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LEARNING STRATEGIES TO IMPROVE SPEAKING SKILLS OF INFORMATICS STUDENTS

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Marita Nurharjanti^{1*}, Rosyidah Jayanti Vijaya², Agus Wibowo³, Netci Hesvindrati⁴
^{1,2,3}Faculty of Economics and Social, Amikom University, Yogyakarta
⁴Faculty of Computer Science, Amikom University, Yogyakarta
Jl. Ringroad Utara, Condongcatur, Depok, Sleman, Yogyakarta
E-mail: ¹maritanurharjanti@amikom.ac.id

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Learning Strategies, Speaking Skills **Abstrak:** This research aims to identify the learning strategies used to improve English speaking skills by Informatics students of Universitas Amikom Yogyakarta. The necessity of studying speaking skills has been highlighted by a lot of researchers in recent years. This research used questionnaires of Language Learning Strategies (SLL) to collect the data. The research respondents were 22 students of the academic year 2023/2024 from an international class of Informatics Study Program, Faculty of Computer Science. They were divided into three categories; seven students with high English speaking skills, eight students with medium English speaking skills, and seven students with low English speaking skills. This study employs a quantitative research method with a Linear Regression Analysis to explore the learning strategies used to improve speaking skills among Informatics students. The strategies are divided into 6: Affective Strategy, Cognitive Strategy, Social Strategy, Meta-Cognitive Strategy, Memory Strategy and Compensation Strategy. The result showed that students with high speaking skills implement the social strategy. It gives high influence to the success of their speaking skills. The students from medium level use the cognitive strategy. Whereas the students with low speaking skills also implement the cognitive strategy but in low frequency.

INTRODUCTION

In this globalization era and fast technological advancement, the capability to communicate effectively in English has become a vital skill for students, including those in Informatics Study Program. As future professionals in the world of information technology, students are hoped not only to have technical expertise but also to demonstrate strong communication skills, including English speaking. Despite the importance of English-speaking skills, many Informatics students still find some problems as well in expressing ideas clearly and confidently in English.

Several factors contribute to the problems, such as a lack of self-confidence, limited vocabulary, anxiety, and insufficient exposure to English-speaking environments. Consequently, there is a growing need to identify effective learning strategies that can help students overcome these challenges and improve their speaking skills. Numerous studies



have emphasized the role of learning strategies in developing language proficiency, highlighting how the right strategies can foster learner autonomy, motivation, and language performance.

This research aims to identify learning strategies that can effectively improve the English-speaking skills of Informatics students. By understanding which strategies are most beneficial, teachers/ lecturers and students can work collaboratively to implement appropriate methods that promote confidence, fluency, and overall communicative competence. The findings of this study are expected to contribute valuable insights to the field of language learning and provide practical recommendations for both teachers/lecturers and students in the Informatics Study Program.

LITERATURE REVIEW Learning Strategies

It was stated in Kehing (2021) that researchers noticed students who implemented learning strategies in language learning are usually better learners (Adi et al., 2019).¹

On the other hand, Oxford (1990) cited in Razmjoo and Ardekani (2011) had divided the learning strategies into two parts, those are "direct strategies" namely "memory strategies, cognitive strategies and compensation strategies"; and "indirect strategies" namely "metacognitive strategies, affective strategies and social strategies".²

Oxford and Crookall (1989) which was also cited in Razmjoo and Ardekani (2011) explained about the direct strategies. First, memory strategies are ways to assist students store new information in memory and retrieve it later. Second, cognitive strategies involve manipulation or transformation of the language in some direct way such as note taking. Third, compensation strategies are behaviors used to compensate for missing knowledge. Compensation strategies are used while speaking; however, communication can occur in other language skill areas.

They elaborated the indirect strategies as Metacognitive strategies, Affective Strategies and Social Strategies. Metacognitive strategies are used to provide control over the learning process. Next, affective strategies are methods to gain better control over their emotions. The last, social strategies are actions involving other people in the language learning process such as questioning, cooperating.

For international class students, speaking is a crucial skill to master. This is because they will interact extensively with people from various countries through oral communication. Mastering English, particularly speaking skills, is a requirement that they cannot afford to ignore. 3

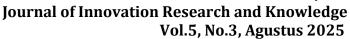
Oxford (1990: 8) explained learning strategies as certain actions conducted by the students to create learning easier, faster, enjoyable, more self-directed, more effective, and

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¹ Katherine Livan Kehing and Melor Md Yunus, "A Systematic Review on Language Learning Strategies for Speaking Skills in a New Learning Environment," *European Journal of Educational Research* (Eurasian Society of Educational Research, October 1, 2021).

² S A Razmjoo Associate Professor and S M Ghasemi Ardekani A, A Model of Speaking Strategies for EFL Learners A r c h i v e o f S I D, Previously Journal of Social Sciences & Humanities) The Journal of Teaching Language Skills, vol. 3, 2011, www.SID.ir.

³ Implementasi Merdeka et al., *PROSIDING SEMINAR NASIONAL STRATEGI BELAJAR BAHASA INGGRIS UNTUK MENINGKATKAN KEMAMPUAN BERBICARA*, n.d.





more transferable to new situations. These strategies enhance the growth of communicative competence in general. $^{\rm 4}$

Speaking Skills

Leong & Ahmadi (2017) clearly explained that speaking English is considered complicated and hard because speakers have to be proficient in five aspects, namely: pronunciation, grammar, vocabulary, fluency, and comprehension. Students must own sufficient English language skills to interact comfortably with others.⁵

In relation with pronunciation, there is a threshold level of pronunciation for nonnative speakers of English; if they fall behind this threshold level, they will have oral communication problems no matter howexcellent and extensive their control of English grammar and vocabulary might be" (Celce-Murcia& et. al. 2010: 8). 6 It means that correct pronunciation ensures that your listener understands what you're saying. Mispronounced words can lead to confusion or miscommunication.

Grammar constitutes a fundamental element of communication, in written and spoken form, to express thoughts, ideas, and feelings. It is a language's set of rules for modifying words' forms and linking them together to make sentence (Chowdhury, 2014). Grammar is needed to make people understand the meaning of a message being conveyed (Praise & Meenakshi, 2014). ⁷ Proper grammar ensures that your message is understood as you intend. Without it, communication can become confusing or misleading.

Vocabulary knowledge is commonly viewed as a critical tool for second language learners because a limited vocabulary in a second language impedes successful communication. Underscoring the importance of vocabulary acquisition. Schmitt (2000), cited in Alqahtani 2015). emphasizes that "lexical knowledge is central to communicative competence and to the acquisition of a second language" p. 55)8. A strong vocabulary improves all language skills—reading, writing, listening, and speaking. It enhances comprehension when reading or listening and allows for more accurate and engaging writing and speaking. In academic and professional settings, a rich vocabulary helps you present yourself more clearly and confidently.

Richards (2006), cited in Shahini, points out that fluency is the use of naturally occurring language when a speaker engages and maintains in meaningful communication. This communication would be comprehensible and ongoing in spite of limitations in one's communicative competence. Fluency empowers individuals to function effectively and confidently in diverse aspects of life. Whether linguistic, academic, or technical, fluency

⁴ Rosyidah Jayanti Vijaya, *STUDENT'S SOCIOAFFECTIVE STRATEGY IN READING*, n.d., http://www.linguist.org.cn/doc/su200812/su20081201pdf.

⁵ Emily John et al., "Language Learning Strategies Used by Form 4 Esl Learners to Develop Speaking Skills," *International Journal of Academic Research in Business and Social Sciences* 11, no. 6 (June 23, 2021).

⁶ Isil Atli and Ayfer Su Bergil, "The Effect of Pronunciation Instruction on Students' Overall Speaking Skills," *Procedia - Social and Behavioral Sciences* 46 (2012): 3665–3671, http://dx.doi.org/10.1016/j.sbspro.2012.06.124.

⁷ Afi Normawati, "How Efl Learners Perceive Grammar in Speaking and Writing," *Journal of English Educational Study (JEES)* 6, no. 1 (2023): 23–30.

⁸ MOFAREH ALQAHTANI, "The Importance of Vocabulary in Language Learning and How to Be Taught," *International Journal of Teaching and Education* III, no. 3 (2015): 21–34.

⁹ Gholamhossein Shahini and Fatemeh Shahamirian, "Improving English Speaking Fluency: The Role of Six Factors," *Advances in Language and Literary Studies* 8, no. 6 (2017): 100.



enhances both personal development and societal contribution.

Khasanah (2021) inferred that higher reading comprehension skills will be related to the higher score of speaking. When learning an unfamiliar language, weakness in speech can be solved by using a particular text. ¹⁰ Teachers Comprehension allows a speaker to respond appropriately to questions, comments, or cues during a conversation. Miscommunication often arises when a speaker misunderstands the other person. Comprehension helps prevent confusion or incorrect responses.

RESEARCH METHOD

In quantitative research, the researcher needs to choose specific techniques to collect, analyze, and interpret data according to the problem's nature or the research question under study. ¹¹ This study employs a quantitative research method with a Linear Regression Analysis to explore the learning strategies used to improve speaking skills among Informatics students. Quantitative model is used to reach many respondents. The research respondents were 22 students of the academic year 2023/2024 from an international class of Informatics Study Program, Faculty of Computer Science. They were divided into three categories; seven students with high English speaking skills, eight students with medium English speaking skills, and seven students with low English speaking skills.

This research used questionnaires of Language Learning Strategies (SLL) to collect the data. The researchers made five questions from each learning strategy and totally there were 6 strategies, those are Affective Strategy, Cognitive Strategy, Social Strategy, Meta-Cognitive Strategy, Memory Strategy and Compensation Strategy. So, the questionnaire consists of 30 questions that can be answered with *Likert Scale* of "Never" (converted with score 1), "Seldom" (2), "Sometimes" (3), "Often" (4), "Always" (5).

The steps that the researchers took to conduct this research are: 1. Problem Formulation and Research Objectives. 2. Literature Review. 3. Development of Research Instruments (Questionnaires). 4. Determination of Population and Sample. 5. Data Collection 6. Data Processing and Analysis. 7. Interpretation and Discussion of Results 8. Drawing Conclusions. 9. Preparation of the Research Report.

FINDINGS AND DISCUSSIONS

Table.1 below showed the result of respondents' data from the quesionnare about the Language Learning Strategies (LLS) used by EFL (English as a Foreign Language) students to improve their speaking skills.

¹⁰ Siti Uswatun Khasanah and Rizka Safriyani, "A Correlation Study of Reading Comprehension with Speaking Skill in English Class at Vocational High School," *Metathesis: Journal of English Language, Literature, and Teaching* 5, no. 1 (2021): 32.

¹¹ Juwel Rana, Patricia Luna Gutierrez, and John C. Oldroyd, "Quantitative Methods," in *Global Encyclopedia of Public Administration, Public Policy, and Governance* (Cham: Springer International Publishing, 2021), 1–6, https://link.springer.com/10.1007/978-3-319-31816-5 460-1.



Table 1. Strategi Belajar Responden Berdasarkan Kuesioner LLS

No.	Affective Strategy	Cognitive Strategy	Social Strategy	Meta- cognitive Strategy	Memory Strategy	Compensation Strategy	Speaking	Average Score	
1	4	3.8	4.8	3.8	3.8	4	4	4.0	
2	3.8	3.8	4.8	4	3.8	4	4	4.0	
3	3.8	3.6	4.8	3.2	3.6	3.8	4	3.8	
4	3.6	3.4	4.8	3	3.4	4	4	3.7	High
5	3.6	3.2	4.8	3	3.4	4	4	3.7	
6	3.4	3.2	4.6	3.6	3.4	3.8	4	3.7	
7	3.4	3.2	4.6	3.4	3.4	3.6	4	3.7	
Average	3.66	3.46	4.74	3.43	3.54	3.89	4		
8	2.8	3.2	3.2	3	2.6	3	3	3.0	
9	2.8	3.2	3.2	2.8	2.6	3	3	2.9	
10	2.8	3.2	3.2	2.8	2.6	2.8	3	2.9	
11	2.6	2.8	2.8	2.8	2.4	2.8	3	2.7	Medium
12	2.4	2.6	2.8	2.8	2.4	2.8	3	2.7	Medium
13	2.4	2.8	2.6	2.6	2.4	2.8	3	2.7]
14	2.2	2.8	2.4	2.2	2.4	2.8	3	2.5	
15	2.2	2.4	2.4	2.2	2.4	2.8	3	2.5	
Average	2.53	2.88	2.83	2.65	2.48	2.85	3		
16	1.8	2.4	1	1.8	1.6	2	2	1.8	
17	1.6	2.4	1	2.2	1.4	2	2	1.8	
18	1.4	2.4	1	2.2	1.4	2	2	1.8	
19	1.2	2.4	1	2	1.4	1.8	2	1.7	Low
20	1.2	1.6	1	1.4	1.4	1.6	2	1.5	
21	1.2	1.6	1	1.2	1.4	1.4	2	1.4	
22	1	1.4	1	1.2	1.4	1.2	2	1.3	
Average	1.34	2.03	1.00	1.71	1.43	1.71	2		

The numbers on the tablet indicate how often respondents used a certain learning strategy to learn English speaking. Every column represents a different learning strategy category. The average score for each row indicates the level of English-speaking skills that the respondents gain. An average score 1.3 until 1.8 is low speaking skills; 2.5 until 3.0 is medium speaking skills, and 3.7 until 4.0 is high speaking skills.

The result showed that students with high speaking skills implement the social strategy. In other word it can be stated that the social strategy gives high influence to the success of their speaking skills. It is indicated by the average of 4.74. The students from medium level use the cognitive strategy, indicated by the average of 2.88. The last, the students with low speaking skills also implement the cognitive strategy but in low frequency, it is shown by the average of 2.03.

In the research questionnaire, social strategies explain that students prefer to speak within an English-language organization than practicing on their own. Students initiate conversations with others using English. They pay attention when someone speaks to them in English. They look for friends or partners with whom they can speak English. They always ask questions in English to others in the class activities.



Based on cognitive strategies we learn that with their understanding of grammar, students find it easy to speak English. With their extensive vocabulary, they also find it easy to speak English. When speaking English, they pronounce words correctly. They construct sentences in their minds before speaking and they pay attention to English grammar when speaking.

From table.1 we comprehend that the students from both medium and low speaking skills implement the same strategies namely cognitive strategies. Although they use the same strategies, their speaking ability is not the same. It is because the frequency to use the strategy is not the same. Students with medium speaking skills mostly answer the questionnaire about cognitive strategies with "often" and "sometimes". It is derived from "likert scale": Never (converted with score 1), Seldom (2), Sometimes (3), Often (4), Always (5). Students with low speaking skills mostly answer the questionnaire about cognitive strategies with "seldom" and "never". That is why this cognitive strategy doesn't influence much on their progress of learning language for the low speaking skill students, since they seldom or even never implement this strategy.

CONCLUSIONS

From the data above, it can be concluded that the students with high speaking skills implement the social strategy. It gives high influence to the success of their speaking skills. From the research questionnaire, social strategies explore that students prefer to speak within an English-language organization than practicing on their own. Students initiate conversations with others using English. They pay attention when someone speaks to them in English. They look for friends or partners with whom they can speak English. They always ask questions in English to others in the class activities.

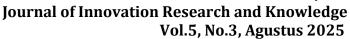
The students from medium level use the cognitive strategy. Whereas the students with low speaking skills also use the cognitive strategy but in low frequency. Based on cognitive strategies questionnaire we learn that with their understanding of grammar, students find it easy to speak English. With their extensive vocabulary, they also find it easy to speak English. When speaking English, they pronounce words correctly. They construct sentences in their minds before speaking and they pay attention to English grammar when speaking. Since the students from the low speaking skills use the strategy in low frequency; as a consequence, it doesn't support their language learning progress.

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REFERENCES

[1] Katherine Livan Kehing and Melor Md Yunus, "A Systematic Review on Language Learning Strategies for Speaking Skills in a New Learning Environment," European Journal of Educational Research (Eurasian Society of Educational Research, October 1,





2021).

- [2] Razmjoo Associate Professor, S A, and S M Ghasemi Ardekani A. A Model of Speaking Strategies for EFL Learners A r c h i v e o f S I D. Previously Journal of Social Sciences & Humanities) The Journal of Teaching Language Skills. Vol. 3, 2011. www.SID.ir.
- [3] Merdeka, Implementasi, Belajar Berdasarkan, Ajaran Tamansiswa, and Nuraini Indah Budiarti. PROSIDING SEMINAR NASIONAL STRATEGI BELAJAR BAHASA INGGRIS UNTUK MENINGKATKAN KEMAMPUAN BERBICARA, n.d.
- [4] Vijaya, Rosyidah Jayanti. STUDENT'S SOCIOAFFECTIVE STRATEGY IN READING, n.d. http://www.linguist.org.cn/doc/su200812/su20081201pdf.
- [5] John, Emily, Devandran Rangasamy, Dinesiriy Indiran, Evelyn Rita Adickalam, Saraswathy Kashinathan, and Harwati Hashim. "Language Learning Strategies Used by Form 4 Esl Learners to Develop Speaking Skills." International Journal of Academic Research in Business and Social Sciences 11, no. 6 (June 23, 2021).
- [6] Atli, Isil, and Ayfer Su Bergil. "The Effect of Pronunciation Instruction on Students' Overall Speaking Skills." Procedia Social and Behavioral Sciences 46 (2012): 3665–3671. http://dx.doi.org/10.1016/j.sbspro.2012.06.124.
- [7] Normawati, Afi. "How Efl Learners Perceive Grammar in Speaking and Writing." Journal of English Educational Study (JEES) 6, no. 1 (2023): 23–30.
- [8] ALQAHTANI, MOFAREH. "The Importance of Vocabulary in Language Learning and How to Be Taught." *International Journal of Teaching and Education* III, no. 3 (2015): 21–34.
- [9] Shahini, Gholamhossein, and Fatemeh Shahamirian. "Improving English Speaking Fluency: The Role of Six Factors." Advances in Language and Literary Studies 8, no. 6 (2017): 100.
- [10] Khasanah, Siti Uswatun, and Rizka Safriyani. "A Correlation Study of Reading Comprehension with Speaking Skill in English Class at Vocational High School." *Metathesis: Journal of English Language, Literature, and Teaching* 5, no. 1 (2021): 32.
- [11] Rana, Juwel, Patricia Luna Gutierrez, and John C. Oldroyd. "Quantitative Methods." In *Global Encyclopedia of Public Administration, Public Policy, and Governance*, 1–6. Cham: Springer International Publishing, 2021. https://link.springer.com/10.1007/978-3-319-31816-5_460-1.



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