Gauging the Interactive Language Learning to improve English Communication Skills Among Vocational High School Students

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Abstract

Enhancing English language skills in Vocational High Schools (SMK) is crucial for preparing students to meet the demands of globalization and the workforce. This study aims to evaluate the effectiveness of communication-based learning methods in comparison to lecture, project, and game-based methods in improving students' scores on the English Proficiency Test (EPT). The research employs a quasi-experimental design with a post-test only approach, involving 53 students divided into four groups according to the learning methods applied. Data were collected through the EPT, and data analysis was conducted using One-Way ANOVA and Tukey's Post Hoc test. The findings indicate that the communication-based learning method is significantly more effective in enhancing EPT scores than the other methods, achieving the highest average score of 389.29. Additionally, both project-based and game-based methods also demonstrated significant improvements compared to the lecture method. The conclusion of this study underscores the importance of innovation in education, advocating for the integration of methods that combine communication, play, and technology. A technology-assisted edutainment Co-Trainers program is recommended as an innovative solution to create an interactive and effective learning environment, equipping students to face an increasingly competitive job market.

Keywords: English, EPT, Learning Method, Co-Trainers, Edutainment, Technology

1. Introduction

The enhancement of English language skills in vocational schools is becoming increasingly essential in the context of global workforce demands. As industries become more interconnected, English proficiency has emerged as a critical competency for vocational graduates, particularly in sectors like tourism, hospitality, and technology, where effective communication is crucial (Han, 2024; Sari et al., 2024). Many employers now prioritize candidates with strong English skills, highlighting the need for vocational education to adopt English for Specific Purposes (ESP), tailoring instruction to meet the specific needs of various fields (Rosyida & Effendy, 2022; Tri Nurhasanah & Eri Kurniawan, 2023). This approach ensures students acquire the communication skills for their future careers.

To encourage the student engagement learning, integrating innovative teaching methods, such as project-based and technology-enhanced learning, have proven effective (Dian Aprilyani Azir et al., 2024; Arvina Sholawati et al., 2022). Despite challenges like insufficient background knowledge, motivation issues, and limited lesson hours, successful approaches like vocational orientation have shown the improvement in term of learning outcomes (Skarpaas & Hellekjær, 2021). The growing demand for English proficiency, especially in developing countries (Doan & Hamid, 2021), emphasizes the need for vocational institutions to adapt their curricula to meet global standard of workforce requirements.

Additionally, the teaching methods employed often fail to reflect the modern and interactive approaches needed to improve students' language skills. For instance, the use of English for Specific Purposes (ESP), which focuses on industry needs and professional contexts, is rarely applied in many SMKs (Rosyida & Effendy, 2022; Olizko, 2022). Research shows that English teaching in SMKs tends to focus on general grammar and vocabulary without providing practical, relevant contexts for students (Dian Aprilyani Azir et al., 2024). This leads to a lack of motivation and difficulty in applying language skills in real workplace situations (Sugesti et al., 2023). Furthermore, English plays an important role of communication and beyond in terms of critical soft skills and professional success. Effective listening and speaking are vital for business transactions and customer interactions in service-oriented industries (Batsila & Shrestha, 2022). Creating a supportive English language environment in vocational schools can empower students to practice their skills in real-world contexts, boosting confidence and adaptability (Irawan et al., 2022). As globalization shapes the job market, vocational education must prioritize English proficiency alongside technical training to equip students with the linguistic competencies necessary to succeed in a dynamic, globalized economy (Simbolon et al., 2019; Zhang et al., 2022). This dual focus ensures that graduates are well-prepared to navigate and thrive in diverse professional environments.

The enhancement of English language skills in vocational high schools (SMK) is crucial for meeting the demands of global workforce. These skills have become a core competency, especially in sectors such as tourism and technology. Innovative teaching methods and the English for Specific Purposes (ESP) approach equip students with the technical vocabulary and communication skills needed to compete effectively in the dynamic global job market.

Vocational school students face numerous challenges in mastering English, which can significantly hamper their ability to communicate effectively in their respective fields. One of the primary obstacles is the lack of confidence, particularly during oral examinations, where students often struggle to articulate their thoughts in English due to anxiety and fear of making mistakes (Pramesti & Susanto, 2023). This anxiety is compounded by a general lack of vocabulary mastery, which can lead to feelings of inadequacy and frustration when attempting to engage in conversations or complete assignments (Marzulina et al., 2021). The pressure to perform well in both their vocational training and English language acquisition creates a challenging environment that can impede their overall learning experience.

The gap between English competency requirements and teaching methods in vocational high schools (SMK) is a serious issue contributing issue to the high unemployment rate among vocational school graduates in Indonesia. SMK graduates accounted for the highest percentage (11.45%) of unemployment in February 2021, largely due to a mismatch between the skills taught in schools and industry needs (Soenarto et al., 2020). Although the primary goal of vocational education is to prepare students with relevant technical skills, adequate English proficiency is equally important to enhance their competitiveness in the job market. However, many vocational high schools (SMKs) still use general English teaching methods that do not address the specific needs of their students. For example, research indicates that many SMK students lack adequate speaking skills, even though this ability is crucial in fields such as tourism and hospitality. Moreover, much of the teaching material used in SMKs is not designed to meet the specific demands of the industry, leaving students without the relevant training required for their future careers (Sukarni, 2019; Natsir et al., 2022).

Project-based, game-based, and communication-based learning strategies help vocational high school (SMK) students improve their English skills. These strategies make learning more fun and get students involved. Project-based learning encourages students to accomplish real-world projects, which improves their communication abilities. However, game-based learning encourages English-language interaction through competition and collaboration. Communication-based learning, which stresses verbal contact and active debates, improves students' speaking and listening abilities most. This method helps students build deeper and more relevant language skills by practicing English in everyday situations.

Interactive learning methods including project-based learning (PjBL), game-based learning, and communication-focused strategies help vocational school students improve their English language skills. PjBL, in instance, increases student involvement and motivation by letting them collaborate on real-world English-language projects (Jaedun et al., 2022). This strategy promotes teamwork, critical thinking, and meaningful language use, enhancing students' speaking, listening, reading, and writing skills. Students are more likely to learn the language and its applications in their disciplines when they work on projects that match their interests and career goals (Ghafor et al., 2019). Similarly, game-based learning has emerged as an effective approach to enhance language acquisition by making the learning process enjoyable and interactive. By integrating games into the curriculum, educators can create a dynamic learning environment that motivates students to practice their English skills actively (Aries Denta Putra et al., 2023; L.-K. Lee et al., 2023). Games can facilitate the development of vocabulary and conversational skills, as they often require players to communicate and collaborate with peers (Afifah & Devana, 2020; Widiantara et al., 2022). Furthermore, the incorporation of communication-focused strategies, such as role-playing and group discussions, allows students to practice their language skills in a supportive setting, which can alleviate anxiety and build confidence (Sarnovska, 2020; Akbari, 2018). Overall, these interactive learning methods not only improve English proficiency but also prepare vocational students for the demands of the workforce, where effective communication is essential (Syamsudin et al., 2018).

The study seeks to understand vocational high school (SMK) students' English learning challenges, particularly when lectures, project-based, and game-based methods fail to meet their needs. Communicative training emphasizes real-life contact and language use, which is crucial for occupational situations. Unlike lecture, project, and game-based methods, communication-based training promotes active engagement and real-world communication. Practice in real-world circumstances boosts confidence and language retention. Communication-based teaching improves students' speaking and listening skills, unlike other methods, according to research. This study indicates how communication-based teaching can increase students' English competence, making it an innovative and effective vocational education technique. Therefore, this study analyzes how communication-based learning enhances vocational high school students' English ability. A more engaging classroom environment where students directly communicate verbally and non-verbally should accelerate language acquisition. The study contrasts lecture, project, game, and communication-based learning. The study evaluates approaches to improve EPT performance and give vocational teachers practical guidance.

2. Literature Review

2.1 Student Engagement Through Active Learning

Research indicates that active learning practices, which involve students directly, improve engagement and comprehension in numerous subjects, such as engineering and science (Baričević & Luić, 2023). Design thinking, collaborative problem-solving, and interactive activities promote critical and inventive thinking in students (Ghommem & Gunn, 2021). Active learning implementation must address gender gaps in engagement and student fear (Cooper et al., 2020). Instructors should create inclusive environments, provide clear instructions, and provide enough support to maximize active learning (Aguillon et al., 2020). Institutions should align research and

teaching, build infrastructure, and invest in staff professional development. Effective use of active learning strategies can enhance education and prepare students for global challenges (Mora-Luis & Martń-Gutiérrez, 2020; Yusra et al., 2022). Communication-based instruction requires active learning, especially in language acquisition, where student engagement is key. Communication-based teaching emphasizes active learning and student interaction. This method lets English language learners actively participate in debates, collaboration, and social contact, which improves language acquisition. Well-structured exercises help students build on their knowledge and push their limits, making them perfect for language acquisition (Mweneni Hautemo & Homateni Julius, 2016). Active learning helps students become language producers, which is essential for good communication.

Furthermore, active learning supports the development of critical and creative thinking skills, which are essential in language learning. By engaging in collaborative activities, students learn from one another and deepen their understanding of language within a broader social context (Huggins & Stamatel, 2015; Braathen, 2022). This approach also helps alleviate the anxiety often associated with learning a foreign language, as students feel more at ease interacting in a supportive, non-judgmental environment (Bao & Liu, 2021). As a result, active learning not only increases student engagement but also strengthens the language acquisition process by creating a more enjoyable and effective learning experience.

2.2 The Role of Communication in Developing Language Skills

To really learn a foreign language, you need to be able to communicate with others. This means knowing how to use grammar and words correctly, as well as how the language is used in social and cultural settings. According to research, learning a language well means being able to talk and write with real people, so that students can say what they want to say clearly and correctly (Ahmad & Yusof Khan, 2023). Students with good communication skills can also adapt to different conversation settings, which is becoming more and more important in today's globalized world where people from different cultures often interact (Chistyakova et al., 2017; Abdikarimova et al., 2021). Active methods that focus on conversation, like project-based learning and games, can get students more interested in learning a foreign language and help them improve their speaking skills (Bondareva et al., 2017) So, communication skills aren't just a way to use a language; they're also important for getting to know people from other countries, which makes learning a language more fun (Sarnovska, 2020). Also, these skills are necessary to get a job in a global setting (Martinaj, 2020; Chan et al., 2022).

All language skills are important, but speech is often seen as the most important for getting your point across (Khamzovich et al., 2021). However, anxiety can have a big effect on how well you speak a new language (Hanifa, 2018). Tiawati et al. (2023) stated that learning a language and understanding other cultures must go hand in hand if you want to communicate well. Global communication skills can be developed through things like drive, integrating into society and school, getting help from institutions, and using foreign languages (Dauber & Spencer-Oatey, 2023). Online communication tools have also been shown to help students improve their written conversation skills while learning a foreign language (Martyushev et al., 2021). In today's connected world, learning how to communicate in a foreign language is important for both academic success and career growth. Building on this knowledge, communication-based learning has become a very useful way to help people learn languages through real-life situations and group activities.

Activities involving real communication, such as group discussions or collaborative projects, encourage students to interact with one another, allowing them to develop speaking and listening skills in a more natural setting (Khamzovich et al., 2021). Research indicates that learning experiences involving exploration and observation of the surrounding environment can enhance students' understanding of vocabulary and language structures (Rita Napitupulu et al., 2023; Sapukh, 2018). Thus, communication-based learning not only improves students' language abilities but also prepares them to communicate effectively in social and professional settings in the real world.

2.3 Related Research: Use of Communication-Based Methods in Vocational Schools

The use of interactive methods to enhance English skills at the vocational high school (SMK) level has been widely supported by research, highlighting their effectiveness in fostering student engagement and language proficiency. A notable study by Kilbrink et al. (2023) emphasizes the value of interaction in vocational education, suggesting that hands-on activities in workshop settings enrich the learning experience and lead to a deeper understanding of the subject. This aligns with Dao & McDonough (2018), which show that peer interaction creates an ideal environment for second language acquisition, allowing learners to practice language skills through interactive feedback and collaborative learning.

Understanding students' learning needs improves English teaching at SMK, especially when using interactive approaches (Taufan et al., 2022; Irawan et al., 2022). Sitorus (2018) discovered that narrative greatly improves students' speaking skills, showing how interactive methods can directly improve language fluency. Social learning tactics improve vocabulary and language skills in occupational settings. Social learning improves language acquisition through collaboration and peer inquiry (Faqih et al., 2023). According to Pramesti & Susanto (2023), giving pupils real-world settings and industry-specific terminology encourages independence and initiative in language acquisition. The literature strongly recommends interactive strategies in vocational high schools to improve English language abilities. These strategies engage children and meet their requirements, improving language competency and academic performance.

This research contributes to the reinforcement of interactive learning theories within the context of vocational education, specifically in the teaching of English at vocational high schools (SMK). By supporting previous findings on the effectiveness of communication- and interaction-based methods, this study demonstrates that such approaches not only enhance students' active engagement but also address their specific learning needs. The results further solidify evidence that interactive methods, such as Project-Based Learning and social learning strategies, are effective in improving language skills, including vocabulary and speaking abilities, which are highly relevant for

preparing students for the workforce.

3. Method

3.1 Research Design

This study employs a quantitative approach with a quasi-experimental design based on a post-test only design (Abdullah, 2015; Koo et al., 2022). The purpose of this design is to examine the impact of various learning methods on the improvement of English Proficiency Test (EPT) scores among vocational health students, utilizing only post-treatment test data without conducting a pre-test at the beginning of the learning process.

3.2 Research Sample

The population in this study comprised eleventh-grade students at SMK Kesehatan, with a total sample of 53 students divided into four groups based on the applied learning method. The sample was selected using purposive sampling technique (Budiyono, 2017), and the group distribution is presented in Table 1 as follows:

Table 1. Sample distribution

Group	Learning Strategy	Students
1	Lecture	24 students
2	Project Based	14 students
3	Game Based	8 students
4	Communication Based	7 students

3.3 Data Collection Tools and Research Variables

Data collection was conducted through an EPT test given after the implementation of the learning method in each group. The results of the post-test were used as the only data to analyze the differences in the influence of different learning methods on improving students' EPT scores. Meanwhile, the research variables inherent in this research are as follows.

Independent variable (X): Learning method (lecture, game-based, project-based, and communication-based).

Dependent variable (Y): English Proficiency Test (EPT) score.

3.4 Grid and Validity of Instruments

The instrument utilized was the English Proficiency Test (EPT), which assesses students' English language proficiency in the domains of listening, reading, writing, and speaking (Silalahi et al., 2023; Ghafar & Raheem, 2023). This test was administered following the implementation of the instructional treatment (post-test) to evaluate the differential outcomes among various pedagogical methodologies.

Table 2. Instrument Grid

Aspect	Indicator	Number of Questions
Listening	Understanding conversations in English	10
Reading	Understanding reading texts in English	10
Writing	Composing sentences/paragraphs with correct grammar	10
Speaking	Communicating verbally in English	5

Adaptation from research (Ghafar & Raheem, 2023; Hadiyansah, 2022)

Prior to implementing instruments in research activities, it is essential to ensure that the instruments meet validity criteria; therefore, validity testing is necessary. Validity testing is conducted to verify that each instrument item accurately measures the intended aspect. The validity test is performed using the Pearson Product Moment correlation technique between item scores and total scores for each aspect (Qashou, 2021). Table 3 presents the validity test results based on the measured aspects:

Table 3. Results of Instrument Validity Test

Aspect	Indicator	Number of Question	Validity Value (r count)	Nilai Kritis (r tabel)	Decision
Listening	Understanding conversations in English	10	0.45 - 0.78	0.361 ($p < 0.05$)	Valid
Reading	Understanding reading texts in English	10	0.50 - 0.82	0.361 ($p < 0.05$)	Valid
Writing	Composing sentences/paragraphs with correct grammar	10	0.42 - 0.76	0.361 ($p < 0.05$)	Valid
Speaking	Communicating verbally in English	5	0.48 - 0.80	0.361 ($p < 0.05$)	Valid

All items in the instrument are deemed valid, as the calculated r-value for each indicator exceeds the critical r-table value (0.361) at a 5% significance level. This indicates that each item in the instrument exhibits a significant correlation with the total score, thus validating the instrument for measuring the intended aspect. Furthermore, the reliability test of the instrument demonstrates that it falls within the reliable category and is suitable for data collection. The reliability test was conducted using Cronbach's Alpha (Sumarni et al., 2018). Table 4 below presents the results of the reliability test.

Table 4. Reliability Test Results

Aspect	Item	Alpha Cronbach Score	Criteria	Decision
Listening	10	0.81	> 0.70	Reliabel
Reading	10	0.85	> 0.70	Reliabel
Writing	10	0.79	> 0.70	Reliabel
Speaking	5	0.76	> 0.70	Reliabel

The Cronbach's alpha values for all aspects exceeded 0.70, indicating that this instrument demonstrates reliability and consistency in measuring each aspect (listening, reading, writing, and speaking). This instrument can be utilized with confidence that the measurement results will be stable and reliable.

3.4 Data Analysis Techniques and Research Hypotheses

The post-test data were analyzed using SPSS software. The data analysis process commenced with a homogeneity test, which aimed to ensure that the variance across groups was equivalent, thus enabling the application of ANOVA (Abdullah, 2015). Subsequently, a One-Way ANOVA was conducted to determine whether significant differences existed among the learning methods in relation to students' EPT scores based on the post-test results. In the event that the ANOVA test revealed significant differences, a Post Hoc Tukey test was performed to identify which learning method exerted the most substantial influence on the improvement of students' EPT scores.

With reference to the data analysis techniques employed, these methods were specifically selected to test the research hypotheses. The hypotheses for this study are as follows:

- Null Hypothesis (H0): There is no significant difference among the learning methods (lecture-based, game-based, project-based, and communication-based) in terms of improving the English Proficiency Test (EPT) scores of vocational health students.

- Alternative Hypothesis (H1): There is a significant difference among the learning methods (lecture-based, game-based, project-based, and communication-based) in terms of improving the English Proficiency Test (EPT) scores of vocational health students.

3.5 Research Procedure

This research was carried out in several stages as follows:

1. Preparation Stage, contain: 1) Determine the research subjects and divide students into groups that will receive different learning methods, 2) Prepare the EPT post-test instrument.

2. Implementation Stage: 1) Students are divided into groups that receive different learning methods, Group 1: Lecture method. Group 2: Project-based method. Group 3: Game-based method. Group 4: Communication-based method., 2) Each group receives treatment according to the specified learning method (lecture, project-based, game-based, communication-based)., 3) After the treatment is complete, an EPT post-test is conducted to measure students' abilities.

3. Data Collection Stage: 1) After the learning process is complete, an EPT post-test is conducted to measure students' improvement in English, 2) Collect post-test results from each group.

4. Data Analysis Stage: 1) Analyze the post-test results using homogeneity test, One-Way ANOVA, and Post Hoc Tukey to determine the most effective learning method in improving students' EPT scores.
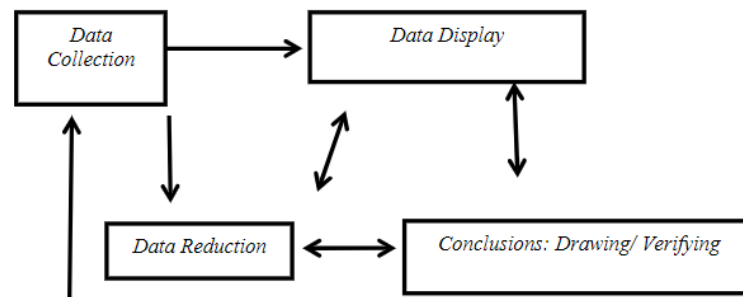

Figure 2. Interactive Data Analysis Techniques

4. Results

4.1 Descriptive Analysis of EPT Results with Various Learning Methods

This study involved 53 vocational health students who were divided into four groups based on the learning method employed: lecture-based, game-based, project-based, and communication-based. Following the intervention, an English Proficiency Test (EPT) was administered to assess the English language proficiency of students in each group. The post-test data from all four groups were analyzed to determine the differences in mean EPT scores. Table 5 presents the descriptive analysis of the students' post-test results.

Table 5. Descriptive Analysis

Learning Strategies	N	Average	Standard Deviation	Minimum Value	Maximum Value
Lecture Method	24	75	12.34	50	100
Game Based Method	8	80	10.56	60	100
Project Based Method	14	78	11.23	55	100
Communication Based Method	7	90	15.87	70	100

The post-test results indicate that the communication-based learning method yielded the highest EPT scores compared to other learning methods. The mean EPT scores for each group are as follows:

- Lecture Group: The mean EPT score is 198.75, with a standard deviation reflecting the data variation among students in this group.

- Project-Based Group: The mean EPT score is 214.64, demonstrating an improvement compared to the lecture method.

- Game-Based Group: The mean EPT score is 219.38, showing a slight difference from the project-based group.

- Communication-Based Group: The highest mean EPT score of 389.29, suggesting that this method is most effective in enhancing students' English language proficiency.

Furthermore, the standard deviation, maximum, and minimum values within each group demonstrate the variation in student abilities after receiving treatment. This analysis provides an overview indicating that the communication-based learning method is superior in improving EPT scores compared to other methods.

4.2 Homogeneity Test Results

Data must be homogenous before ANOVA analysis. SPSS software was used to test homogeneity, hence this part presents the results. We know that the homogeneity test is required for ANOVA since it confirms that treatment groups have consistent variance. Levene's Test is used to determine if English Proficiency Test (EPT) scores change significantly between groups taught differently. Table 6 shows analytical results.

Table 6. Homogeneity Test Results

Test of Homogeneity of Variances			
Score Pre Test of EPT			
Levene Statistic	df1	df2	Sig.
2.700	3	49	.056

Referring to Table 6, the significance value is 0.056 with a Levene Statistic of 2.700 at degrees of freedom (df1 = 3 and df2 = 49). As the significance value exceeds 0.05, it can be concluded that there is no significant difference in variance among the groups. Consequently, the assumption of homogeneity of variance is met, and the data is considered homogeneous. This indicates that the variance of EPT scores across groups utilizing lecture-based, game-based, project-based, and communication-based learning methods exhibits equivalent variance, thus satisfying the requirements for proceeding with a One-Way ANOVA test.

4.3 Analysis of EPT Score Differences Based on Learning Methods

To evaluate whether there are significant differences among the learning methods in relation to students' scores on the English Proficiency Test (EPT), a One-Way ANOVA was conducted. This test aims to determine if varying teaching methods can have different impacts on students' performance in the EPT. The results of the analysis, utilizing SPSS software, are presented in the following Table 7.

Table 7. One Way ANOVA Test Results

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	205166.265	3	68388.755	32.780	.000
Within Groups	102229.018	49	2086.306		
Total	307395.283	52			

The One-Way ANOVA test produced an F value of 32.780 with a significance level of 0.000, indicating a statistically significant difference in students' EPT scores based on instructional methods. Since the significance value is less than 0.05, it confirms that different teaching approaches impact students' English proficiency differently. This finding highlights the importance of selecting effective instructional strategies, as structured and innovative learning methods can lead to better educational outcomes. To establish the best teaching approach, a Post Hoc Tukey test will be done. This test will help determine the teaching style that improves students' EPT scores, clarifying the best approach. Tukey post hoc analysis results are in Table 8.

Table 8. Post Hoc Tuckey Test Results

Tukey HSD[a,b]

Preferred Learning Methods	N	Subset for alpha = 0.05	
		1	2
Lecture Learning Method	24	198.75	
Project Based Learning Method	14	214.64	
Game Based Learning Method	8	219.38	
Communication Based Learning Methods	7		389.29
Sig.		.730	1.000

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 10.500.
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Table 8 highlights that Communication-Based Learning is the most effective method for improving students' English Proficiency Test (EPT) scores, with an average Tukey HSD score of 389.29 which means it was the highest among all methods. In contrast, Lecture Learning had the lowest score at 198.75, followed by Project-Based Learning at 214.64 and Game-Based Learning at 219.38. The data indicate that Lecture, Project-Based, and Game-Based Learning methods fall into the same category (Sig. = 0.730), meaning there is no significant difference in their impact. However, Communication-Based Learning stands apart (Sig. = 1.000), proving to be significantly more effective. This method fosters active engagement, interaction, and dynamic learning, making it a powerful tool for enhancing English proficiency. Given these findings, incorporating Communication-Based Learning into teaching strategies, especially in technical high schools, can better prepare students for a globalized world. Educators are encouraged to adopt this approach more frequently to help students develop stronger language skills.

5. Discussion

Communication-based learning improves EPT scores. This method beats lecture-, project-, and game-based methods in the One-Way ANOVA test. Better mean scores indicate that the communication-based strategy optimizes English language learning. Participatory and engaging communication-based approaches enhance student participation. Active learning theory states that direct student participation in learning activities improves comprehension. Active participation transforms students into information consumers and learners, boosting learning. Communication-based language learning gives pupils real-world practice, which improves communication abilities. Teacher-student interaction creates a collaborative, engaging learning environment that engages students. This technique enhances Vocational High School (SMK) students' communication and workplace preparation. Communication-based learning got the highest average English Proficiency Test (EPT) score, according to the Post Hoc Tukey test. The group outscored lecture, project, and game-based methods. These results suggest that communication-based tactics improve students' English proficiency more.

Communication-based methods demonstrate superior efficacy in enhancing language skills, particularly verbal communication proficiency, for several reasons: Communication-based approaches prioritize active language use, which is crucial for developing speaking proficiency. These methods encourage learners to express their ideas and thoughts verbally, addressing one of the most challenging aspects of language learning (Ghafar & Raheem, 2023; Dendup & Onthanee, 2020). By focusing on authentic communication, students are better prepared to overcome psychological barriers and expand their linguistic repertoire. These methods align with the significance of verbal communication in daily life and professional contexts. As Abdikarimova et al. (2021) note, speech etiquette and verbal communication skills play a pivotal role in an individual's successful life. Communication-based approaches assist students in developing these essential skills, preparing them for real-world interactions.

Although the communication-based method proved to be the most effective, project-based and game-based methods also showed better improvements in English Proficiency Test (EPT) scores compared to the lecture method. Both approaches successfully encouraged more active student engagement in the learning process, contributing to better learning outcomes, even if not as effective as the communication-based method. Project-based and game-based learning have been recognized for their ability to enhance student engagement and motivation in learning English. These methods create a dynamic and interactive learning environment, which can increase interest in language acquisition. Project-based learning (PBL), in particular, encourages students to collaborate on meaningful projects that require the application of language skills in practical contexts (Nurtanto et al., 2019; Maksum et al., 2023). Research indicates that PBL promotes active reflection and conscious engagement, moving students away from passive learning experiences (Kokotsaki et al., 2016). This collaborative form of learning not only enhances students' motivation but also helps them develop critical thinking skills as they work towards a shared outcome (Järvenoja et al., 2018). Furthermore, the integration of technology in PBL has been shown to increase students' interest and creativity in English language classes (Kusumatuty et al., 2018).

Similarly, game-based learning methods leverage the inherent appeal of games to motivate students. The interactive and often competitive nature of games can lead to heightened engagement, making the learning process enjoyable and stimulating (Chotimah et al., 2022; Hope et al., 2023). Game-based learning has been linked to increased willingness to communicate (WTC) among students, as it provides a low-stakes environment for practicing language skills (Zarrinabadi & Abdi, 2011; Vani & Veeranjaneyulu Naik, 2023). This aspect is particularly crucial in language learning, where motivation significantly influences students' willingness to engage in communication (Ghafor et al., 2019). However, while both project-based and game-based methods can effectively boost engagement and motivation, they may not be as effective as communication-based methods in achieving comprehensive language proficiency. Communication-based

methods prioritize real-life interactions and contextual understanding, which are essential for developing fluency and accuracy in language use (Wagner et al., 2022).

In conclusion, project- and game-based learning methods improve student involvement and motivation in English learning, but they may not develop comprehensive language abilities as well as communication-based methods. The latter stresses actual language use and contextual learning, essential for English proficiency. Lecturers scored lower on the English Proficiency Test (EPT). This may be because lectures are passive and involve students less in learning. This technique limits student-teacher interaction, diminishing opportunities for pupils to build contextual and interactive communication skills, which are essential to English language learning.

The lecture method is less effective in developing interactive and contextual language skills for several reasons: Traditional lecture-based teaching often fails to provide the necessary engagement and practical application required for effective language learning. As demonstrated in Wagner et al. (2022), interactive teaching methods stimulate students' interest in learning foreign languages, making the process more exciting and fulfilling. The study found that medical students taught using interactive methods showed positive dynamics in performance indicators, while those taught using traditional methods did not (Asmin, 2019; Wagner et al., 2022). Contradictory to the lecture method, interactive and contextual approaches offer more opportunities for real-world application and skill development. (Efendi et al., 2023) highlights how the Audiolingual Method, focusing on listening and speaking skills, enhances engagement and fosters inclusivity for visually impaired students learning Arabic. Similarly, Markiano Solissa et al. (2023) reveals that a contextual teaching method for hearing-impaired students resulted in higher mean increases in language skills compared to traditional methods.

The findings of this study indicate that learning methods focusing on active communication, games, and technology significantly contribute to enhancing students' language skills. However, based on the synthesis of research findings, there is a need for more comprehensive and structured innovation in teaching methods. This innovation should encourage student engagement through communication, games, and technology to create a more interactive and engaging learning environment.

One innovative recommendation emerging from this study is the development of a Technology-Assisted Edutainment-Based Co-Trainers Program. This program combines a co-trainer approach with elements of edutainment, where technology, such as interactive applications, game-based simulations, and digital learning tools, serve as the primary means of supporting the learning process. In this program, co-trainers act as facilitators who assist other students in technology-based discussion and practice activities, fostering a collaborative and participatory learning environment. Previous research supports the effectiveness of the Co-Trainers Program in enhancing communication skills. Co-trainers play a pivotal role in encouraging active participation, which is crucial for language acquisition, especially in vocational high schools (SMKs) where practical skills are essential.

Edutainment, which combines games and technology, also motivates language learners. According to (Chistyakova et al. (2017), interactive technology like apps and game-based platforms can expedite language acquisition, making this curriculum more practical and entertaining. According to Dao & McDonough (2018), active involvement in real-life circumstances improves language acquisition. Thus, the Technology-Assisted Edutainment-Based Co-Trainers Program provides a novel approach to vocational high school English education. This curriculum mixes communication, games, and technology to create a relevant and engaging digital learning environment for students. This program can improve students' communication abilities, preparing them for a competitive workforce.

This study has certain limitations, primarily the relatively small sample size of 53 students, which may limit the generalizability of the findings. Further research with a larger sample would better represent the overall population. Additionally, the study focused solely on one type of test, the English Proficiency Test (EPT), which may not comprehensively evaluate specific language skills such as speaking, writing, or listening. Future research employing a variety of tests would provide a more complete picture of the effectiveness of the learning methods used.

6. Conclusion

Based on the research findings, it can be concluded that the communication-based learning method is the most effective in improving students' English Proficiency Test (EPT) scores. This method successfully creates an interactive learning environment and encourages active student engagement, which significantly contributes to the enhancement of their English skills. It has proven to be more effective than lecture, project-based, and game-based methods. Given the effectiveness of communication-based learning, it is highly recommended that this approach be more widely implemented in English teaching, particularly at the vocational high school (SMK) level. This method can help students develop strong communication skills, which are highly valued in the workforce. Additionally, further research could explore and test the effectiveness of integrating various models into a program or method called the Co-Trainers Program with Edutainment and Technology assisted to enhance students' English proficiency.

Acknowledgments

Authors' contributions

Ratini Setyowati and Indra Hastuti were responsible for the study design and revising the manuscript. Intan Oktaviani was responsible for

data collection and analysis. Ratini Setyowati drafted the manuscript, and Indra Hastuti revised it. All authors contributed equally to this study, read, and approved the final manuscript.

Competing interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Sciedu Press.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

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