

## STUDENTS' PERCEPTIONS OF COLLABORATIVE LEARNING IN ENGLISH FOR MEDICAL PURPOSES (EMP) COURSE

Diah Royani Meisani<sup>1✉</sup>, Laely Hidayati<sup>2</sup>

Universitas Brawijaya, Jl. Veteran, Malang, East Java, Indonesia<sup>1,2</sup>

---

### Article Info

Article History:  
Received October 2024  
Accepted March 2025  
Published April 2025

#### Keywords:

Collaborative learning,  
English for Medical  
Purposes (EMP), students'  
perceptions

---

### Abstract

Research on collaborative learning in English for Specific Purposes (ESP), particularly from the students' perspectives, remains relatively limited due to prevailing focuses on teacher-centered approaches and individual assessment. The present study addresses the gap by exploring how collaborative learning impacts student engagement and outcomes in an English Medical Purposes (EMP) course. A total of 328 Medicine, Nursing, and Nutrition students completed a questionnaire using a 5-point Likert scale to evaluate their perspectives on collaborative learning. Results show overall satisfaction, with mean ratings ranging from 4.00 to 4.25 across key aspects such as utility, alignment with expectations, enjoyment, practical application, sense of community, exchange of ideas, and skill development. These findings underscore the value of collaborative learning in fostering active participation and supportive learning environments. In addition, as the identification of potential weaknesses in current implementations of collaborative learning in EMP contexts was not explored, future research should investigate the challenges and develop targeted strategies to optimize collaborative learning experiences in EMP settings.

## INTRODUCTION

Collaborative learning is an approach or learning process that involves groups of students, where each member contributes information, experience, ideas, attitudes, opinions, abilities and skills to work together to solve problems, complete tasks or create a product (Ansari & Naseer, 2024; Laal & Laal, 2012). Through the collaborative method, the learning process is not just about working together in a group but rather a learning process that involves a complete and fair communication process in the classroom. Barkley, et al. (2014) add by positing that the goal of collaborative learning is to build an autonomous individual who is good at actualizing his thoughts. In addition, through dialogue, and sharing information with fellow students and teachers when learning collaboratively, the ability to build the knowledge to improve students' mental abilities at a high level is encouraged (Deysolong, 2023).

Collaborative learning has long been employed in university-level English classrooms. Thorough research uncovered the fact that the results of this practice differed from region to region. In the Indonesian context, previous studies show that collaborative learning is a way to increase student engagement and academic performance (Latifa, 2021; Ruiz-Rojas et al., 2024). In the same vein, research in Vietnam has revealed that both students and teachers view collaborative learning as a positive means to develop communication skills and autonomy, albeit there are some chances of unequal participation alongside the strengths (Nguyen, 2018). Maesin et al. (2009) lend support by positing that in their research involving students in Malaysia, the vast majority of undergraduates have a clear interest in collaborative learning regardless the gender and program of study. In Taiwan (Wang, 2024), the issue of training conversational skills for non-English major freshmen was solved by using the collaborative learning method. This method benefited students and as a result, increased the number of in-class conversations. With this method, students had the chance to develop their soft skills so teaching them and keeping them quiet were self-fulfilling ends for the teacher. Moreover, research in the rest of the world has yielded ambivalent findings with some researchers postulating that collaborative learning might even amplify the extant inequalities in the classroom if it is not properly structured (Rodphotong, 2018). These results are indicative of the importance of cultural adjustments, which are needed to make collaborative learning strategies more effective.

Although collaborative learning has been extensively employed in general English classrooms, its application in English for Specific Purposes (ESP) causes different problems as well as brings advantages that are aimed at the professional and academic needs of learners.

According to Hutchinson and Waters (1987), ESP learning is an English learning approach where the things taught and the teaching methods are based on the reasons why the learner wants to learn English. Given the definition, ESP acts as an approach to teaching and using English for specific fields and studies that are in accordance with the needs of the fields of science and professions that use English. These fields of science and professions include English for law, medicine, psychology, engineering, economics and so on. This is intended to prepare learners to use English for academic, professional, or work environment purposes, and program design based on needs analysis. Robinson (1991) further said that there are three main characteristics of ESP, namely 1) ESP is goal-oriented learning. In this context, learners learn English not because they want to know the language as a language and the culture contained therein, but learners learn ESP because they have special, particular and specific goals in the academic and professional fields with each other. 2) The substance of ESP is designed and developed based on the concept of needs analysis. The concept of needs analysis aims to specialize and link and bring closer what learners need both in academic and professional fields. 3) ESP is more aimed at adult learners than children or adolescents because ESP is generally taught at the middle academic and professional work levels. Seeing the understanding and characteristics of ESP learning, there are many benefits that learners will get after taking the learning.

What makes the ESP learning method unique is the contextual approach it applies. It is not just about learning English to meet general needs. Instead, students will be guided to learn English that is relevant to the specific fields they are interested in or engaged in. So, whether they are interested in business, tourism, or information technology, ESP will help them hone and apply their language skills according to their needs in those fields. In the ESP learning method, tutors or teachers play an important role as learning facilitators. They will use student-centered teaching methods, focusing on materials that are tailored to the needs and interests of students. For example, in an ESP class that teaches English for business purposes, students will learn about various business situations such as presentations, negotiations, formal letter writing, and so on. Of course, no one can achieve satisfactory results without the support and cooperation between teachers and students. Students must be actively involved in the learning process and learn through repeated practice in situations that they can apply in their own lives. The ESP method allows students to build their language competence through simulated situations, role-plays, or even internships that are relevant to their specific fields.

One of the challenges in ESP classes comes from students. This challenge includes two things, namely the entry proficiency level of learners and learner motivation. Dudley-Evans

and St John (1998) state that one of the additional characteristics of ESP is that ESP is intended for learners with intermediate and advanced language skills. This is because ESP is built on the basis of English for General Purposes (EGP) so ESP learners are expected to be learners who already have sufficient English language capital so that they are able to follow ESP skills according to goals and needs. Alwasilah (2000) adds by stating that ESP courses in Indonesia are often underestimated by learners. This is suspected because learners cannot find practical benefits from learning English according to their field of interest. This problematic learning motivation is one of the impacts of the various challenges that have been outlined in the previous points.

Based on the abovementioned background, the urgency to explore and implement collaborative learning models becomes increasingly urgent. Education is no longer just about absorbing information, but also about developing 21st-century skills such as collaboration, communication, and problem-solving skills. The present study aims to identify the best strategies for implementing collaborative learning models, especially in one of the branches of ESP which is English for Medical Purposes (EMP) courses, involving medical, nursing, and nutrition students. More specifically, this research aims to answer the following questions: (1) How do students perceive the collaborative learning process when applied in ESP classes? (2) What impact do students get after applying this technique in EMP classes? It is hoped that this study can provide valuable guidance for educators and policymakers in designing responsive curricula that are oriented toward optimal learning outcomes in the modern education era.

## **REVIEW OF LITERATURE**

### **Concepts and Approaches of Collaborative Learning**

Collaborative learning is an educational approach in which a group of learners work together to achieve a common learning goal. This method emphasizes interaction and active involvement between learners, where they share knowledge, ideas, and skills (Ansari & Naseer, 2024; Barkley et al., 2014; Laal & Laal, 2012). In addition, collaborative learning is a pedagogical method that emphasizes cooperation between learners in solving problems, critical thinking (Ting, 2022), completing tasks, or understanding new concepts. This process involves sharing responsibilities and supporting each other to achieve the learning goals that have been set. Not only focusing on individual achievement, collaborative learning also focuses on how learners can help each other in the learning process (Laksmiwati et al., 2022). It becomes increasingly important in today's education world, where teamwork and collaboration skills are considered very important for success in the workplace and social life.

In English courses, the application of collaborative learning offers various significant benefits, both for students and lecturers, with a theoretical basis that strengthens the effectiveness of this approach. The benefits for students can be understood through the lens of several relevant educational theories. First, in the context of increasing motivation and learning engagement, the self-determination theory developed by Deci and Ryan in 1985 is relevant. This theory emphasizes the importance of internal factors in intrinsic motivation, where collaboration allows students to feel more autonomous and competent in the learning process (Scager et al., 2016). Not only do students receive the benefits, but the teachers also gain the advantages of implementing this method in teaching English. Collaborative learning facilitates classroom management and improves the quality of learning, in accordance with cooperative learning theory. Johnson and Johnson (1989) suggest that collaboration in learning can improve the quality of learning by encouraging active participation and deeper knowledge. In addition, Deci and Ryan's (1985) intrinsic motivation theory is relevant to understanding the increase in teaching motivation for lecturers who implement collaborative learning (De Hei et al., 2015). Through collaboration, lecturers have the opportunity to build closer relationships with students, understand their needs better, and provide more personal support.

Furthermore, the characteristics of cooperation, respect for other people's opinions, self-control, patience, and adequate emotional intelligence in collaborative learning, are very much needed from students, because by having such characteristics, it is expected that learning will be more meaningful, enjoyable and produce problem-solving as expected. Cabrera et al. (2002) emphasize that collaborative learning eliminates stereotypes that are usually attached to students from certain groups, working together in groups, and being accustomed to different people, and producing graduates who are broad-minded and accepting of diversity, as one of the requirements for success in the current era of globalization. The results of Clark & Baker's research (2010) show that there is a general understanding among learners that collaborative learning provides great benefits for diverse groups.

The learning outcomes achieved by students are inseparable from the learning process that occurs in the classroom. According to van der Kleij et al. (2011), the effectiveness of learning occurs when students are actively involved in organizing the relationships between the information provided. Therefore, efforts to improve student learning outcomes must be accompanied by efforts to increase student learning activities and motivation. To improve learning outcomes, various learning methods can be used. One of the learning methods is the collaborative learning method in which students study in small groups with different levels of ability (Laal & Laal, 2012). Based on some experts (Buchs & Butera, 2015; Chandra, 2015;

Kumar, 2017) collaborative learning is developed to achieve three important learning objectives, namely academic achievement, acceptance of diversity, and development of social skills. During group study, each member works together and helps understand the learning material. This method increases students' enthusiasm for learning. Besides, mutual assistance activities, which are characteristics of cooperative learning, allow learning to be more enjoyable, thereby increasing students' enthusiasm for learning, which means increasing students' motivation to learn. It also encourages students to be able to solve difficult problems because they can discuss them with friends. This can improve students' competence and learning outcomes. Based on the explanation above, finding out whether collaborative learning can enhance the implementation of EMP teaching is crucial to improve the concept of effective English learning for students who are not from English majors.

## **METHOD**

The study carried out a descriptive qualitative research design to explore the perceptions of medical students on the implementation of collaborative learning in the English for Medical Purposes (EMP) courses. As stated by Creswell (2014) qualitative descriptive data is used to find relevant themes and ideas and then convert them into numerical data for further comparison and evaluation. The qualitative method was an appropriate research approach since it explored students' experiences in collaborating with their peers in the English class. In addition, the data was collected through a survey questionnaire that uses a five-point Likert scale adopted from So & Brush (2007) and an additional open-ended question. The questionnaire was distributed to students online via Google Forms.

The current study involved students of health who were from several majors, namely medicine, nursing, and nutrition. Through the questionnaire, the data collected covered three parts. First, it contains six demographic items, including students' gender, age, number of credits taken this semester, and study program. Second, it consists of statements to measure students' overall satisfaction with ESP learning and instructors. The last part contains statements to find out students' perspectives and preferences regarding group work versus individual work, preferences for online versus face-to-face interaction, amount of collaboration, and overall satisfaction with collaborative learning which are followed by open-ended questions to explain their answers.

To help contextualize the findings, the demographic data of the participants were analyzed using descriptive statistics that summarized the distribution of study programs, gender, age, and self-reported English proficiency level. To provide a clear overview of participants'

backgrounds, frequencies and percentages were also calculated for each subcategory. Besides, in order to summarize students' perceptions of the implementation of collaborative learning in the EMP course, the data obtained from the questionnaire were analyzed using descriptive statistics which covered the calculation of mean, median, and standard deviation (SD) for each item.

## RESULTS AND DISCUSSIONS

This section elaborates on the results of the research on the effectiveness of collaborative learning in the English for Medical Purposes (EMP) course based on students' experiences. The data which was collected from 328 participants across medicine, nursing, and nutrition majors, were analyzed in terms of study program distribution, gender, age, and English proficiency level. Besides highlighting students' demographic characteristics and their potential influence on engagement, the findings present the outcomes in collaborative learning settings. Additionally, thematic analysis of qualitative responses gathered from the open-ended questions provides insights into students' perceptions, challenges, and perceived benefits of the collaborative learning approach in EMP. The table below summarizes the demography of the participants.

**Table 1. The Demography of the Participants**

Category	Subcategory	N (%)
<b>Study Program</b>	Medicine	136 (41.5)
	Nursing	147 (44.8)
	Nutrition	45 (13.7)
<b>Gender</b>	Female	271 (82.6)
	Male	57 (17.4)
	<18	6 (1.8)
	18	69 (21.0)
	19	125 (38.1)
	20	58 (17.7)
	21	58 (17.7)
	22	12 (3.7)
<b>English Level</b>	Beginner	99 (30.2)
	Intermediate	210 (64.0)
	Advanced	19 (5.8)

Table 1 shows that the research participants come from three different study programs, namely Medicine, Nursing, and Nutrition. Among the 328 total participants, the largest group comes from Nursing (147 students), followed by Medicine (136 students), and Nutrition has the smallest representation with 45 students. This distribution suggests a diverse academic background among the participants, which may contribute to varied perspectives in the study.

In terms of gender distribution, the majority of participants are female, with 271 students, while only 57 participants are male. The age range of the participants varies, with the largest

group being 19 years old (125 students), followed by 18 years old (69 students), 20 and 21 years old (58 students each), 22 years old (12 students), and a small portion of participants (6 students) being younger than 18 years old. Regarding English proficiency, most participants fall into the intermediate category, with 210 students, while 99 students are at the beginner level, and only 19 students are categorized as advanced. This indicates that while the majority of participants have a moderate command of English, relatively few have advanced proficiency, which could have implications for language-related aspects of the research.

The survey results indicate that students generally had a positive experience with collaborative learning in their English courses. The highest-rated item (Mean = 4.47, Median = 5.0, SD = 0.6) suggests that students found the course to be a useful learning experience. Additionally, students felt engaged in their learning community (Mean = 4.39) and perceived the collaborative learning activities as well applied (Mean = 4.38). Although the median score across most items is 4.0, slight variations in mean and standard deviation values suggest differing individual experiences, particularly in areas such as learning activities meeting expectations (Mean = 4.28, SD = 0.71) and enjoyment of group work (Mean = 4.30, SD = 0.74).

The results also highlight the benefits of peer collaboration in skill development and problem-solving. Many students felt that they actively exchanged ideas (Mean = 4.34) and learned from group members (Mean = 4.38). Moreover, problem-solving skills were enhanced through collaboration (Mean = 4.36), and the effectiveness of group work was well-rated (Mean = 4.37). The overall satisfaction with collaborative learning (Mean = 4.36, SD = 0.67) suggests that while most students had a positive experience, there was some variation in individual perspectives. The relatively low standard deviations across all items indicate a general consensus among students, reinforcing the effectiveness of the collaborative learning approach in this course. See the table below.

**Table 2. Results of the Questionnaire**

Item	Mean	Median	SD
1. This English course provides a useful learning experience.	4.47	5.0	0.6
2. Overall, the learning activities and assignments of this course meet my learning expectations.	4.28	4.0	0.71
3. I enjoyed doing the group work in English class.	4.30	4.0	0.74
4. Collaborative learning activities in the English course were well applied.	4.38	4.0	0.66
5. I felt part of a learning community in my group.	4.39	4.0	0.65
6. I actively exchanged my ideas with group members.	4.34	4.0	0.72
7. I was able to develop new skills and knowledge from other members in my group.	4.38	4.0	0.71

8. I was able to develop problem-solving skills through peer collaboration.	4.36	4.0	0.70
9. Collaborative learning in my group was effective.	4.37	4.0	0.72
10. Overall, I am satisfied with my collaborative learning experience in this course.	4.36	4.0	0.67

The findings of this study reinforce the growing body of evidence supporting collaborative learning as an effective approach in English for Medical Purposes (EMP) courses. The generally high satisfaction levels among students suggest that working in groups facilitated meaningful engagement and interaction. This aligns with the social constructivist perspective, which emphasizes that learning is enhanced through peer collaboration and shared problem-solving (Vygotsky, 1978). Given that medical students often work in team-based environments, fostering these collaborative skills early in their education is crucial for both language acquisition and professional communication (Dooly & O'Dowd, 2012). However, while most students found the learning experience useful, slight variations in ratings indicate that individual factors, such as personal learning styles, group dynamics, or prior English proficiency, may influence perceptions of effectiveness.

One of the key advantages of collaborative learning is its role in developing critical thinking and communication skills. The students' positive ratings for active idea exchange and peer learning are consistent with research showing that collaborative learning fosters deeper cognitive processing and knowledge retention (Johnson & Johnson, 2009; Tran, 2014). This is particularly relevant in EMP courses, where the integration of medical concepts with language learning requires students to apply both linguistic and subject-specific knowledge simultaneously. Moreover, group work can expose students to different perspectives and problem-solving strategies, which are essential in medical practice (Rezaei, 2018). However, effective collaboration depends on well-structured tasks and clear group roles; otherwise, challenges such as unequal participation and conflicts may arise, potentially reducing engagement and learning outcomes (Slavin, 2014).

While the study highlights the overall benefits of collaborative learning, there is room for improvement in optimizing the learning experience for all students. The lower ratings in certain aspects, such as meeting learning expectations and enjoyment of group work, suggest that some students may have struggled with teamwork-related challenges. Previous research indicates that factors such as language barriers, mismatched proficiency levels, and group composition can impact students' collaborative experiences (Wilczewski & Alon, 2023). Addressing these issues through structured facilitation, role assignments, and clearer task guidelines could enhance the effectiveness of collaborative learning. Additionally, future studies should explore

how different proficiency levels affect students' engagement in EMP courses, ensuring that collaborative activities are accessible and beneficial to learners with varying language competencies.

Furthermore, when given the choice between working collaboratively or individually, students express distinct preferences based on their learning styles and experiences. Three key themes emerge in favor of group work: knowledge sharing and problem-solving, social interaction and motivation, and efficiency and task division. Many students appreciate the ability to exchange ideas, discuss concepts, and learn from peers, which enhances their understanding and problem-solving skills. Others value the social aspect, finding collaboration enjoyable, motivating, and beneficial for confidence-building. Additionally, some prefer group work for its efficiency, as dividing tasks among members helps complete assignments more quickly. However, a significant number of students also highlight a preference for working individually. This preference stems from their desire for independent learning and personal focus, allowing them to work at their own pace, assess their own knowledge, and avoid potential challenges associated with group dynamics.

To gain deeper insights into these preferences, open-ended questions were included in the questionnaire, allowing students to elaborate on their responses to the Likert scale. These varied perspectives highlight the importance of flexibility in learning approaches to accommodate different student needs. From the responses, four themes emerged as presented below.

### **Collaborative Learning and Knowledge Exchange**

Many students prefer working in groups because it allows them to share knowledge, learn from others, and clarify misunderstandings. They value the opportunity to exchange ideas, gain different perspectives, and collectively solve problems which can be seen in the extracts below.

"Because working in a group will make me add new insights from others and can find out my mistakes in learning English so far, and can share how to be able to understand English easily."

"Because my English level is still not that good. When working in a group and there is a member who understands the learning material, it will help me to learn."

### **Efficiency and Task Completion**

Some students choose group work because it makes tasks easier and faster to complete. They highlight the benefits of dividing work among members and leveraging different strengths to enhance productivity as quoted below.

"Because the work can be completed faster and feels easier when done together."

"By working in a group, we can discuss many things together with exchange ideas or thoughts about the assignment so that it will be effective to finish the assignment. And also, I think we will get the best result too if we are working in a group."

### **Social Interaction and Motivation**

Some students prefer group work because they enjoy socializing, interacting, and feeling a sense of community. They find group work engaging and motivating because of the presence of peers as written below.

"I'm a very extroverted person, so I prefer to interact and work in a group rather than individually. I also prefer working in a group because I enjoy exchanging opinions with other members. I find it both interesting and fun!"

"First of all, I do like interacting with others. Working as a team will allow me to do more social interaction, share ideas and perspectives, and also we can support and motivate each other to achieve our goals."

### **Preference for Individual Work Due to Independence or Challenges in Group Dynamics**

While many students favor group work, some prefer working individually due to concerns about group dynamics, different work paces, or personal learning preferences. Some feel they can focus better and evaluate their own learning more effectively when working alone. See the quotations below.

"I prefer working individually because thus far, I have been working with the same person. I like working in a group, but I hope I can work with new people other than my seatmate."

"I always got a group where the members are always passive (?), so I need to fire them up. They need a 'starter,' which always happens to be ME. I don't like it. If I got 'passive' like they did, we'd never get anything done."

The findings above align with previous research on collaborative learning, which highlights the cognitive and social benefits of working in groups (Johnson & Johnson, 2009). Studies suggest that group learning fosters deeper understanding and enhances critical thinking by encouraging students to explain concepts to peers (Deysolong, 2023). Furthermore, Vygotsky's (1978) sociocultural theory emphasizes the role of social interaction in cognitive development, supporting the idea that learning is most effective when it occurs through collaboration. However, individual learning preferences should not be overlooked. Research indicates that some students perform better independently due to increased concentration and a greater sense of autonomy in managing their learning process (Nalatambi et al., 2015). These findings suggest that a balanced instructional approach, incorporating both collaborative and individual tasks, can optimize learning experiences for diverse student needs.

Next, group activities and assignments in English courses offer students a dynamic and collaborative learning experience. Based on students' reflections, three key themes emerge regarding their preferred group activities and the challenges they face. Many students enjoy competitive quizzes and interactive games that make learning engaging and stimulating. Others favor video projects, as they encourage equal participation, creativity, and teamwork while improving their English skills. Additionally, discussions and idea exchanges are widely appreciated for fostering a deeper understanding of the material. However, challenges such as differences in opinions, passive group members, time management, and communication barriers often arise, making collaboration both rewarding and demanding. Below are the explanations.

### **Engaging and Competitive Learning Through Group Quizzes**

Many students enjoy group quizzes because they make learning more interactive and competitive. The point system and teamwork create excitement, making it easier to grasp different English structures. Some students find it challenging to keep up with fast-thinking peers, while others struggle to agree on answers when opinions differ. Below are the extracts.

"I liked the quiz that was done last week. The challenge is that we have to quickly think of the correct answer so that the other team doesn't take it."

"I really like the game Quizizz with group members because in a group we can interact, but sometimes I can't keep up because I don't really understand."

### **Enhancing Creativity and Speaking Skills Through Video Projects**

Students appreciate video-making assignments as they allow creativity and practical application of English. The project enables equal participation, improves speaking skills, and encourages critical thinking about grammar and tenses. Time constraints, differing opinions on concepts, and inactive group members can make the process stressful. Below are the students' responses.

"The thing I like most in the English course is the group assignment to make videos. This makes me practice speaking English and collaborate on creative ideas."

"The video project is fun, but the challenge is that some members are inactive, and sometimes our expectations for the final result don't align."

### **Deepening Understanding Through Group Discussions**

Group discussions help students learn from different perspectives, making complex topics easier to grasp. Many enjoy exchanging ideas, as it feels more like a conversation than formal studying. Some group members dominate the conversation while others stay silent, making it

difficult to balance participation. Additionally, not all students feel confident expressing their opinions in English. See the extracts below.

"My favorite experience in English class is when exchanging ideas. My friends explain sentence structures, so I understand better."

"I enjoy group discussions because they help me improve my speaking, but the challenge is that I sometimes hesitate to share my thoughts due to fear of making grammar mistakes."

The findings above highlight three key themes in students' reflections on group activities: engagement through interactive tasks, the benefits of creative collaboration, and the value of discussions in deepening understanding. Research supports the effectiveness of competitive quizzes and games in language learning, as they enhance motivation and active participation (Nacional, 2024; Yuan & Liu, 2025). Similarly, video projects promote language acquisition by fostering teamwork and encouraging students to apply their skills in authentic contexts (Mebert et al., 2020). Moreover, discussions help develop critical thinking and communication skills, reinforcing comprehension and language fluency (Tang et al., 2021). However, challenges such as conflicting opinions, unequal participation, and time constraints remain obstacles to effective collaboration, echoing previous studies on group work difficulties (Chang & Brickman, 2018). Addressing these challenges through structured roles and clear communication strategies can enhance the benefits of group learning activities.

## CONCLUSION

The findings of this study reinforce the effectiveness of collaborative learning in English for Medical Purposes (EMP) courses, highlighting its role in enhancing engagement, knowledge exchange, and problem-solving skills. From the thematic analysis of open-ended responses, it was revealed that the students appreciate opportunities to share knowledge, solve problems collectively, and interact socially with peers. The widespread satisfaction with group-based learning activities is also reflected by high mean scores and low standard deviations. However, the differences in learning preferences and group dynamics influenced the overall experience, suggesting that while collaboration is valuable, it may not suit all learners equally. These insights emphasize the need for structured facilitation and balanced task design to ensure equitable participation and maximize learning outcomes.

The implications of these findings extend beyond language learning to professional medical education, where teamwork and communication are critical skills. Integrating structured collaborative activities in EMP courses can better prepare students for real-world healthcare settings, promoting interdisciplinary cooperation and problem-solving abilities.

However, to optimize learning for diverse student needs, educators should provide flexibility by incorporating both group and individual learning approaches. Future research could further explore strategies for addressing group challenges, such as role assignments and adaptive learning models, to enhance the overall effectiveness of collaborative learning in medical education.

## REFERENCES

- Ansari, Z., & Naseer, S. (2024). Perspective chapter: Collaborative learning benefits and its role in critical thinking. In S. Goundar (Ed.), *Massive Open Online Courses - Learning Frontiers and Novel Innovations*. IntechOpen. <https://doi.org/10.5772/intechopen.1007316>
- Baker, T., & Clark, J. (2010). Cooperative learning – a double-edged sword: A cooperative learning model for use with diverse student groups. *Intercultural Education*, 21(3), 257–268. <https://doi.org/10.1080/14675981003760440>
- Barkley, E. F., Cross, K. P., & Major, C. H. (2014). *Collaborative learning techniques: A handbook for college faculty*. John Wiley & Sons.
- Buchs, C., & Butera, F. (2015). Cooperative learning and social skills development. In *Collaborative Learning: Developments in Research and Practice* (pp. 201–217). R. Gillies.
- Cabrera, A. F., Crissman, J. L., Bernal, E. M., Nora, A., Terenzini, P. T., & Pascarella, E. T. (2002). Collaborative learning: Its impact on college students' development and diversity. *Journal of College Student Development*, 43(1), 20–34. <https://eric.ed.gov/?id=EJ642665>
- Chandra, R. (2015). Collaborative learning for educational achievement. *IOSR Journal of Research & Method in Education (IOSR-JRME)*, 5(3), 4–7. <https://doi.org/10.9790/7388-05310407>
- Chang, Y., & Brickman, P. (2018). When group work doesn't work: Insights from students. *CBE—Life Sciences Education*, 17(3), 1–17. <https://doi.org/10.1187/cbe.17-09-0199>
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches* (4th ed.). SAGE.
- De Hei, M. S. A., Strijbos, J.-W., Sjoer, E., & Admiraal, W. (2015). Collaborative learning in higher education: lecturers' practices and beliefs. *Research Papers in Education*, 30(2), 232–247. <https://doi.org/10.1080/02671522.2014.908407>
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Springer US. <https://doi.org/10.1007/978-1-4899-2271-7>
- Deysolong, J. A. (2023). Assessing the benefits of cooperative learning or group work: Fostering collaboration and enhancing learning outcomes. *Journal Contribution*, 1–2. <https://doi.org/10.6084/m9.figshare.23009159.v1>
- Dooly, M., & O'Dowd, R. (2012). *Researching online foreign language interaction and exchange: Theories, methods and challenges* (Volume 3). Peter Lang.
- Dudley-Evans, T., & St John, M. J. (1998). *Developments in English for specific purposes: A multi-disciplinary approach*. Cambridge University Press.

- Hutchinson, T., & Waters, A. (1987). *English for specific purposes: A learner-centered approach*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511733031>
- Johnson, D. W., & Johnson, R. (1989). *Cooperation and competition: Theory and research*. Interaction Book Company.
- Johnson, D. W., & Johnson, R. T. (2009). An educational psychology success story: Social interdependence theory and cooperative learning. *Educational Researcher*, 38(5), 365–379. <https://doi.org/10.3102/0013189X09339057>
- Kumar, R. (2017). *The effect of collaborative learning on enhancing student achievement: A meta-analysis* [Concordia University]. <https://doi.org/10.13140/RG.2.2.27289.26721>
- Laal, M., & Laal, M. (2012). Collaborative learning: What is it? *Procedia - Social and Behavioral Sciences*, 31, 491–495. <https://doi.org/10.1016/j.sbspro.2011.12.092>
- Laksmiwati, H., Rusijono, R., Mariono, A., & Arianto, F. (2022). The influence of collaborative learning on social skills in higher education. *International Journal of Multidisciplinary Research and Analysis*, 05(11), 2997–3000. <https://doi.org/10.47191/ijmra/v5-i11-05>
- Latifa, A. (2021). Collaborative learning as a strategy to improve the English reading comprehension of Indonesian learners in the Agribusiness Department at Muhammadiyah University of Parepare. *Journal of English Language Teaching and Applied Linguistics*, 3(2), 78–84. <https://doi.org/10.32996/jeltal.2021.3.1.8>
- Maesin, A., Mansor, M., Shafie, L. A., & Nayan, S. (2009). A study of collaborative learning among Malaysian undergraduates. *Asian Social Science*, 5(7), 70–76. <https://doi.org/10.5539/ass.v5n7p70>
- Mebert, L., Barnes, R., Dalley, J., Gawarecki, L., Ghazi-Nezami, F., Shafer, G., Slater, J., & Yezbick, E. (2020). Fostering student engagement through a real-world, collaborative project across disciplines and institutions. *Higher Education Pedagogies*, 5(1), 30–51. <https://doi.org/10.1080/23752696.2020.1750306>
- Nacional, R. B. (2024). Gamifying education: Enhancing student engagement and motivation. *Puissant*, 5, 1511–1524. <https://puissant.stepacademic.net/puissant/article/view/238#:~:text=This paper explores gamification in education to improve,participation%2C improved learning outcomes%2C and enhanced sustainability education.>
- Nalatambi, S., Shahudin, S., & Zaludin, Z. (2015). Students' perception on independent learning and possible impact on the students' performance at pre-university. *Proceedings of ISER 10th International Conference*, 24–28. [https://worldresearchlibrary.org/up\\_proc/pdf/101-144842441724-28.pdf#:~:text=This study examines on how students perceive independent,Year students aged 17 to 20 years old.](https://worldresearchlibrary.org/up_proc/pdf/101-144842441724-28.pdf#:~:text=This study examines on how students perceive independent,Year students aged 17 to 20 years old.)
- Nguyen, T. B. T. (2018). *EFL collaborative learning in A Vietnamese university: Perceptions and experiences of students and teachers* [The University of Sydney]. <https://ses.library.usyd.edu.au/handle/2123/21356>
- Rezaei, A. (2018). Effective groupwork strategies: Faculty and students' perspectives. *Journal of Education and Learning*, 7(5), 1–10. <https://doi.org/10.5539/jel.v7n5p1>
- Robinson, P. (1991). *ESP today: A practitioner's guide*. Prentice Hall.
- Rodphotong, S. (2018). The effectiveness of collaborative learning to enhance English

- communicative competence: A case study of the first-year students at Thepsatri Rajabhat university. *International Journal of Pedagogy and Teacher Education*, 2(July), 143–150. <https://doi.org/10.20961/ijpte.v2i0.25174>
- Ruiz-Rojas, L. I., Salvador-Ullauri, L., & Acosta-Vargas, P. (2024). Collaborative working and critical thinking: Adoption of generative artificial intelligence tools in higher education. *Sustainability*, 16(13), 5367. <https://doi.org/10.3390/su16135367>
- Scager, K., Boonstra, J., Peeters, T., Vulperhorst, J., & Wiegant, F. (2016). Collaborative learning in higher education: Evoking positive interdependence. *CBE—Life Sciences Education*, 15(4), ar69.1-ar69.9. <https://doi.org/10.1187/cbe.16-07-0219>
- Slavin, R. E. (2014). Cooperative learning and academic achievement: Why does groupwork work? *Anales de Psicología*, 30(3), 785–791. <https://doi.org/10.6018/analesps.30.3.201201>
- Tang, S., Irby, B. J., Tong, F., & Lara-Alecio, R. (2021). The effects of cooperative, collaborative, and peer-tutoring strategies on English learners' reading and speaking proficiencies in an English-medium context: A research synthesis. *Sage Open*, 11(4), 1–17. <https://doi.org/10.1177/21582440211060823>
- Ting, C. (2022). The effectiveness of collaborative learning in enhancing student learning outcomes. *Journal of Informatics Education and Research*, 2(1). <https://doi.org/10.52783/jier.v2i1.16>
- Tran, V. D. (2014). The effects of cooperative learning on the academic achievement and knowledge retention. *International Journal of Higher Education*, 3(2), 4763–4763. <https://doi.org/10.5430/ijhe.v3n2p131>
- van der Kleij, F. M., Timmers, C. F., & Eggen, T. J. H. M. (2011). The effectiveness of methods for providing written feedback through a computer-based assessment for learning: a systematic review. *CADMO*, 19(1), 21–38. <https://doi.org/10.3280/CAD2011-001004>
- Vygotsky, L. S. (1978). *Mind in society: the development of higher psychological processes*. Harvard University Press.
- Wang, C. (2024). Learning English Conversational skills with collaborative learning: A case in a Taiwanese university. *International Journal of Linguistics and Translation Studies*, 5(4), 61–76. <https://doi.org/10.36892/ijlts.v5i4.500>
- Wilczewski, M., & Alon, I. (2023). Language and communication in international students' adaptation: a bibliometric and content analysis review. *Higher Education*, 85(6), 1235–1256. <https://doi.org/10.1007/s10734-022-00888-8>
- Yuan, L., & Liu, X. (2025). The effect of artificial intelligence tools on EFL learners' engagement, enjoyment, and motivation. *Computers in Human Behavior*, 162, 108474. <https://doi.org/10.1016/j.chb.2024.108474>