STUDENTS' PERCEPTIONS ON THE INTEGRATION OF MULTIMODALITY IN VOCABULARY CLASSROOM PRACTICES

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Abstract

Teaching vocabulary in the context of the 5.0 Industrial Revolution demands an integrated strategy incorporating literacy abilities, 21st-century skills, and technology; however, teacher educators play a crucial role in preparing English as a Foreign Language (EFL) students to meet these issues. This study is part of a more extensive study on multimodality learning in a Vocabulary course; therefore, it examines EFL students' positive perceptions of multimodality integration proposed by Sakulprasertsri (2020) in teaching practices after a Vocabulary course. Multimodality is utilized in English language instruction to improve learning by integrating numerous communication modalities such as texts, images, sounds, gestures, and spatial and interactive technology. Fifty students participated in the English Education Program for the academic year 2022–2023. The study utilized a descriptive quantitative method, employing a Likert scale questionnaire with six alternatives and two open-ended questions using frequencies of keywords to explore modes of teaching and teacher educators' integration of multimodality into vocabulary teaching. The findings demonstrated that students generally had positive perspectives on incorporating multimodality into vocabulary classroom practices, mainly using images, sound, and interactive technologies such as Google Forms and Quizizz. These positive responses indicate the need for multimodal strategies for developing exciting and successful learning environments, especially when meeting the demands of the 5.0 era. The study emphasizes the relevance of teacher educators in promoting practical and engaging vocabulary learning through multimodality.

Keywords – positive perceptions, multimodality, vocabulary teaching, 5.0 era

Introduction

Significant developments occurred throughout the Fourth to Fifth Industrial Revolutions. Industry 5.0 brings humans and machines together to achieve new levels of speed and efficiency in manufacturing (Demir et al., 2019; Nahavandi, 2019). Changes in the world of education, particularly the impact of the digitalization system, have offered a significant stimulus to the integrating process of pedagogical education culture and the habit of using technology as a crucial aspect of learning. Every educational institution, from elementary to tertiary, uses digital technology in teaching and learning activities. Faced with these obstacles, teacher educators, as agents in education, must be willing to change and adapt to technology. Super-sophisticated robots like artificial intelligence systems will not eliminate teacher educators because they are critical in developing character, manners, tolerance, and positive values. Teacher educators play an essential role in developing empathy, boosting student imagination and creativity, and pushing for an emotional approach to technological innovation. Leadership, digital literacy, interaction, interpersonal skills, entrepreneurial activity, social responsibility, solving issues, and teamwork are essential to the transition from the fourth to the fifth industrial revolution (F. Susanto & Zasrianita, 2023). Teacher educators must be adaptable and

competently integrate technology into their teaching strategies.

Emerging technologies have the potential to enhance learning outcomes, boost students' engagement, and provide them with the skills needed to succeed in both online and offline learning environments (Baryanto et al., 2023; Hafner, 2014; Prasetya, 2021; Sakulprasertsri, 2017). According to New London Group (2000), Kress (2010), Burn (2017), and Mayer (2009), students can create understanding through various methods, including written and spoken language, visual representations, auditory experiences, gestures, spatial arrangements, and combinations of different modalities. As a result, teacher educators must acknowledge the significance of multimodality and possess the ability to incorporate multimodal strategies with technology in the classroom.

Researchers have focused on multimodality in vocabulary classroom activities within the context of second and foreign language pedagogies (Altas, 2014; Bisson et al., 2015; Ho & Tai, 2020; Peters et al., 2016; Zou & Teng, 2023). The varied research findings illustrate the efficacy of incorporating numerous multimodal resources, such as videos, photos, and visual aids, into vocabulary classroom instruction. It empowers teacher educators with valuable instruments to establish engaging and efficient classrooms. As a consequence, more empirical research needs to be conducted on incorporating multimodality, specifically in vocabulary teaching practices, at the university level in Indonesia. The reason is that vocabulary teaching and learning is not explicitly focused on but rather seen as a general responsibility of the campus and lecturers for learning activities (A. Susanto et al., 2019).

Vocabulary is a mandatory course for students in the English Education Program at Universitas Indraprasta PGRI Jakarta, which is taken during the third semester. Based on the recommendation of a previous study, teacher educators should transition from monotonous teaching methods to multimodal approaches while teaching vocabulary (Hendrawaty et al., 2024).

This study draws on the perception theory proposed by Sakulprasertsri's (2020), as it explains how students create positive or negative views depending on their experiences with multimodal teaching approaches. Therefore, it investigates EFL students' positive perceptions of multimodality in teaching vocabulary after completing a Vocabulary course in a big class. This study is part of a broader study on implementing the multimodal approach in the Vocabulary course.

Methodology
Research Design
This study utilized a descriptive quantitative research design, concentrating on a survey to conduct a practical quantitative investigation of some respondents on a topic or issue. It also examined EFL students' perceptions of incorporating multimodality in vocabulary teaching activities, using data from a questionnaire and open-ended questions calculated statistically using Mean, Standard Deviation. and keyword frequencies.

Participants
This study focused on EFL third-semester students from the English Education Program taking a Vocabulary course in a large class. The decision to use the classroom with many students was made to determine whether incorporating multimodality in vocabulary teaching practices functioned effectively and received positive feedback from students. As a consequence, the researchers utilized purposeful sampling. Purposing sampling involves discovering and selecting

proficient and well-informed persons about a topic of interest (Etikan, 2016). Furthermore, Sugiyono (2019), as stated in Wahdiniawati et al. (2023), indicates that purposive sampling is a data-gathering approach with specific considerations. As a result, the samples consisted of 50 students in the academic year 2022-2023 from one class at Universitas Indraprasta PGRI in Jakarta.

All ethical considerations were observed during the study process. Before data collection began, participants received enough information on the purpose and procedures of the study. Participants' identities and personal information were kept confidential by confidentiality and anonymity.

Data Collection
A questionnaire was distributed to EFL students about their perceptions of integrating multimodality in vocabulary teaching practices to acquire measurable information. The questionnaire is an evaluation instrument that includes questions or statements that respondents must complete to get information. The questionnaire adopted from Sakulprasertsri (2020) consisted of 14 items with two indicators: modes of teaching employed in vocabulary class and teacher educators' integration of multimodality into vocabulary classroom practices. The questionnaire utilized the Likert scale. A standard Likert scale with six options was also provided to avoid the neutral option and obtain more reliable data analysis findings. Participants received directions to choose one of each of the items. The scale varied from 1 "strongly disagree" to 6 "strongly agree," as directed. In addition, three open-ended questions were asked concerning the lecturer's use of a single or several modes to teach vocabulary, which modes of teaching impressed or benefited students the most in enhancing their vocabulary, and which modes of teaching did not impress or help students. Before

distributing the questionnaire to respondents, researchers ensured its validity and reliability. The validity test employed Pearson Product Moment (≥ 3.0), and 12 of 14 items were valid. The reliability test employed Cronbach's Alpha value (≥ 0.60), and the results were reliable (0.89). The research procedure was that the online research instrument was delivered to 50 students through the Google form application, and the data collection took four days.

Data Analysis
The current study was analyzed quantitatively. The data from the questionnaire was first assessed using quantitative descriptive statistics. The descriptive analysis comprised Mean (M) scores and Standard Deviation (SD). The Mean scores obtained from the questionnaire were interpreted using the following table.

Table 1.
The Criteria of Mean Scores

5.20-6.00	means	students confirmed strongly agree
4.36-5.19	means	students confirmed moderately agree
3.52-4.35	means	students confirmed slightly agree
2.68-3.51	means	students confirmed slightly disagree
1.84-2.67	means	students confirmed moderately disagree
1.00-1.83	means	students confirmed strongly disagree

Furthermore, data from open-ended questions were quantitatively examined using frequencies of keywords to explore participants' perceptions.

Finding and Discussion
This section includes two indications of results: modalities of teaching employed in vocabulary class and teacher educators' integration of multimodality into vocabulary classroom practices. The

questionnaire responses were analyzed using Mean and Standard Deviation scores. The category is then divided into six groups, as shown in Table 1. Table 2 depicts students' perspectives on integrating multimodality into vocabulary classroom practices.

Table 2

Students' Perceptions on Integrating Multimodality in Vocabulary Classroom Practices

No.	Statement	M	SD
Modes of Teaching Used in Vocabulary Class			
1	My lecturer integrates multiple modes (ways) in teaching vocabulary. For example, textbook/module, visuals, audio/sounds, pictures, gestures, and spatial (tables, mind maps, charts).	5.22	1.016
2	My lecturer designs many activities to get students involved in the vocabulary class.	5.14	.969
3	My lecturer uses online tools such as Google Form and Quizziz for vocabulary exercises and games.	5.30	.909
4	My lecturer uses interactive PowerPoint slides with various pictures and animations in the vocabulary class.	5.02	1.220
5	My lecturer uses videos or videos from YouTube to teach vocabulary.	5.28	.991
6	My lecturer assigns students in pairs or groups to use multiple modes (ways) to illustrate their knowledge and understanding of a particular module/vocabulary unit.	5.26	.876
Teacher Educator's Integration of Multimodality into Vocabulary Classroom Practices			
7	Learning English vocabulary with a lecturer who walks around the class to monitor the students when teaching is an effective way.	5.18	1.004
8	Adding related visuals and sounds/music to vocabulary lessons helps students learn vocabulary much better.	5.32	.999
9	Lecturer should use English to define or explain unfamiliar words or abstract ideas rather than using Indonesian.	4.32	1.186
10	Lecturer should use Indonesian to define or explain unfamiliar words or abstract ideas rather than using English.	4.56	1.033
11	Lecturers can maximize their teaching competencies for creating effective vocabulary classes by integrating multiple modes (ways) such as texts, pictures, sound/music, gestures, and spatial (tables, diagrams, charts, mind maps) into vocabulary classroom practices.	5.20	.833
12	If my lecturer integrates multiple modes (ways) into	5.24	.822

vocabulary classroom practices, I can improve my vocabulary achievement significantly.

Table 2 describes the two aspects of integrating multimodality into vocabulary classroom practices. Based on the teaching methods employed in vocabulary class, the participants demonstrated that their lecturer incorporates multiple modes (means) of teaching vocabulary. Examples include textbooks/modules, images, audio/sounds, drawings, gestures, and spatial elements like tables, mind maps, and charts (M = 5.22, SD = 1.016). The results also revealed that the lecturer planned numerous activities to engage students in the vocabulary lesson (M = 5.14, SD = .969). Regarding the use of technology in teaching, the results showed that the lecturer used online tools such as Google Forms and Quizziz for vocabulary exercises and games (M = 5.30, SD =.909), utilized PowerPoint slides with various pictures and animations in the vocabulary class (M = 5.02, SD = 1.220), and used videos or videos from YouTube to teach vocabulary (M = 5.28, SD =.991). Furthermore, the lecturer assigned students in pairs or groups to demonstrate their knowledge and understanding of a specific module/vocabulary unit through several modes (M = 5.26, SD = .876).

In terms of perceptions of teacher educators' integration of multimodality into vocabulary classroom practices, the findings revealed that participants moderately agreed with learning English vocabulary with a lecturer who walked around the class to monitor the students when teaching was an effective method (M= 5.18, SD = 1.004). They highly agreed that including associated pictures and sounds/music in vocabulary lessons significantly improved students' vocabulary learning (M 5.32, SD =.999). Furthermore, participants moderately agreed that the lecturer should describe or

explain foreign terminology or abstract ideas in Indonesian rather than English (M = 4.56, SD = 1.033). They also moderately agreed that the lecturer should describe or explain foreign words or abstract ideas in English rather than Indonesian (M = 4.32, SD = 1.186). There was strong agreement when lecturers could maximize their teaching competencies for creating practical vocabulary classes by integrating multiple modes (ways) such as texts, pictures, sound/music, gestures, and spatial (tables, diagrams, charts, mind maps) into vocabulary classroom practices (M = 5.20, SD =.833). Their lecturer integrated multiple modes (ways) into vocabulary classroom practices so that they could significantly improve their vocabulary achievement (M = 5.24, SD = .822).

When the findings are compared, it is clear that the participants in this study agreed with each statement in the questionnaire to a similar degree. As shown in Table 2, the highest to lowest mean scores for the types of instruction employed in vocabulary class were 3, 5, 6, 1, 2, and 4. The highest M score showed that all students strongly agreed that the teacher educator used online resources like Google Forms and Quizizz for vocabulary drills and games. However, the lowest M score revealed that participants were moderately agreeable when their lecturer used PowerPoint slides with diverse visuals and animations in vocabulary lessons. Furthermore, the highest to lowest M scores for teacher educator's integration of multimodality into vocabulary classroom activities were 8, 12, 11, 7, 10, and 9. The highest M score suggested that including associated pictures and sounds/music in vocabulary courses helped students learn vocabulary more effectively. However, the lowest M score indicated that participants preferred that their lecturer utilize English to explain foreign vocabulary or abstract ideas rather than Indonesian.

Table 3.
EFL Students' Opinions on Open-Ended Questions

EFL Students' Opinions	Frequencies of Keywords/ Key Phrases in the Answer (*f*)
Question 1: Did your lecturer use a single mode in teaching vocabulary? For example, textbook/module or pictures only. If yes, why?	
- Yes, she did.	1
- No. she did not. She used multiple modes in teaching vocabulary.	49
Question 2: What modes of teaching of your lecturer impressed you and helped you to improve your vocabulary the most and why?	
- Integrating various modes of teaching vocabulary such as texts, visuals, sound effects, music, images, and technology (internet and ChatGPT) in vocabulary classroom practices	17
- Using interactive and collaborative activities and games into vocabulary classroom practices	24
- Having comprehensive explanations in the vocabulary classroom practices.	15
- Using Indonesian instead of English for defining and explaining unfamiliar words	3
Question 3: What modes of teaching of your lecturer did not impress you and did not help you to improve your vocabulary the most and why?	
- Using L1 (English) for explaining unfamiliar words or topic.	4
- Using the gestural mode	2
- Taking online class	6

The responses to the three open-ended questions were analyzed using content analysis to learn more about the participants' perspectives on teacher educator's use of multimodality in vocabulary instruction, and based on question 2 from Table 2, 49 out of 50 students reported that the lecturer employed various modes to teach vocabulary (*f* = 49). There were numerous reasons behind this. The lecturer used multimedia such as modules, PowerPoint slides, photos, YouTube videos, music, and Quizizz. Then, using multiple modes of teaching made students more quickly understand vocabulary materials. After that, using multiple modes of teaching was effective. Next, using various modes of teaching made students remember the vocabulary in simple and fun ways. Lastly, using attractive pictures made the content more understandable and imaginative.

Based on the data collected from students' responses to the second open-ended question in Table 2, it was discovered that the lecturer's methods of teaching impressed and aided students in improving their vocabulary the most when they integrated different methods of teaching language, including texts, visuals, sound

effects, music, images, and technology in vocabulary classroom practices ($f = 17$). The following impressive mode was using interactive and collaborative activities and games in vocabulary classroom practices ($f = 24$). Additionally, students were impressed by the lecturer's ability to provide comprehensive explanations in the vocabulary classroom practices ($f = 15$). The minor teaching mode that impressed students was when the lecturer used Indonesian instead of English to define and explain to define and explain unfamiliar words ($f = 3$).

Furthermore, based on data from students' responses to the third open-ended question in Table 2, it was discovered that the lecturer's teaching methods did not impress and help students improve their vocabulary the most when students experienced confusion when their lecturer used English to explain unfamiliar words or topics ($f = 4$) and used the gestural mode, such as facial expressions, body movement, or hand gestures, for the meaning of the words ($f = 2$). A few students also claimed that taking an online Vocabulary class did not help them to learn vocabulary better ($f = 6$). Some students reported that their lecturer's teaching modes were appropriate ($f = 38$).

As previously stated, the quantitative analysis results indicate that the current study's discussion can be divided into three parts. The first is the modes of teaching used in vocabulary classroom practices. The next is the teacher educator's integration of multimodality into vocabulary classroom practices, and the last is the potential for integrating multimodality in EFL classroom practices for the 5.0 era.

Modes of Teaching Utilized in Vocabulary Classroom Practices
The results of the questionnaire, as well as questions 1 and 2 of the open-ended questions, revealed that the teacher educator lecturing a Vocabulary course for EFL third-semester students at Universitas Indraprasta PGRI during the academic year 2022-2023 used a variety of teaching modes in vocabulary classroom practices, including texts, visuals, audio/sounds, pictures, gestures, and spatial (tables, mind maps, charts). As a consequence, the participants reported that integrating multimodality brought some benefits. Participants, for example, felt that combining numerous modalities of instruction was beneficial, helped students acquire vocabulary more quickly and retain vocabulary in simple and engaging ways, and that incorporating visually appealing images made the content more understandable and exciting. Previous research on multimodality, the use of different semiotic modes (texts, visual, sound effects, images, gestures (body movement and facial expressions), and spatial through multiple resources such as printed materials, films, songs, videos, animated images, tables, mind maps, and charts, in English Language Teaching (ELT) both offline and online classes, could have a significant effect on EFL students' involvement in the lesson as opposed to the conventional classroom, especially on higher education (Anari et al., 2019; Djamdjuri et al., 2021; Freyn, 2017; Lim & Polio, 2020; Moghaddam, 2023; Moreno & Woodruff, 2023; Sakulprasertsri, 2020; Sarıçoban & Yürük, 2016; Sidabutar, 2021; Trisanti et al., 2022).

Moreover, the participants expressed a modest agreement on their teacher educator's implementation of many attempts to engage students in the vocabulary class—the students' responses in the open-ended questions found using Quizizz for games enjoyable and attractive. Utilizing PowerPoint slides for the group presentations proved to be advantageous and engaging. Finding phrasal verbs in song lyrics and participating in cooperative singing were

pleasurable. Both individually and collaboratively, engaging in quizzes and projects benefitted students in retaining and improving their new vocabulary. The results indicate that teacher educators at the university level, with more than thirty students in a class and limited teaching and learning resources can employ Quizizz. It is a highly recommended mobile learning application, to enhance students' vocabulary achievement (Huei et al., 2021; Munawir & Hasbi, 2021; Zuhriyah & Pratolo, 2020). Additionally, they can utilize another platform, such as Google Forms, for students' assignments (Iqbal et al., 2018). By incorporating interactive PowerPoint presentations with visually appealing design graphics, sound effects, animations, facial expression images, tables, mind maps, and charts, teacher educators can actively engage with their students and enhance their vocabulary learning (Rochman, 2021). Utilizing a video created by the teacher educator or the students or sourced from YouTube enhances the effectiveness of vocabulary classroom practices, as the content is directly linked to the course plan and real-life situations (Husna et al., 2019; Jailani, 2022; Nasution, 2019). The study emphasizes that teacher educators can successfully improve students' vocabulary proficiency and involvement by utilizing interactive digital tools such as Quizizz, Google Forms, and multimedia-enriched PowerPoint presentations, even in settings with limited resources.

Teacher Educator's Integration of Multimodality in Vocabulary Classroom Practices

The results from the questionnaire and open-ended questions also examined students' viewpoints on how the teacher educator incorporated multimodality into vocabulary classroom activities, in addition to different teaching modes. The participants strongly agreed that the teacher educator could develop a successful vocabulary class by incorporating multimodality into vocabulary teaching in the vocabulary classroom practices. Data gathered from both current and previous studies supports these present findings (Djamdjuri et al., 2021; Sakulprasertsri, 2020; Sidabutar, 2021; Trisanti et al., 2022).

The students were particularly impressed by the teacher educator's competence in providing comprehensive explanations during vocabulary classroom discussions. According to them, the clear explanations were understandable and easily remembered. The welcoming, active, and innovative teacher educator heightened students' enthusiasm for acquiring vocabulary. Instructions on using the word in a phrase or statement were relevant to daily life. Moreover, the results indicated that students preferred the teacher educator to use the Indonesian language when defining or explaining foreign vocabulary or abstract concepts, as opposed to English. Using their language, Indonesian (L1), to clarify word meanings was significantly more comprehensible for them. It was in line with the previous research that students' preference was Indonesian or the use of code-mixing of Bahasa Indonesia and English (Abdurahman et al., 2018). The results indicate that it would be beneficial for teacher educators and curriculum designers to include network-based learning and digital technology in English language teaching methods. It would enable students to utilize and explore English.

However, a few modes of teaching by the teacher educator did not impress students or assist them in enhancing their vocabulary the most. According to number 3 of the open-ended question, taking an online class was uninteresting. A few students stated that studying vocabulary through online courses would have been more engaging. They also remarked that the lecturer-student interactions may have been more interesting and active than those

in the classroom. When the lecturer explained how to define unfamiliar words in English, it could have been clearer for students. Besides, using gestural modes such as facial expressions or body movement was challenging for students who preferred pictures to understand meanings. Students subsequently argued that various teaching modes utilized by the teacher educator were necessary to develop their vocabulary, including difficulties with gestural mode, linguistic preference, and less attractive online classes.

Potential of Incorporating Multimodality into Vocabulary Classroom Practices in the 5.0 Era

The primary concern of the 5.0 era in education is the impact of digitalization systems on online, blended, and hybrid learning activities. Teacher educators are also expected to be agents of transformation, enhancing human resources to shape student character and building students' skills such as critical thinking, problem-solving, creativity, innovation, communication, and teamwork (F. Susanto & Zasrianita, 2023; Yosintha, 2020). By adding multimodal resources and activities such as semiotic resources, games, and online platforms, teacher educators can improve the learning experience and adapt to students' various learning styles and preferences. As a result, teacher educators in the Indonesian context should be familiar with digital literacy and integrate multiple modes in their classes that are most intriguing to students.

The integration of multimodality in a large number of students in the vocabulary class, as demonstrated by a teacher educator at Universitas Indraprasta PGRI, shows the major benefits of using a variety of instructional modes such as texts, visual, audio, and spatial aspects. This approach promotes faster and more engaging

vocabulary learning, improving topic comprehension and student excitement. Even in resource-limited situations, using digital tools such as Quizizz and Google Forms and multimedia-rich presentations has proven helpful in actively engaging students and enhancing vocabulary retention. However, number 3 of the open-ended question found that some students needed help with gestural mode, Indonesian preferences, and less participatory online lectures. The potential for adopting multimodality in the 5.0 era is enormous, as it connects with the educational change toward digitalization and hybrid learning. Teacher educators must adopt digital literacy and utilize diverse multimodal resources to meet various learning styles, enhancing the learning experience and fostering crucial abilities such as creativity, innovation, and teamwork. This comprehensive approach enhances vocabulary learning and gives students the necessary skills in a digitally interconnected society.

Conclusion
The results of this study confirm that EFL students held **positive perceptions** on integrating multimodality into vocabulary teaching practices. The learning environment was more engaging and effective due to the diverse teaching modalities, including texts, visuals, audio, and spatial elements, which students appreciated. Interactive PowerPoint presentations, YouTube videos, and online tools such as Quizizz and Google Forms effectively improved students' vocabulary acquisition and retention. Despite the favourable response, some students found certain teaching modes less successful, such as online classes and gestural mode.

The study additionally points out the critical role of teacher educators in integrating multimodality into their teaching practices. Students' vocabulary achievement and overall learning experience are substantially influenced by

the capacity of teacher educators to create interactive and collaborative learning environments and provide comprehensive explanations. Furthermore, the fact that Indonesian is the preferred language for explaining complex concepts implies that an effective combination of English and the native language may be more advantageous for EFL students. The results indicate that teacher educators must be innovative and adaptable, utilizing digital technology and multimodal strategies to develop vocabulary teachings that are both engaging and effective.

In the future, research should concentrate on the long-term effects of multimodal teaching on vocabulary acquisition and retention. Providing deeper perspectives can be achieved by examining the efficacy of multimodality in various educational contexts and with different student groups. In addition, it is crucial to explore how teacher educators' training programs can more effectively enable them to incorporate multimodality into their teaching practices. Ultimately, such research will improve the quality of EFL education by facilitating the continuous development of innovative and effective teaching strategies that align with the requirements of the 5.0 Industrial Revolution.

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