

RESEARCH ARTICLE

Does the co-trainers learning model improve English proficiency? Evidence from vocational high school students across different study programs

Ratini Setyowati*, Intan Oktaviani, Indra Hastuti

Universitas Duta Bangsa Surakarta, Jl. Ki Mangun Sarkoro No. 20, Nusukan, Kecamatan Banjarsari, Kota Surakarta, Jawa Tengah 57135, Indonesia

*Correspondence: ✉ ratini_setyo@udb.ac.id

ABSTRACT

Background: English proficiency has become an essential competency for vocational high school graduates to meet the communication demands of an increasingly globalized workforce. However, English instruction in vocational education is still predominantly delivered through General English approaches, which often fail to accommodate the diverse communication needs of different vocational study programs.

Purpose: This study aimed to evaluate the implementation of the Co-Trainers Learning Model by examining the English proficiency profile of vocational high school students, comparing English proficiency across different vocational study programs, and identifying the study programs demonstrating the highest English proficiency based on the English Proficiency Test (EPT).

Method: A quantitative study employing a posttest-only comparative design was conducted involving 888 students from six vocational high schools in Central Java, Indonesia. Participants had completed English learning through the Co-Trainers Learning Model before undertaking the English Proficiency Test (EPT). Data were analyzed using descriptive statistics and One-Way Analysis of Variance (ANOVA), followed by Tukey's Honestly Significant Difference (HSD) test to identify significant differences among vocational study programs.

Findings: The findings revealed that students generally demonstrated a moderate level of English proficiency, with listening performance exceeding reading performance. Among the participants, 288 students were enrolled in health- and pharmacy-related study programs, while 600 students represented non-health vocational programs. Significant differences in English proficiency were identified across vocational study programs, with health-related programs consistently achieving higher proficiency than several other programs.

Implication: These findings suggest that the effectiveness of the Co-Trainers Learning Model is closely associated with the contextual characteristics and communication demands of individual vocational disciplines, supporting the integration of collaborative learning and English for Vocational Purposes to strengthen workplace-oriented English instruction in vocational education.

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INTRODUCTION

English is increasingly positioned as a core work competency, but its implementation in vocational schools often lags behind the demands of the ever-evolving world of work (Setyowati et al., 2025; Simanjuntak et al., 2025). In the context of vocational education, English proficiency is becoming increasingly important with increasing globalization, labor mobility, and the interconnectedness between education, industry, and professional training (Li, 2022; Crompton et al., 2024). In various sectors, such as tourism, hospitality, technology, and international business, English proficiency supports communication in the workplace, facilitates access to technical documents, and improves graduates' readiness to compete in the global job market (Simanjuntak et al., 2025; Tegeh et al., 2025). This competency is not only limited to speaking skills, but also includes reading literacy needed to understand work manuals, operational procedures, journals, certifications, and various learning resources and industry documents, most of which are available in English (Yapp et al., 2023). Therefore, various studies emphasize the importance of implementing English for Specific Purposes (ESP) or a learning approach oriented to vocational needs so that English material is aligned with students' areas of expertise and is more relevant to the needs of the world of work (Yapp et al., 2023; Setyowati et al., 2025). As the demands for 21st-century graduate competencies increase, English proficiency is no longer seen as a complementary competency, but rather as an essential ability needed to increase the competitiveness of vocational high school graduates at the national and global levels.

Despite its increasingly strategic role, English language learning in vocational high schools still faces various academic and contextual challenges. Many students have relatively low basic English skills, limited vocabulary mastery, poor pronunciation, and low levels of self-confidence and learning motivation, which hinders communication skills and mastery of other language skills (Purwati et al., 2023; Setyowati et al., 2025). At the institutional level, limited learning time allocation, a lack of contextual learning processes, curriculum incompatibility with the needs of each expertise program, and teachers' difficulties in integrating English material with vocational competencies cause learning to still be dominated by General English and not fully accommodate communication needs in the world of work (Anwas et al., 2025; Yildirim & Bal, 2023). This condition is exacerbated by the use of teaching materials that are not always appropriate to the students' ability levels, limited learning resources, an unsupportive learning environment, and various social factors, such as part-time work, family support, and access to technology (Santi & Endarto, 2024; Yu

& Abdullah, 2025). In addition, the characteristics and communication needs of each different vocational program mean that a general English language learning approach is unable to optimally accommodate the learning needs of all students. Therefore, a learning strategy is needed that can integrate English learning with the vocational context, increase student engagement, and provide a more authentic and relevant learning experience to their field of expertise.

The development of English language learning in vocational education demonstrates a growing need for contextual, collaborative, and workplace-oriented strategies. Various studies report that communicative learning approaches, English for Specific Purposes (ESP), constructivism-based learning, and multimodal learning can improve students' language competence, learning participation, and work readiness because learning is designed according to students' learning needs and professional demands (Alvi, 2023; Mao & Zhou, 2024). In line with these developments, ESP has also experienced a paradigm shift from learning oriented toward text mastery to learning that emphasizes social participation, knowledge co-construction, and collaboration between language teachers, subject matter teachers, and students (Dafouz Milne, 2021; Macaro & Aizawa, 2024). In this context, the Co-Trainers Learning Model is a collaborative instructional approach in which an English teacher and a vocational subject teacher act as complementary facilitators, combining language and pedagogical expertise with occupational knowledge and workplace contexts. The model is designed to address the gap between general English instruction and the specific communication demands of vocational education by integrating English learning with field-specific terminology, tasks, and professional situations. Through joint planning and instruction, the model aims to enhance learning interaction, contextual understanding, student motivation, and the communication skills required in professional settings. The collaboration also enables students to encounter English in more authentic vocational contexts, making language learning more relevant to their field of expertise and future workplace demands (Setyowati et al., 2025).

Research on the Co-Trainers Learning Model remains at an early stage. The model integrates English teachers' language and pedagogical expertise with vocational teachers' occupational knowledge to connect English learning with vocational tasks and workplace communication. Although related research on communicative, project-based, ESP, and collaborative learning supports the value of contextualized and collaborative instruction (Alvi, 2023; Chen, 2021), existing Co-Trainers research remains limited in scale and empirical evidence, particularly regarding differences in English proficiency across vocational study programs (Setyowati et al., 2025; Setyowati et al., 2022). Thus, further empirical research is needed to strengthen evidence on the implementation of Co-Trainers in diverse vocational contexts. Furthermore, most research on English proficiency, TOEFL, EPT, and English

language assessments still focuses on mapping learning outcomes without linking them to learning strategies or the characteristics of students' vocational programs. Yet, ESP implementation itself still faces challenges such as gaps in student abilities, teacher readiness, the need for cross-disciplinary collaboration, and inconsistent learning support (Ramalingam et al., 2022; Crompton et al., 2024; Zhou & Zhang, 2022). Therefore, this study develops and implements the Co-Trainers Learning Model as an alternative learning strategy to bridge the need for communicative, collaborative, and needs-based English learning, while filling the empirical gap regarding the effectiveness of the model in improving the English language skills of vocational high school students based on the results of the English Proficiency Test (EPT) in various expertise programs (Liu et al., 2022; Setyowati et al., 2025).

Although various studies have shown that communicative learning strategies, ESP, and collaborative teaching contribute to improving students' English language proficiency and learning engagement (Alvi, 2023; Farmati et al., 2023), most of these studies still examine these three aspects separately. On the other hand, research on English proficiency generally focuses on mapping TOEFL or English Proficiency Test (EPT) results without linking them to learning strategies or program characteristics (Ramalingam et al., 2022). Research on the Co-Trainers Learning Model has demonstrated its potential to support English learning through trained peer facilitators. However, previous studies have mainly focused on higher education and specific student groups, with limited evidence from vocational high schools and standardized English proficiency assessment (Setyowati, 2020)(Setyowati et al., 2025). Moreover, existing studies have not sufficiently examined whether students' English proficiency varies across different vocational study programs, despite differences in occupational communication demands, technical terminology, and vocational learning contexts (Alvi, 2023)(Mao & Zhou, 2024)(Setyowati et al., 2025). Existing research has also tended to examine Co-Trainers, ESP, collaborative teaching, and English proficiency as related but separate areas, leaving limited empirical evidence on their integration within diverse vocational programs. Therefore, this study extends the existing research by examining the implementation of the Co-Trainers Learning Model across multiple vocational programs and comparing students' Listening, Reading, and Total EPT scores.

The characteristics of each expertise program in vocational high schools require different English communication competencies according to the work environment, technical terminology, and the needs of each industry, so that English learning needs to be adapted to the professional context that students will face (Alvi, 2023; Mao & Zhou, 2024; Setyowati et al., 2025). These differences in needs indicate that the effectiveness of a learning strategy, including the Co-Trainers Learning Model, has the potential to produce different outcomes in each expertise program because the level of integration between English

language materials and vocational competencies is not always the same (Dafouz Milne, 2021; Macaro & Aizawa, 2024). Therefore, a comparative analysis between expertise programs is important to gain a more comprehensive understanding of the implementation of these learning models in the context of vocational education. Theoretically, this research is expected to expand the study of collaborative teaching in vocational education, provide empirical evidence regarding the implementation of the Co-Trainers Learning Model on students' English language skills based on the results of the English Proficiency Test (EPT), and enrich the development of English for Vocational Purposes (EVP) as a contextual English learning approach oriented to the needs of the world of work (Macaro & Aizawa, 2024; Setyowati et al., 2025; Liu et al., 2022).

The implementation of the Co-Trainers learning model is theoretically grounded in the principles of Social Constructivism and Collaborative Learning Theory, which emphasize that knowledge is actively constructed through social interaction, shared experiences, and collaborative problem-solving, rather than merely transmitted by the teacher. In the context of vocational education, this theoretical perspective suggests that English language learning becomes more meaningful when students engage in authentic communication, receive continuous feedback from peers and teachers, and link language use to real-world professional contexts (Dafouz Milne, 2021; Chen, 2021). Collaboration between English teachers and vocational subject teachers within the Co-Trainers model creates opportunities for students to co-construct knowledge while integrating language learning with vocational competencies; this fosters active participation, contextual understanding, and communicative competence (Liu et al., 2022; Setyowati et al., 2025). Furthermore, Collaborative Learning Theory posits that student-to-student interaction, supported by various facilitators, can enhance learning engagement, promote deeper understanding, and develop high-level communication skills essential for workplace performance (Chen, 2021; Macaro & Aizawa, 2024). Thus, this theoretical perspective provides a robust conceptual foundation for examining how the Co-Trainers model supports English language learning in vocational education and for explaining potential variations in learning outcomes across different vocational study programs.

Based on these research gaps, this study seeks to provide empirical evidence regarding the implementation of the Co-Trainers Learning Model in English language learning in vocational high schools. Specifically, this study aims to answer the following research questions. (1) What is the English proficiency profile of vocational high school students following the implementation of the Co-Trainers Learning Model? (2) Are there significant differences in English proficiency among vocational study programs following the implementation of the Co-Trainers Learning Model? (3) Which vocational study programs

demonstrate the highest English proficiency based on the results of the English Proficiency Test (EPT)?

METHODS

This study used a quantitative approach with a posttest-only comparative study design to evaluate the implementation of the Co-Trainers Learning Model on the English language skills of vocational high school students ([Haq & Yasin, 2025](#)). All participants had participated in learning using the Co-Trainers Learning Model before being assessed using the English Proficiency Test (EPT). This design was chosen because it allowed researchers to evaluate the implementation of the Co-Trainers Learning Model in the context of natural learning at school and to compare the English language skills of students from various vocational programs based on the EPT scores obtained after the learning. Thus, this study focused on evaluating the implementation results of the learning model and differences in English language proficiency achievement between vocational programs.

The study was conducted in the even semester of the 2025/2026 academic year at several vocational high schools (SMK) in Central Java Province. These schools were selected because they had implemented the Co-Trainers Learning Model in English language learning across various skill programs. Participants consisted of students from several classes representing various skill programs, with the number of schools, classes, and participants detailed in Table 1. The study used a purposive sampling technique to determine schools that met the criteria for implementing the Co-Trainers Learning Model, while total sampling was applied at the participant level, so that all students participating in the model were included as research respondents ([Bostley & Peters, 2023](#)).

The implementation of the Co-Trainers Learning Model was conducted over 12 weeks, consisting of two 90-minute sessions per week, resulting in a total of 24 instructional sessions. Throughout the implementation, English teachers and vocational subject teachers jointly planned, delivered, and evaluated the learning activities to ensure that English instruction was consistently integrated with vocational content. Peer facilitators were selected by the teachers based on their academic achievement in English, communication skills, collaborative attitudes, and willingness to assist classmates. Prior to the implementation, all peer facilitators participated in a 6-hour orientation and training program, which introduced the objectives of the Co-Trainers Learning Model, collaborative facilitation techniques, classroom communication strategies, and procedures for providing peer feedback under teacher supervision. This approach was chosen so that the data obtained could comprehensively represent the implementation of the learning model in each skill program, while also providing an adequate basis for comparing students' English language abilities based on the results of the English Proficiency Test (EPT) across skill programs.

Table 1.*Distribution of Research Participants by School and Vocational Study Program*

School	Vocational Study Program	Participants (n)
Vocational High School A	Nursing	156
Vocational High School A	Pharmacy	92
Vocational High School B	Clinical and Community Pharmacy	96
Vocational High School B	Nursing Assistant and Caregiving	108
Vocational High School C	Visual Communication Design (DKV)	124
Vocational High School D	Nursing Support Services and Caregiving (LPKC)	118
Vocational High School E	Clinical and Community Pharmacy Support Services (LPKK & K)	104
Vocational High School F	Nursing (additional parallel classes)	90
Total	6 Schools; 7 Vocational Study Programs	888

The research instrument was the English Proficiency Test (EPT), administered after the implementation of the Co-Trainers Learning Model to assess students' English language proficiency (Gaisford & O'Neill, 2006). The EPT consists of two main components, namely Listening Comprehension and Reading Comprehension, which produce individual component scores and a total EPT score as indicators of students' English proficiency. The instrument blueprint was developed based on these two components, as presented in Table 2. The instrument's content validity was considered in relation to the relevance of the measured English language proficiency indicators, while standardized administration and scoring procedures were applied to ensure consistency of measurement. The EPT provided a common assessment basis for describing students' English proficiency and comparing performance across vocational study programs. All EPT scores obtained after the implementation were used in the subsequent descriptive and inferential analyses.

Table 2.*Blueprint of English Proficiency Test*

No.	Aspect	Indicator
1	Listening Comprehension	Identifying main ideas, understanding explicit and implied information, recognizing detailed information, interpreting the speaker's intent, and understanding conversations and oral presentations.
2	Reading Comprehension	Identifying main ideas, understanding explicit and implied information, interpreting the meaning of vocabulary based on context, recognizing text structure, and drawing conclusions from reading.

Source: Adaptation from research Setyowati et al. (2025), Zhang et al. (2025), Ahmed et al. (2024).

Data were analyzed using IBM SPSS Statistics, the analysis began with descriptive statistics, including the mean, standard deviation, minimum, and maximum values, to describe students' English proficiency following the implementation of the Co-Trainers Learning Model (Zheng, 2021). Prior to inferential analysis, the data were examined for normality, homogeneity of variance, and outliers to ensure that the assumptions of parametric testing were satisfied. Differences in English proficiency across vocational study programs were subsequently analyzed using One-Way Analysis of Variance (ANOVA). When significant differences were identified, Tukey's Honestly Significant Difference (HSD) test was employed as the post hoc procedure to determine which pairs of study programs differed significantly (Pfenninger & Neuser, 2019). In addition, descriptive comparisons based on the mean, standard deviation, ranking, and 95% confidence interval were used to identify the vocational study programs demonstrating the highest English proficiency following the implementation of the Co-Trainers Learning Model.

RESULT AND DISCUSSION

The Co-Trainers Learning Model is a collaborative learning model developed to improve English communication skills through the active involvement of students as peer facilitators in the learning process. This model is student-centered by optimizing the abilities, experience, motivation, and collaboration between students in a contextual learning environment oriented to vocational needs. Implementation of the model begins with the selection of Co-Trainers based on English language ability and leadership potential, followed by the formation of small study groups consisting of one Co-Trainer and several group members. During the learning process, the English teacher acts as the main facilitator who designs the learning, provides material reinforcement, monitors the progress of the discussion, and conducts evaluations. Meanwhile, Co-Trainers are tasked with facilitating group discussions, providing mentoring to peers, motivating group members to actively communicate in English, helping answer questions according to their capacity, and reporting the group's progress to the teacher periodically. Collaboration between teachers and Co-Trainers is expected to create more interactive learning, increase student confidence, strengthen communication in English, and connect learning materials to the context of the vocational work world. The implementation syntax of the Co-Trainers Learning Model used in this study is presented in Table 3.

English Proficiency Profile Following the Implementation of the Co-Trainers Learning Model

This section addresses the first research question by describing the overall English proficiency profile of vocational high school students after participating in learning activities based on the Co-Trainers Learning Model. The profile is derived from students' scores on the English Proficiency Test (EPT), which comprises two components, Listening and Reading, combined into a Total EPT Score. A total of 888 students from six vocational high schools that implemented the Co-Trainers Learning Model completed the test and were included in the descriptive analysis, after excluding participants who did not sit for either section of the test.

Table 3.

Syntax of the Co-Trainers Learning Model

Phase	Learning Activities
Phase 1. Learning Orientation	The teacher explains the learning objectives, forms study groups, and assigns Co-Trainers to facilitate each group.
Phase 2. Collaborative Instruction	The teacher delivers the main material, while the Co-Trainers receive reinforcement to support group discussions.
Phase 3. Contextual Language Practice	Students practice using English through activities tailored to the context of their respective expertise programs under the guidance of the Co-Trainers.
Phase 4. Vocational Communication Activities	Each group conducts discussions, simulations, presentations, or communication based on work situations, while the Co-Trainers facilitate interactions and support group members.
Phase 5. Reflection and Feedback	The teacher and Co-Trainers reflect, provide feedback on the learning process, evaluate group progress, and plan follow-up learning activities.

Source: Adoption from [Setyowati \(2020\)](#), [Strogilos et al. \(2023\)](#) and [Setyowati et al. \(2025\)](#)

Table 4.

Descriptive Statistics of English Proficiency Test (EPT)

Variable	Mean	SD	Minimum	Maximum
Listening Score	150.23	49.01	40	440
Reading Score	132.70	90.94	0	495
Total EPT Score	282.93	116.25	85	895

Table 4 summarizes the descriptive statistics of students' English Proficiency Test (EPT) scores following the implementation of the Co-Trainers Learning Model. Overall, students demonstrated a moderate level of English proficiency, although considerable variation was observed across individual learners. The relatively wide distribution of scores indicates that

while some students achieved high levels of English proficiency, others continued to experience difficulties, suggesting that learning outcomes were not equally distributed among participants. This pattern is further reflected in the relatively large standard deviations across the EPT components, indicating substantial dispersion in students' performance and suggesting that English proficiency remained heterogeneous despite the implementation of the learning model. This finding reflects the diverse language abilities commonly found in vocational education settings and highlights the need for instructional approaches that can accommodate differences in students' prior knowledge and learning needs.

A comparison of the two EPT components revealed that students generally performed better in Listening than in Reading, indicating that listening comprehension was relatively stronger following the implementation of the Co-Trainers Learning Model. In addition, listening scores were more consistent across students, whereas reading performance showed substantially greater variation, reflecting wider differences in students' ability to comprehend written texts. This pattern suggests that the collaborative and interaction-oriented nature of the Co-Trainers Learning Model may have provided more opportunities for students to develop listening skills through communication and peer interaction. At the same time, the greater variability in reading performance indicates that reading comprehension may require additional instructional support, particularly in relation to vocabulary development, technical texts, and contextual reading activities relevant to vocational education.

Comparison of English Proficiency across Vocational Study Programs

This section addresses the second and third research questions together, as identifying the vocational study program with the highest English proficiency represents a direct extension of comparing English proficiency across vocational study programs. Students were classified into seven vocational study programs based on the academic records provided by each participating school, namely Nursing, Pharmacy, Clinical and Community Pharmacy, Nursing Assistant and Caregiving, Visual Communication Design (DKV), LPKC, and LPKK & K. Parallel classes within the same vocational study program (e.g., multiple Nursing and Pharmacy classes) were combined into a single study program category to facilitate statistical analysis.

As presented in Table 5, English proficiency varied across the seven vocational study programs, indicating that students' language achievement was not uniformly distributed following the implementation of the Co-Trainers Learning Model. Health-related programs, including Nursing, Pharmacy, Clinical and Community Pharmacy, and Nursing Assistant and Caregiving, consistently demonstrated the highest levels of English proficiency and formed

a relatively high-performing group. In contrast, LPKC and LPKK & K were positioned at the lower end of the distribution, while Visual Communication Design (DKV) occupied an intermediate position. Although differences in mean scores were evident, variations in score dispersion were also observed across study programs. Specifically, the lower-performing programs exhibited smaller standard deviations, indicating more homogeneous English proficiency among students, whereas the higher-performing programs showed greater variability in performance

Table 5.

English Proficiency Scores across Vocational Programs

Program	n	Mean	SD	Rank
Nursing	301	315.27	135.62	1
Pharmacy	142	311.73	117.08	2
Clinical and Community Pharmacy	57	308.51	105.14	3
Nursing Assistant and Caregiving	84	304.88	109.83	4
Visual Communication Design (DKV)	11	271.82	135.87	5
LPKC	194	230.57	70.07	6
LPKK & K	99	213.79	52.22	7

Table 6.

Comparison of Listening and Reading Comprehension across Program

Vocational Study Program	n	Listening M	Listening SD	Reading M	Reading SD	F	p
Nursing	301	149.22	70.41	166.05	82.73	11.48	< .001
Pharmacy	142	143.41	63.27	168.32	73.85		
Clinical and Community Pharmacy	57	174.21	62.18	134.30	58.76		
Nursing Assistant and Caregiving	84	171.85	63.54	133.03	61.27		
Visual Communication Design (DKV)	11	165.45	72.16	106.36	69.48		
Nursing Support Services and Caregiving (LPKC)	194	145.18	46.82	85.39	42.73		

Vocational Study Program	n	Listening M	Listening SD	Reading M	Reading SD	F	p
Clinical and Community Pharmacy Support Services (LPKK & K)	99	121.06	41.37	92.73	38.91		
Overall ANOVA	888					11.48	< .001

As shown in Table 6, students' performance varied across the two EPT components, Listening Comprehension and Reading Comprehension, across the seven vocational study programs. The differences in mean scores indicate that program-level patterns were not necessarily consistent across the two skills, suggesting that students' English proficiency may vary according to the language component assessed. The standard deviations also show differences in score dispersion, with some programs demonstrating greater variation in students' performance than others. These descriptive patterns, together with the differences observed in the overall EPT scores, suggest that English proficiency may be associated with differences in vocational learning contexts and program characteristics. However, descriptive differences alone do not establish whether the observed variation is statistically significant; therefore, separate One-Way ANOVA tests were conducted for Listening Comprehension, Reading Comprehension, and total EPT scores.

Table 7.

Results of One-Way ANOVA

Source	SS	df	MS	F	p
Between Groups	1,516,803.0	6	252,800.5	21.27	< .001
Within Groups	10,470,380.0	881	11,885.8		
Total	11,987,183.0	887			

A one-way ANOVA was conducted to examine whether English proficiency differed significantly across the seven vocational study programs. The results, presented in Table 5, indicate a statistically significant difference in Total EPT Score among study programs, $F(6, 881) = 21.27$, $p < .001$. This finding confirms that the vocational study program a student is enrolled in is significantly associated with variation in English proficiency following the implementation of the Co-Trainers Learning Model.

Following the significant omnibus ANOVA, a Tukey HSD post hoc analysis was conducted to identify the specific vocational study programs that differed significantly in English proficiency. As presented in Table 7, significant differences were consistently observed between the lower-performing programs (LPKC and LPKK & K) and the four higher-performing programs, namely Nursing, Pharmacy, Clinical and Community

Pharmacy, and Nursing Assistant and Caregiving. In contrast, no significant differences were identified among the four higher-performing programs, between LPKC and LPKK & K, or between Visual Communication Design (DKV) and the other study programs. When interpreted alongside the descriptive statistics, the higher-performing programs generally exhibited larger standard deviations, indicating greater variability in students' English proficiency, whereas the lower-performing programs showed smaller standard deviations, suggesting more homogeneous performance within each program. Overall, these findings indicate that English proficiency following the implementation of the Co-Trainers Learning Model formed two broad performance clusters: a higher-performing cluster comprising health- and pharmacy-related programs and a lower-performing cluster represented by LPKC and LPKK & K. Among all vocational study programs, Nursing demonstrated the highest level of English proficiency, whereas LPKK & K consistently recorded the lowest performance.

Table 8.

Post Hoc Comparison of English Proficiency across Programs

Program	Comparison	Mean Difference	p
Nursing	vs LPKC	84.70	< .001
Nursing	vs LPKK & K	101.48	< .001
Pharmacy	vs LPKC	81.16	< .001
Pharmacy	vs LPKK & K	97.94	< .001
Clinical and Community Pharmacy	vs LPKC	77.94	< .001
Clinical and Community Pharmacy	vs LPKK & K	94.72	< .001
Nursing Assistant and Caregiving	vs LPKC	74.31	< .001
Nursing Assistant and Caregiving	vs LPKK & K	91.09	< .001

The favorable English proficiency profile observed following the implementation of the Co-Trainers Learning Model may be explained by the pedagogical characteristics embedded in the model, which emphasize student-centered learning, collaborative interaction, peer-assisted learning, and active learner engagement throughout the instructional process. Rather than positioning students as passive recipients of knowledge, the model encourages them to participate actively in discussion, problem-solving, and authentic communication activities facilitated by both teachers and peer facilitators. Such learning conditions are consistent with the principles of Social Constructivism, which view

knowledge as being co-constructed through social interaction and meaningful collaboration, enabling learners to develop both conceptual understanding and communicative competence through shared experiences (Dafouz Milne, 2021). Similarly, Collaborative Learning Theory argues that cooperative knowledge construction, reciprocal feedback, and peer support contribute to deeper learning and greater learner autonomy, particularly in language learning contexts where communication itself constitutes the primary learning objective (Chen, 2021; Tegeh et al., 2025). Within the Co-Trainers Learning Model, peer facilitators function not merely as academic assistants but also as learning partners who reduce communication anxiety, encourage participation, and provide immediate feedback during classroom interaction. These mechanisms create richer opportunities for language exposure and repeated communicative practice, which are widely recognized as essential conditions for developing second-language competence.

Previous studies have likewise reported that collaborative and communicative learning environments promote greater classroom engagement, improve students' confidence in using English, and foster more meaningful learning experiences than traditional teacher-centered instruction (Chen, 2021; Liu et al., 2022). Furthermore, research on communicative and constructivist approaches has consistently shown that students learn more effectively when they actively negotiate meaning, exchange ideas, and solve authentic problems collaboratively rather than relying solely on direct instruction (Rahmanu & Molnár, 2024). Therefore, the positive English proficiency profile identified in this study can reasonably be interpreted as reflecting not only the collaborative structure of the Co-Trainers Learning Model, but also its capacity to create an interactive learning environment that encourages sustained participation, authentic communication, and shared responsibility for learning.

An equally important finding of this study is that English proficiency was not uniformly distributed across vocational study programs, suggesting that the implementation of the Co-Trainers Learning Model should be understood within the context of each vocational discipline rather than as a universally applicable instructional approach. The superior performance demonstrated by health-related programs, including Nursing, Pharmacy, Clinical and Community Pharmacy, and Nursing Assistant and Caregiving, is unlikely to reflect inherent differences in students' academic ability. Consequently, English is perceived not merely as an academic subject but as an authentic workplace competency that directly supports future occupational performance. This interpretation is consistent with the principles of English for Specific Purposes (ESP) and English for Vocational Purposes (EVP), which emphasize that language learning becomes more meaningful when instructional content reflects learners' disciplinary contexts and professional communication needs rather than relying on generalized language instruction (Alvi, 2023; Mao & Zhou, 2024).

From a broader Technical and Vocational Education and Training (TVET) perspective, these findings further suggest that vocational programs characterized by stronger industrial engagement and greater demand for workplace communication naturally create richer opportunities for authentic English use, thereby facilitating higher levels of language proficiency (Li, 2022; Setyowati et al., 2025). Accordingly, the observed differences across study programs reinforce the view that effective English instruction in vocational education should be designed around the communicative practices, industrial requirements, and occupational identities of individual vocational fields rather than adopting a one-size-fits-all approach to language teaching (Dafouz Milne, 2021; Chen, 2021).

The findings of this study carry important educational, practical, and theoretical implications for English language instruction in vocational education. From an educational perspective, the observed differences across vocational study programs indicate that English instruction can no longer rely on a General English approach that assumes similar language needs across disciplines. Instead, English learning should be designed according to the principles of English for Vocational Purposes (EVP) by integrating vocational contexts, technical terminology, workplace communication, and authentic professional tasks into classroom activities (Alvi, 2023; Mao & Zhou, 2024). In this regard, the Co-Trainers Learning Model offers a promising instructional framework by fostering collaboration between English teachers and vocational subject teachers, enabling students to learn language skills within meaningful occupational contexts while simultaneously strengthening communication competence relevant to their future professions (Dafouz Milne, 2021; Setyowati et al., 2025). Practically, these findings suggest that schools should strengthen interdisciplinary collaboration in curriculum implementation by encouraging joint lesson planning, contextual material development, and continuous professional development involving both English teachers and vocational teachers.

School leaders also play a critical role in supporting the institutional implementation of collaborative teaching through appropriate policies, scheduling flexibility, and teacher training that facilitates sustained cooperation across subject areas. Beyond its practical contribution, this study also extends the theoretical discussion of collaborative learning within English for Vocational Purposes by demonstrating that the outcomes of collaborative instructional models are influenced not only by pedagogical design but also by the characteristics of vocational study programs. In other words, the effectiveness of collaborative English instruction is closely related to the communication demands, workplace contexts, and professional identities embedded within each vocational discipline (Budiarto et al., 2024; Simanjuntak et al., 2025; Crompton et al., 2024). This perspective enriches previous studies that have predominantly examined collaborative learning strategies or English proficiency independently by positioning vocational program

characteristics as an important contextual factor influencing instructional outcomes (Chen, 2021; Setyowati et al., 2025).

Despite its contributions, this study has several limitations. Students' English proficiency was assessed using a standardized English Proficiency Test (EPT), which provided a common basis for comparing English proficiency across vocational study programs. However, the EPT may not fully capture discipline-specific competencies, such as technical vocabulary and workplace communication, which are central to English for Vocational Purposes (Setyowati et al., 2025). Therefore, future research should complement standardized English proficiency assessments with task-based or domain-specific instruments to provide a more comprehensive evaluation of students' communicative competence in vocational contexts (Chen, 2021; Crompton et al., 2024). Therefore, the findings of this study suggest that the Co-Trainers Learning Model has considerable potential as a contextual and collaborative approach to English language instruction in vocational education. Nevertheless, its successful implementation requires instructional adaptation that reflects the distinctive communication needs and industrial characteristics of each vocational study program, ensuring that English learning remains relevant to workplace expectations and contributes meaningfully to students' employability in an increasingly globalized labor-market.

CONCLUSION

This study demonstrates that the Co-Trainers Learning Model provides a promising collaborative approach to English language instruction in vocational education. The findings suggest that the effectiveness of English learning is influenced not only by instructional strategies but also by the communicative demands and professional characteristics of each vocational study program. These results reinforce the importance of moving beyond General English toward English for Vocational Purposes, where language learning is contextualized through workplace communication and interdisciplinary collaboration between English and vocational teachers. Accordingly, this study contributes to the literature by highlighting vocational study programs as an important contextual factor in the implementation of collaborative English learning. Future research should examine the model across broader vocational settings and employ longitudinal or mixed-methods approaches to provide a more comprehensive understanding of its contribution to students' English language development and workplace readiness.

DECLARATIONS

Author Contribution

Setyowati, R., Conceptualization, Methodology, Investigation, Formal analysis, Data curation, Visualization, Writing – Original Draft, and Project administration. **Oktaviani, I.**, Methodology, Validation, Formal analysis, Writing – Review & Editing, and Supervision. **Hastuti, I.**, Investigation, Resources, Data curation, Validation, Writing – Review & Editing, and Supervision. All authors have read and approved the final version of the manuscript and agree to be accountable for all aspects of the work.

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Conflict of Interest

The authors declare no conflict of interest.

Declaration of AI Use

The authors used Consensus during the literature search and evidence retrieval stages to identify and explore relevant scholarly publications. The tool was employed solely to facilitate the discovery of scientific literature and did not generate, interpret, or analyze the study findings. All study design, data analysis, interpretation of results, and manuscript preparation were performed by the authors. The authors reviewed, verified, and take full responsibility for the accuracy, integrity, and originality of the final manuscript.

Additional Information

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