiency students?
2. What is the most prominent learning strategy in each category?

## **METHOD**

It was a qualitative study that employed an exploratory method with the objective of investigating the research questions that need to be clearly defined to get better knowledge of

the existing research problem (Swedberg, 2020). Exploratory research was conducted to obtain familiarity with a particular phenomenon, in this case, the English learning strategies of the high English proficiency students majoring in Information Systems (Kooli, 2023).

The research used purposive sampling to determine the respondents who were categorized as high English proficiency students majoring in Information Systems. The respondents were selected based on their performance in English learning in class and also their high test scores. The research instrument was the Strategy Inventory of Language Learning (SILL), which was a questionnaire distributed to 16 respondents.

Then, this research used exploratory data analysis (EDA) to understand the data thoroughly and to examine the data characteristics. The data analysis extracted essential features and trends in English learning activities. The steps were explained as follows:

1. Observe the data set
2. Describe the features and trends
3. Visualize the results
4. Making relationships between variables
5. Summarize the results

(Mukhiya & Ahmed, 2020)

## RESULTS AND DISCUSSION

### Results

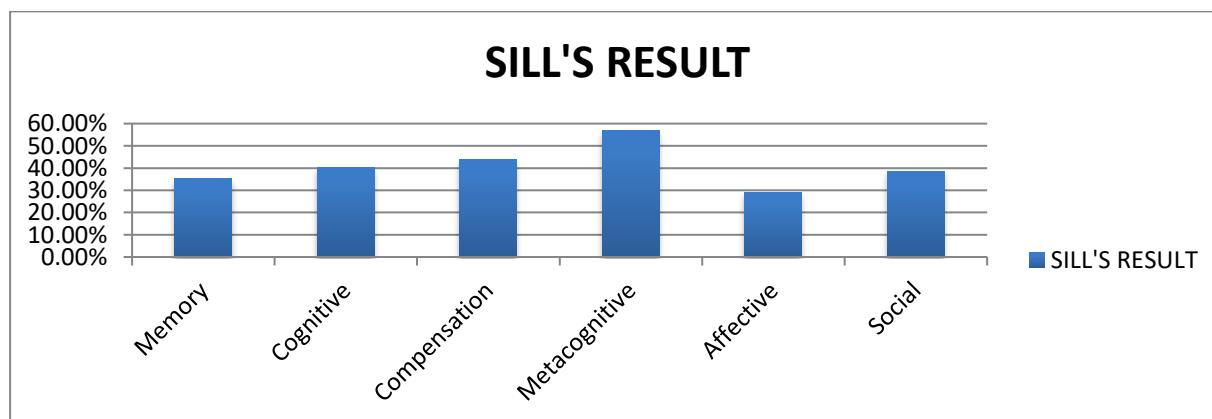
#### Demographic Overview of the Respondents

The initial part of the questionnaire was intended to collect students' personal information such as gender, age and years of studying English. The data showed that eight female students and eight male students were involved in this study. The age range between 19-23 years old, but surprisingly, there was one respondent with the age 43 years old. All the respondents studied English for six years before they attended university. All of the respondents were high English proficiency learners who were selected based on the English lecturers' test scores and assessment of English class.

#### Overview of the SILL's Result

Data from the SILL questionnaires yielded results on the English learning strategies of the high English proficiency students majoring in Information Systems. The calculated percentage of the data is illustrated in Figure 1.

**Figure 1.** Overview of SILL'S RESULT



Regarding the SILL's six categories of language learning strategies, the data gained indicated that the most used learning strategy was the metacognitive strategy, with a percentage of 57%. Then, the second most used learning strategy was the compensation strategy, with a rate of 43.8%. Cognitive strategy was ranked to be the third most used learning strategy with an equal percentage of 40.2%. Next, social strategy came at the fourth position with a percentage of 38.6%. The fifth position was memory strategy, with a rate of 35.4%. Lastly, the affective strategy was the least used learning strategy, with an equal percentage of 29.2%.

### The Most Prominent Attitudes of Each Learning Strategy

The following research results illustrated the most prominent attitudes of each learning strategy, as presented in Table 1. Three attitudes got the highest percentage with the same amount, 87.5%, from metacognitive, cognitive and memory strategies. Then, in the next position was the attitudes in compensation strategy followed by social strategy. Then, the attitude in affective strategy got the lowest percentage.

**Table 1.** The most prominent learning strategy from each category

Learning Strategies	Attitudes	Percentage
Metacognitive	I pay attention when someone is speaking English	87.5 %
Cognitive	I practice the sounds of English	87.5%
Memory	I remember new English word by making a mental picture of a situation in which the word might be used	87.5 %
Compensation	To understand unfamiliar English words, I make guesses	75 %
Social	If I do not understand something in English, I ask the other person to slow down or say it again	68.8 %
Affective	I try to relax whenever I feel afraid of using English	37.5 %

The calculated percentage in Table 1 shows the frequency of use of the attitudes in each learning strategy. Attitudes in metacognitive, cognitive and memory each got the highest percentage, at

87.5 %. That data indicated that learners mostly did the attitudes of (1) paying attention when someone is speaking (metacognitive), (2) practising the sound of English (cognitive), and (3) remembering new English words by making a mental picture of a situation in which the word might be used.

Attitude in compensation strategy got 75 %, that is, the attitude to understand unfamiliar English words by making guesses. Next, students' attitude by asking the other person to slow down or repeat it when they do not understand something in English was in the percentage of 68.8 %. Lastly, the attitude in the affective strategy was in the amount of 37.5 %, showing that the students tried to relax whenever they felt afraid of using English.

## Discussion

This study aimed at answering two research questions: (1) What is the general overview of learning strategies applied by high English proficiency students? (2) What is the most prominent learning strategy in each category? The answer to the first research question was revealed in the data presented in the preceding figure 1. The results indicated that the most used learning strategy is metacognitive, followed by compensation, cognitive, social, and memory, and the least used strategy is affective. Metacognitive strategy, as the most preferred learning strategy of the high English proficiency students, got a percentage of 57%. The metacognitive strategy involves actions that go beyond purely cognitive areas and leads the learners to a way to coordinate and manage their learning process (Oxford, 1990). Learners' metacognitive strategies were manifested in their learning actions. The most frequent action that the students did was paying attention when someone was speaking English. In general, the students did three types of learning actions: centring the learning, arranging and planning, and evaluating learning (Lavasani & Faryadres, 2011). It was carried out to achieve a better outcome of English learning by maximizing their learning process by highly employing themselves (Ariffin et al., 2021).

To reveal the answer to the second research question, the researchers elaborated on the findings in the following section. The metacognitive strategy with the highest used scale was the action of "I pay attention when someone is speaking English." The percentage for that strategy action was 87.5%. It is in line with the research finding conducted by (Altunay, 2014) which reported that the most frequently used learning strategy in the category of metacognitive was "I pay attention when someone is speaking in English." This learning strategy was the basis of language learning since listening comprehension is the core of language learning. If English learners find it difficult to grasp information through listening, there may be a number of difficulties in other areas of English learning (Djabborova, 2020).

Next, the highest rank of compensation strategy was the action: "I practice the sound of English", with a percentage of 87.5%. It becomes a productive skill by pronouncing the sound of English. Learners tried to get meaning from what they heard, and associate sounds with something that they already knew, which became the action of auditing to comprehend the language (Afriyuninda & Oktaviani, 2021). This learning strategy indicated the learning process that involved auditory perception to acquire the English language in a more accessible way by making distinctions of the English sound and holding the sound in learners' memory.

The highest learning strategy with a similar amount of percentage, which is 87.5%, was from the memory learning strategy with the action: "I remember new English word by making a mental picture of a situation in which the word might be used." Memory strategy by making mental imagery is a powerful tool for language learners to deal with vocabulary acquisition. It

is because mental imagery makes English learners easier and more enjoyable in acquiring vocabulary due to its ability to transfer the vocabulary knowledge to a new situation (Zahedi & Abdi, 2012). This learning strategy significantly helps high English proficiency students due to the fact that in the typical situation, most English learners do not have any clue how to memorize the new words they learned. Thus, this strategy really helps the high English proficiency students to retain new vocabulary they learned as a part of their mental lexicon (Zahedi & Abdi, 2012).

The learning action from the compensation strategy that was used with the highest rank was “to understand unfamiliar English words, I make guesses.” The guessing strategy was an effective way for the English learner to understand unfamiliar vocabulary by making relation of any range of clues such as linguistics or non-linguistic clues (Huang & Eslami, 2013). The strategy was then known as the contextual guessing strategy (Oxford, 1990). Moreover, (Nation, 2001) added that contextual guessing is a crucial part of all efforts of vocabulary learning. Many English educators promoted contextual guessing strategy by employing the learners’ linguistics competence and background knowledge to predict the meaning of unfamiliar words (Kaivanpanah, S., & Alavi, 2008). Besides, (Barnett, 1989) mentioned in this research that the advanced-level English learners demonstrated more guessing strategy than the intermediate-level English learners. It was due to the sufficient vocabulary bank that the advanced-level English learners had that it made them more likely to guess unknown vocabulary successfully compared to the intermediate ones.

From the social strategy, the most used strategy was “If I do not understand something in English, I ask the other person to slow down or say it again”, with a percentage of 68.8%. This finding is similar to the research finding carried out by (Altunay, 2014). This learning strategy involves others, such as English speakers, to slow down their speed of communication and also to make repetition if needed. This was a way of learning employed by the high-English proficiency students to grasp the information that they hear in spoken English.

The last discussion showed the learning strategies of the affective category with the highest rank, which was, “I try to relax whenever I feel afraid of using English”. This strategy was an effective effort to minimize anxiety, especially in speaking English (Dumarni, 2018). Speaking performance was a taut situation for some English learners since it demanded fast response orally. The high English proficiency students made use of that strategy to be more confident and get rid of their anxiety in speaking English.

## CONCLUSION

In conclusion, our research has yielded two crucial findings in the realm of English learning strategies. The first noteworthy outcome is the prominence of metacognitive strategies, which play an influential role in improving English language acquisition. Metacognitive strategies, being indirect, empower students to exercise critical thinking and assume greater control over their learning journey, fostering a deeper understanding and proficiency in English. The second significant finding revealed that three learning strategies show strikingly similar popularity; each got 87.5% of learners' preferences. These strategies include attentively listening to English speakers, practising English sounds, and creating mental imagery with new words in future possible contextual situations. It demonstrates the significance of multiple complementary strategies in the language learning process. For future research endeavours, it is suggested to dig out issues on English learning strategies by employing a variety of research instruments to

give a more diverse and comprehensive understanding discussion on this issue, also enriching the knowledge in the field.

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