



Regular Article

Bridging the Gap: A Hybrid Learning Approach to Enhance Medical Students' English Proficiency and Motivation

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Abstract

This research investigates the effectiveness of a hybrid learning strategy in improving the speaking sub-skills and motivation of medical students learning English. Combining online and face-to-face instruction, the program focused on medical-specific content, incorporating multimedia resources and interactive tools within Microsoft Teams. The findings demonstrate a significant improvement in both listening comprehension and speaking fluency, particularly in medical terminology and clinical discussions. Students attributed their increased motivation to the relevance of the course to their academic and professional goals, leading to higher engagement and satisfaction. While minor challenges related to technology and time management arose, the hybrid approach ultimately proved successful in fostering language proficiency and motivation. These results suggest that a blended learning model can serve as a valuable tool for enhancing English language education within medical training programs, contributing to the development of skilled and confident healthcare professionals.

Keywords: Hybrid Learning, English prificency, Motivation, Medical Students, English for Medical Purposes

Introduction

English has firmly established itself as the dominant global language, making it a crucial skill for individuals across all disciplines (Hakim & Chiani, 2019). This widespread adoption has led to a surge in interest among non-native speakers to acquire English proficiency, not just for communication but also for accessing information and participating in a globalized world.

The field of English language learning has witnessed a significant shift towards technology-integrated teaching methods, with the aim of enhancing learning outcomes and catering to diverse needs (Al-Sherman, 2014). This evolution has led to the integration of traditional classroom instruction with online learning platforms, resulting in the emergence of hybrid learning models.

Hybrid learning combines the benefits of face-to-face interaction with the flexibility and accessibility of online platforms, allowing learners to develop a broader range of skills and adapt to individual learning styles. This approach has proven particularly effective in enhancing English language skills, particularly listening and speaking, by offering opportunities for practice both inside and outside the classroom (Dziuban et al., 2015).

The COVID-19 pandemic has further highlighted the importance of hybrid learning models, compelling educational institutions to adopt innovative teaching strategies to ensure uninterrupted learning amidst disruptions. Egypt, like many other countries, has faced challenges related to security and weather variability, leading to the urgent need for alternative learning methods that can adapt to unforeseen circumstances (Abdalla & Amin, 2020).

Educational systems worldwide are recognizing the necessity of adapting to the rapidly evolving technological landscape and integrating online learning platforms into their teaching practices (Akl & Abu Musa, 2019; Mekheimer, 2024). This shift is driven by the need to keep pace with global developments and equip students with the skills necessary to succeed in a technologically driven world (Khanayem, 2020).

One prominent platform that has emerged as a valuable tool for hybrid learning is Microsoft Teams. This platform provides a secure environment for communication, collaboration, and interactive learning experiences, making it particularly suitable for developing language skills (Microsoft Teams, 2021).

This research focuses on investigating the effectiveness of Microsoft Teams as a key component of a hybrid learning strategy for developing listening and speaking skills in medical students. The study aims to:

1. **Examine the impact of a hybrid learning model utilizing Microsoft Teams on the development of listening and speaking skills in medical students.**
2. **Explore the perceived benefits of using Microsoft Teams for English language instruction.**
3. **Assess the influence of a hybrid learning approach using Microsoft Teams on student motivation and learning attitudes towards English language acquisition.**

This research will contribute to the existing body of literature on the effectiveness of hybrid learning models and the use of online platforms for developing English language skills, particularly for non-specialized students. The findings will provide valuable insights for educators seeking to integrate innovative technologies into their teaching practices and enhance learning outcomes for students across various disciplines.

Context of the Problem

The current research problem arises from a significant deficiency in the listening and speaking skills of medical students, particularly in the fields of Physiotherapy and Clinical Pharmacy. This deficiency is evidenced by their consistently low scores in oral and written tests, as well as their limited participation in oral interactions and discussions. Furthermore, students struggle with listening comprehension, demonstrating difficulty in identifying main ideas in audio recordings and responding accurately to questions based on what they hear.

These challenges underscore the urgent need for a modern, effective educational platform designed to enhance the English listening and speaking skills of medical students. However, a survey of 50 sophomore medical students revealed a significant disconnect between the existing English curriculum and their academic and professional needs.

The survey results, presented in Table 1, highlight key areas of dissatisfaction among students:

Table 1

Student Dissatisfaction with Existing English Course

Category	Issue Identified	Number of Students Dissatisfied	Percentage
General Content	Course lacks relevance to the medical field, focusing on general English	43	86%
Lack of Medical	Absence of key medical terms related to	40	80%

Terminology	Human Physiotherapy and Clinical Pharmacy		
Lack of Relevant Conversations	Course lacks conversations related to medical scenarios	36	72%
No Multimedia Materials	Absence of audio tracks and videos related to medical content	39	78%
Overall Dissatisfaction	Course not motivating for academic and professional needs	41	82%

This data reveals a pervasive dissatisfaction with the current English course, with a majority of students (86%) finding the content irrelevant to their medical studies. The absence of specialized medical terminology, lack of medical-related conversations, and limited multimedia resources further exacerbate this issue, leading to a perceived lack of motivation and effectiveness in meeting their academic and professional goals.

A separate analysis of student feedback focused on the factors contributing to low motivation towards the current English course. The results, presented in the Table 2, show a similar pattern of dissatisfaction:

Table 2

Factors Contributing to Low Motivation in English Course

Factors	Students' Feedback	Number of Students	Percentage of Students Expressing Low Motivation
Relevance of Content	The course lacks medical terminology and field-specific vocabulary.	40	80%
Practical Usefulness	The content does not prepare students for academic or clinical settings in Physiotherapy or Clinical Pharmacy.	38	75%
Engagement with Course Materials	Course materials are general and unrelated to medical studies, making them uninteresting.	35	70%
Multimedia	No use of multimedia or interactive	33	65%

Resources	content relevant to their professional fields.		
Real-life Application (Conversations)	No opportunities for practicing medical conversations or case discussions.	43	85%
Overall Dissatisfaction with the Course	The course feels disconnected from their academic and career goals.	39	78%

The consistent high percentages of dissatisfaction in areas related to relevance, practical application, engagement, and multimedia resources demonstrate a clear need for a curriculum revision. The course content needs to be aligned with the specific needs of medical students, incorporating field-specific language, real-life scenarios, and interactive learning experiences.

To address this gap, the researcher conducted an orientation lecture explaining English for Specific Purposes (ESP) and introducing Microsoft Teams as a modern educational platform. The students responded positively, expressing a strong interest in attending English lectures specifically designed for their medical field, aimed at improving their language skills in a more relevant and practical manner.

This research aims to investigate the effectiveness of a hybrid learning strategy that utilizes the Microsoft Teams (MS Teams) platform to enhance the listening and speaking skills of medical students and improve their motivation for learning English. Specifically, the study seeks to address the following aspects:

- The impact of a hybrid learning strategy on developing listening and speaking skills in medical students.
- The effectiveness of using the MS Teams platform in language sessions.
- The role of the proposed course content in enhancing students' motivation for learning English and applying this experience within their academic field and real-life situations.

This research builds upon the existing body of literature on hybrid learning, ESP, and the role of technology in language acquisition. The findings will contribute to the understanding of how online platforms can be effectively integrated into hybrid learning models to enhance language acquisition, particularly for non-specialized students.

Review of Literature: Hybrid Learning and English for Specific Purposes

The growing prominence of English as the global language has sparked a renewed interest in exploring effective teaching strategies, particularly for non-native speakers. The evolution of technology has led to the integration of online platforms into educational systems, giving rise to hybrid learning models that combine traditional classroom instruction with digital elements. Research has consistently demonstrated the efficacy of this approach in enhancing learning outcomes, especially in language acquisition (Dziuban et al., 2015).

Hybrid learning, as defined by Abu-Majd (2020), is a pattern that combines on-campus education with electronic learning, utilizing modern communication mechanisms like computers, networks, multimedia, and the internet to deliver information to learners efficiently and cost-effectively. It also involves integrating traditional classroom instruction with online platforms, creating an environment that encourages interaction between students and teachers through the use of technology (Al-Shumli, 2007). Alekse and Chris (2004) further define hybrid education as a multifaceted approach that combines traditional face-to-face learning with e-learning methods, facilitating a range of teaching methods and learning patterns.

The COVID-19 pandemic has further emphasized the need for adaptable learning methods, as educational institutions have sought to mitigate disruptions and ensure continued learning. In Egypt, the adoption of hybrid learning models has been recognized as a crucial solution to address the challenges of school closures and the limited adoption of e-learning in the country's educational system (Abdalla & Amin, 2020).

Several studies have explored the benefits of hybrid learning across different disciplines. Salah al-Din (2014) demonstrated the effectiveness of using mobile technology in a blended learning environment to enhance students' cognitive achievement, particularly in language speaking skills. Musa and Abu-elsaus (2014) further highlighted the positive impact of hybrid learning on student academic outcomes, showing that students engaged in hybrid learning achieved better results compared to those following traditional, face-to-face learning approaches.

Moreover, research has indicated that hybrid learning can significantly improve student motivation and performance. Lubney (2018) emphasized the importance of integrating quality assurance standards in hybrid learning, demonstrating its positive impact on both students and professors. Jalul et al. (2020) further explored the rationale behind hybrid learning, highlighting its ability to mitigate the drawbacks of both traditional and purely electronic learning models.

The use of specific online platforms, such as Microsoft Teams, has been a focus of recent research. Jihad Al Amiri et al. (2020) emphasized the effectiveness of self-learning using Microsoft

Teams during the COVID-19 pandemic, noting its positive influence on student achievement levels. Althoeny (2021) further explored the impact of self-learning through Microsoft Teams, finding a statistically significant positive effect on both learning motivation and digital achievement.

The adoption of hybrid learning models has also sparked a renewed focus on the importance of tailoring English language instruction to specific fields of study. Sarmento (2018) highlighted the distinction between English for Specific Purposes (ESP) and English for General Purposes (EGP), emphasizing the need for dedicated ESP courses designed to meet the unique language needs of non-specialized students. This approach aims to incorporate specialized content and develop the specific language skills required for success in a particular field.

This research builds upon this existing body of literature by focusing on the effectiveness of a hybrid learning approach, utilizing Microsoft Teams, in developing listening and speaking skills among medical students. It seeks to contribute to the understanding of how online platforms can be effectively integrated into hybrid learning models to enhance language acquisition, particularly for non-specialized students.

Research Questions and Hypotheses

Based on the identified challenges and the need for a more effective approach to English language learning for medical students, the following research questions and hypotheses are formulated:

Research Questions

1. **Main Research Question:** To what extent does a hybrid learning strategy, utilizing the Microsoft Teams platform, enhance the listening and speaking skills of medical students and improve their motivation for learning English in the fields of Physiotherapy and Clinical Pharmacy?
2. **Sub-Questions:**
 - How does the hybrid learning strategy, incorporating Microsoft Teams, affect the development of listening and speaking skills in medical students specializing in Physiotherapy and Clinical Pharmacy?
 - What is the impact of the hybrid learning strategy on students' motivation for learning English in relation to their specific medical fields?

Hypotheses

1. **Hypothesis 1:** There is a statistically significant difference in the mean scores of the treatment group (using hybrid learning with Microsoft Teams) on the interactive

communication post-test compared to their pre-test scores, indicating improved listening and speaking skills.

2. **Hypothesis 2:** There is a statistically significant difference in the mean scores of the treatment group on the verbal comprehension post-test compared to their pre-test scores, suggesting improved listening comprehension skills among the participants.
3. **Hypothesis 3:** There is a statistically significant difference in the mean scores of the treatment group on the motivation scale post-test compared to their pre-test scores, demonstrating a positive impact of the hybrid learning approach on student motivation for learning English in the context of their medical studies.

These research questions and hypotheses directly address the identified problem of ineffective English language learning for medical students. The study aims to explore the effectiveness of a hybrid learning model using Microsoft Teams as a solution to enhance listening and speaking skills and improve student motivation, particularly in the context of the specialized fields of Physiotherapy and Clinical Pharmacy.

Methods and Materials

This study employed a quasi-experimental design with a single group of 35 sophomore students from the Faculty of Physiotherapy and Clinical Pharmacy at Beni Suef University. The research focused on the effectiveness of a hybrid learning strategy, implemented through the Microsoft Teams platform, as the *independent variable* in enhancing students' speaking sub-skills (verbal comprehension and interactive communication) and motivating them towards English language learning, which served as the *dependent variables*. The study was conducted during the first semester of the 2024/2025 academic year, combining on-campus instruction with online sessions via the Microsoft Teams platform.

Materials and Tools:

1. **English for Specific Purposes (ESP) Educational Content:** Modules with an English language curriculum designed specifically for students of the Faculty of Physiotherapy and Clinical Pharmacy.
2. **Microsoft Teams Platform:** This platform facilitated online learning, including student materials such as a student book, teacher's guide, and supplementary PDF files.
3. **Pre/Post-Test:** An assessment tool to measure speaking sub-skills, with a corresponding rubric for evaluation.

4. **Motivation Scale:** A tool to measure the level of motivation of the target students toward English language learning.
5. **Educational Website:** The Microsoft Teams platform provided access to course content and interactive learning resources.

Procedure:

The research followed a structured procedure to investigate the effectiveness of the hybrid learning strategy. First, relevant content was compiled by reviewing existing curricula, literature, and research related to enhancing speaking sub-skills for physiotherapy and clinical pharmacy students. This content was then integrated into a hybrid learning course specifically designed for the target group.

The research tools, including the pre/post-test, motivation scale, evaluation rubrics, and access to the Microsoft Teams platform were carefully prepared and validated by a jury of experts to ensure their suitability and alignment with the study's objectives.

Before the course implementation, students were given the pre-test and motivation scale to assess their initial speaking skills and motivation levels towards English language learning.

Once the course commenced, the designed content was delivered through a combination of on-campus and online instruction using the Microsoft Teams platform. Following the course completion, students were reassessed using the post-test and motivation scale to measure the impact of the hybrid learning strategy on their speaking sub-skills and motivation levels. Finally, the collected data was statistically analyzed to determine the validity of the research hypotheses. The results of this analysis led to the formation of conclusions and recommendations for further research.

Results of the Study

This study aimed to investigate the effectiveness of a hybrid learning strategy, utilizing the Microsoft Teams platform, in enhancing the listening and speaking skills of medical students while improving their motivation for learning English. The research hypotheses, which explored the impact of the intervention on interactive communication, verbal comprehension, and student motivation, were all supported by the data analysis.

1. Improvement in Speaking Sub-skills:

The hybrid learning strategy led to a significant improvement in the treatment group's speaking sub-skills, as evidenced by the statistically significant differences between pre- and post-test scores on measures of interactive communication and verbal comprehension (see Table 3 and Table 4).

Table 3

The t-test Results of Difference between Treatment Group's Mean Scores on Pre-Post Test of Interactive Communication Skill

Group	Administration	No	Mean	SD	df	t-Value	Significance Level	Effect Size
Treatment	Pretest	2.	.7					
		5	314	183	4	-9.459	.000	.720
Treatment	Posttest	4.	.9					
		5	229	727				

Note: The calculated t-value (-9.459) is statistically significant at the .01 level of confidence, indicating a significant difference between the mean scores on the pre- and post-tests. The large effect size (0.720) suggests a substantial positive impact of the hybrid learning strategy.

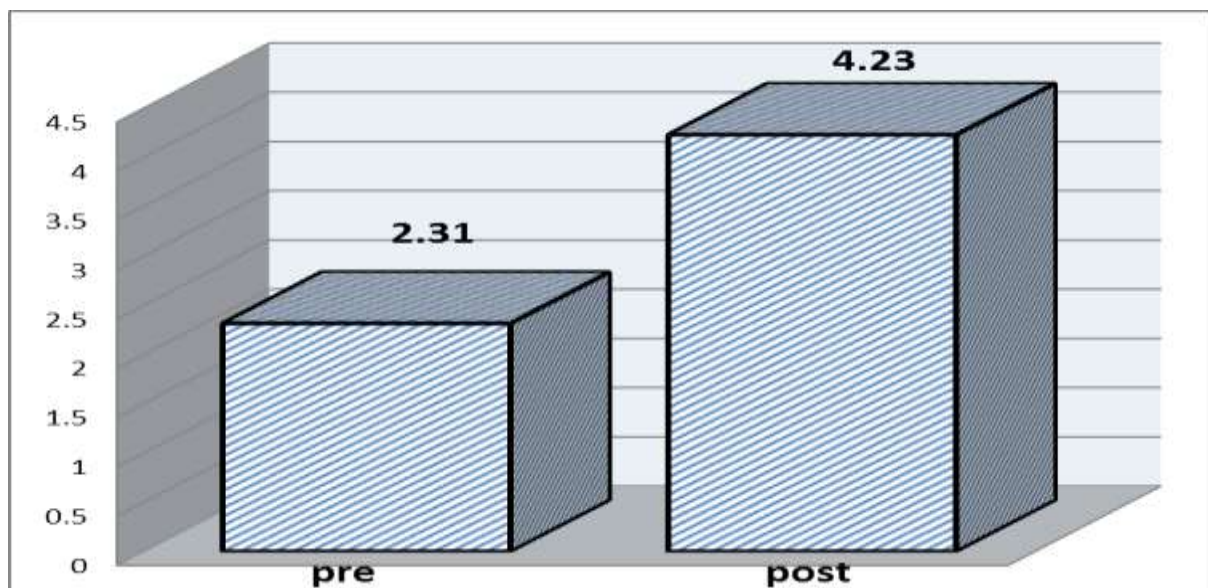


Figure 1. Comparison of the Treatment Group's Mean Scores on Interactive Communication Pre- Posttest

Table 4

The t-test Results of Difference between Treatment Group's Mean Scores on Pre-Post Test of Comprehension Skill

Group	Administration	No	Mean	S	df	t-Value	Significance Level	Effect Size
				D				
Treatment	Pretest	5	3.057	.7253	4	-8.956	.000	.700
Treatment	Posttest	5	5.943	1.8778				

Note: The calculated t-value (-8.956) is statistically significant at the .01 level of confidence, indicating a significant difference between the mean scores on the pre- and post-tests. The large effect size (0.700) suggests a substantial positive impact of the hybrid learning strategy.

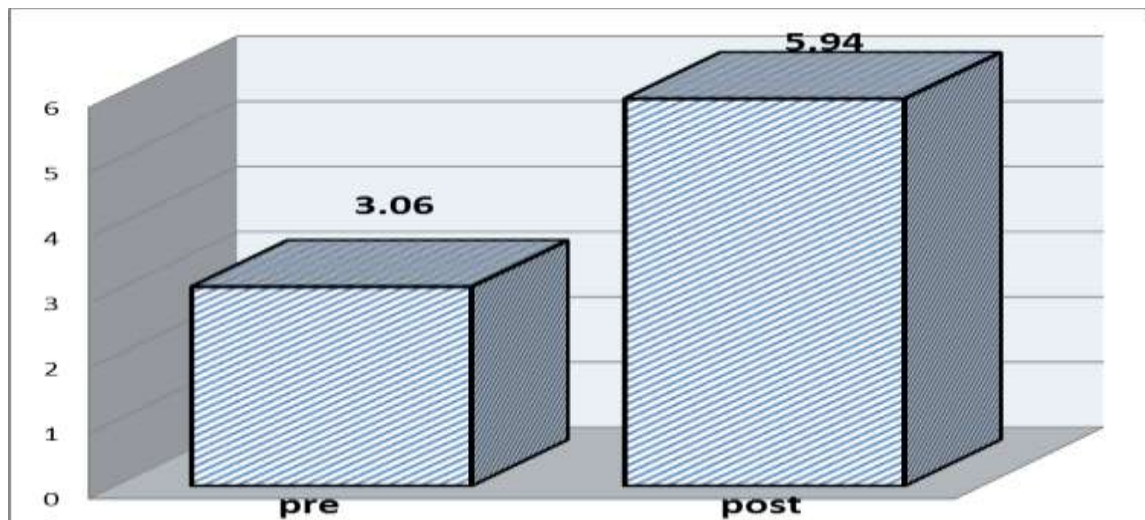


Figure 2. Comparison of the Treatment Group's Mean Scores on Comprehension Skill Pre- Posttest

These findings suggest that the hybrid learning strategy, integrating Microsoft Teams and a tailored ESP curriculum, effectively enhanced students' ability to communicate effectively in English, particularly in the context of medical scenarios. This improvement likely stems from the combination of online and face-to-face interactions, which provided opportunities for continuous language practice and exposure.

2. Increased Motivation for Learning English:

The hybrid learning strategy also had a significant positive impact on student motivation for learning English (see Table 5). The treatment group demonstrated a statistically significant increase in their motivation scores post-intervention.

Table 5

The t-test Results of Difference between Treatment Group's Mean Scores on Motivation Scale Before and After Experimentation

Group	Administration	No	Mean	SD	df	t-Value	Significance Level	Effect Size
Treatment	Pretest	35	80.743	9.4163	34	-49.139	.000	.980
Treatment	Posttest	35	157.571	18.6473				

Note: The calculated t-value (-49.139) is statistically significant at the .01 level of confidence, indicating a significant difference between the mean scores on the motivation scale before and after the intervention. The large effect size (0.980) suggests a substantial positive impact of the hybrid learning strategy on student motivation.

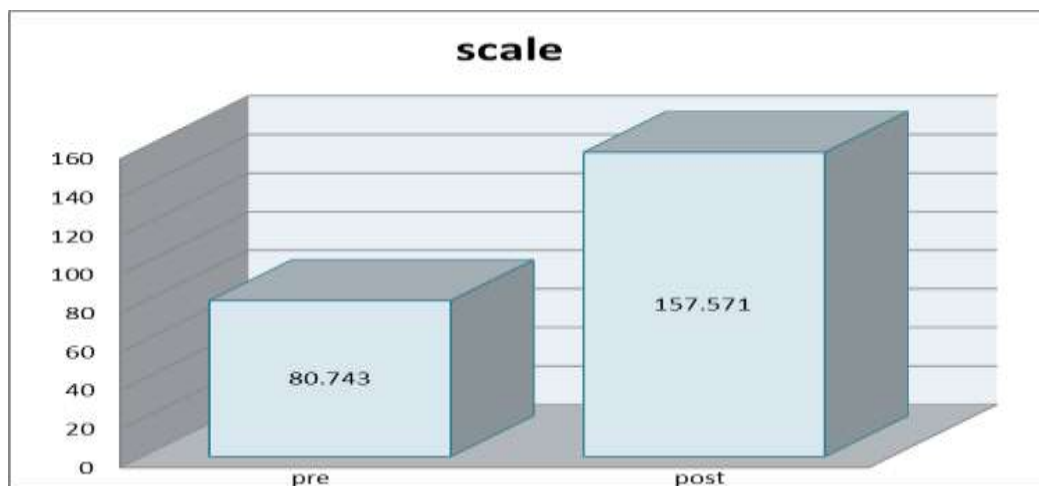


Figure 3. Comparison of the Treatment Group's Mean Scores on Motivation Scale before and after the Experimentation

This increase in motivation can be attributed to the relevance of the course content, the integration of interactive multimedia resources, and the collaborative learning environment provided by the hybrid model. Students felt more engaged and motivated to learn English as they perceived its direct application to their academic and professional pursuits.

3. Positive Student Feedback on Hybrid Learning Environment:

Qualitative feedback from the participants indicated a high level of satisfaction with the hybrid learning environment. Students particularly appreciated the flexibility of the hybrid model, which allowed them to access learning materials and engage in discussions both online and in the traditional classroom setting. The interactive nature of the Microsoft Teams platform, including features for real-time discussions and multimedia resources, enhanced student engagement and fostered a sense of community.

4. Effective Use of Multimedia and Collaborative Tools:

The incorporation of multimedia elements, such as medical videos, podcasts, and interactive case studies, significantly increased student engagement and understanding. These elements provided visual and auditory stimuli that complemented traditional textbook learning. Collaborative activities within Microsoft Teams provided opportunities for real-time practice and discussion, simulating clinical environments and encouraging peer learning.

Overall, the findings of this study strongly suggest that the hybrid learning strategy incorporating Microsoft Teams and a tailored ESP curriculum has the potential to significantly enhance the listening and speaking skills of medical students while improving their motivation for learning English. This approach holds promise for bridging the gap between traditional English language instruction and the specific needs of students in specialized fields, ultimately contributing to their academic and professional success.

Discussion

The findings of this study align with and expand upon previous research regarding the efficacy of hybrid learning models in enhancing language acquisition, particularly for non-specialized students. Several studies have highlighted the benefits of hybrid learning, including its positive impact on academic outcomes, student motivation, and the ability to address the limitations of traditional and purely online learning (Dziuban et al., 2015; Lubney, 2018; Jalul et al., 2020).

This study reinforces these findings by demonstrating the effectiveness of a hybrid approach in developing listening and speaking skills in medical students, specifically in the fields of Physiotherapy and Clinical Pharmacy. The integration of Microsoft Teams, a platform designed for collaborative learning, communication, and multimedia integration, played a crucial role in enhancing the learning experience and achieving positive outcomes.

The study's findings align with previous research exploring the potential of online platforms like Microsoft Teams in enhancing student engagement and learning outcomes (Jihad Al Amiri et al., 2020; Althoeny, 2021). The study further underscores the importance of tailoring English language

instruction to specific fields of study, a key principle emphasized by Sarmiento (2018) in his discussion of English for Specific Purposes (ESP).

However, the study also provides unique insights into the specific challenges faced by medical students in acquiring English language skills. The data revealed a significant gap between the general English curriculum and the specific language needs of students in the medical field. This highlights the critical need for curriculum development that incorporates specialized terminology, clinical scenarios, and real-world applications to enhance student engagement and motivation.

Conclusion

This research provides compelling evidence for the effectiveness of a hybrid learning strategy utilizing the Microsoft Teams platform in enhancing the listening and speaking skills of medical students, specifically in the fields of Physiotherapy and Clinical Pharmacy. The study demonstrated significant improvements in speaking sub-skills, particularly in interactive communication and verbal comprehension, along with a notable increase in student motivation. The findings suggest that this approach holds significant promise for improving English language instruction in a way that is relevant, engaging, and adaptable to the specific needs of students in specialized fields.

Recommendations for Pedagogy

Based on the findings of this study, the following pedagogical recommendations are offered for educators seeking to implement effective hybrid learning models in English language teaching:

1. **Adopt a Tailored Approach:** Curriculum development should prioritize the integration of specialized content, terminology, and real-world applications relevant to students' fields of study.
2. **Leverage Technology Effectively:** Embrace online platforms like Microsoft Teams to facilitate collaborative learning, real-time communication, and access to multimedia resources.
3. **Foster Student Engagement:** Incorporate interactive elements, multimedia resources, and project-based activities to enhance student motivation and promote active learning.
4. **Promote Collaborative Learning:** Design activities that encourage peer interaction and group discussions, fostering communication skills and a sense of community within the learning environment.
5. **Continuously Evaluate and Adapt:** Regularly assess the effectiveness of the hybrid learning model, seeking student feedback to identify areas for improvement and refine the curriculum based on evolving needs.

These recommendations provide educators with a roadmap to empower medical students to achieve greater fluency in English. By implementing these strategies, educators can enhance students' communication skills, their ability to access medical information, and ultimately, pave the way for their professional success.

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