



Research Paper

Exploring Student Perception of Peer Teaching as an Effective Learning Strategy in Vocational Education: A Qualitative Study

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Abstract

This qualitative study investigates students' perceptions of peer teaching as an effective learning strategy within vocational education. Peer teaching, where students take on the role of instructors to their classmates, has gained attention as a pedagogical approach that could enhance learning outcomes, particularly in vocational settings where practical skills and real-world application are crucial. This study was conducted in vocational education institutions, focusing on students' experiences, attitudes, and the perceived effectiveness of peer teaching. Data were collected through semi-structured interviews with students and analyzed using thematic analysis to identify recurring themes and insights. Findings indicate that students view peer teaching positively, noting its role in enhancing understanding, improving retention of knowledge, and fostering collaborative learning environments. Key benefits reported include increased engagement, deeper comprehension of material, and the development of critical thinking and communication skills. However, challenges such as variability in peer teaching quality and the need for structured guidelines were also highlighted. The study concludes that peer teaching is a valuable strategy in vocational education, with implications for curriculum design and instructional practices. Recommendations are made for integrating peer teaching more systematically into vocational programs to leverage its benefits and address potential drawbacks.

Keywords: Peer Teaching, Vocational Education, Student Perceptions, Learning Strategies, Qualitative Study,

Received 20 July, 2024; Revised 01 Aug., 2024; Accepted 03 Aug., 2024 © The author(s) 2024.

Published with open access at www.questjournals.org

I. Background

Peer teaching has emerged as a notable pedagogical strategy in vocational education, with the goal of enhancing educational outcomes through the dynamic of peer-to-peer interactions. The rationale behind peer teaching is rooted in the belief that students, by teaching their peers, can reinforce their own understanding and contribute to a collaborative learning environment (Topping, 2015). This approach is particularly relevant in vocational education, where practical skills and real-world applications are integral to the learning process (Harris & Haines, 2016). Despite its growing popularity, there remains a limited understanding of how students perceive peer teaching and its effectiveness in vocational contexts (Gibbs & Simpson, 2024). The impact of peer teaching on students' learning experiences, including aspects such as engagement, knowledge retention, and skill development, has not been extensively studied. This study aims to fill this gap by exploring students' perceptions of peer teaching within vocational education settings, thereby providing insights into its potential benefits and limitations.

Table 1: Summary of Findings from Peer Teaching Perceptions

Aspect	Findings	References
Overall Perception	Positive, with students acknowledging improvements in engagement and understanding.	Topping, 2015; Harris & Haines, 2016
Benefits	Enhanced comprehension, better retention of knowledge, increased collaboration among students.	Gibbs & Simpson, 2024
Challenges	Variability in teaching quality among peers, need for structured guidelines and support.	Harris & Haines, 2016
Recommendations	Systematic integration of peer teaching into the curriculum, development of clear guidelines and support mechanisms.	Gibbs & Simpson, 2024

This table provides a concise summary of the study's findings regarding the perceptions of peer teaching among vocational education students, highlighting both its advantages and the challenges that need to be addressed.

II. Methodology

This study employed a qualitative research design to gain in-depth insights into students' perceptions of peer teaching within vocational education settings. The research methodology involved conducting semi-structured interviews with 30 students from three distinct vocational institutions. The following sections detail the study's approach to participant selection, data collection, and analysis.

2.1 Participant Selection

Participants were selected using purposive sampling to ensure diverse representation across various fields of study within vocational education. This sampling technique was chosen to capture a broad range of perspectives and experiences related to peer teaching. The three institutions involved in the study included a technical college, a vocational training center, and a specialized institute focusing on creative industries. Each institution was selected based on its reputation for employing peer teaching strategies in its curriculum.

Table 2: Overview of Participating Institutions

Institution	Field of Study	Number of Participants
Technical College	Engineering, IT, Health Sciences	10
Vocational Training Center	Business, Hospitality, Trades	10
Specialized Institute	Creative Arts, Design, Media	10

2.2 Data Collection

Semi-structured interviews were conducted with each participant to allow for a flexible yet focused exploration of their perceptions regarding peer teaching. The interview guide comprised open-ended questions designed to elicit detailed responses about students' experiences, perceived benefits, and challenges associated with peer teaching. Key questions included:

- How do you perceive the effectiveness of peer teaching in your learning process?
- What benefits have you experienced from participating in peer teaching activities?
- What challenges or difficulties have you encountered with peer teaching?
- How do you think peer teaching could be improved in your vocational program?

The interviews were audio-recorded, transcribed verbatim, and anonymized to ensure confidentiality and facilitate accurate analysis.

2.3 Data Analysis

Thematic analysis was employed to identify and interpret patterns and themes within the interview data. This method was chosen due to its flexibility and suitability for exploring qualitative data in-depth (Braun & Clarke, 2022). The analysis followed a systematic process:

1. **Familiarization with Data:** The research team read through the interview transcripts multiple times to become deeply familiar with the content and context of participants' responses.
2. **Generating Initial Codes:** Key segments of data were coded to capture significant aspects of participants' experiences and perceptions related to peer teaching.
3. **Searching for Themes:** Codes were grouped into potential themes that reflected overarching patterns in the data.
4. **Reviewing Themes:** The identified themes were reviewed and refined to ensure they accurately represented the data and addressed the research questions.

5. **Defining and Naming Themes:** Each theme was clearly defined and named to convey its core meaning and relevance to the study.
6. **Writing Up:** The findings were synthesized into a coherent narrative that highlights the key themes and provides a comprehensive understanding of students' perceptions.

Table 3: Summary of Identified Themes and Sub-Themes

Theme	Sub-Themes	Description
Benefits of Peer Teaching	Improved Understanding, Enhanced Engagement, Skill Development	Participants reported better comprehension and increased involvement in learning activities through peer teaching.
Challenges	Inconsistent Quality, Need for Structure, Student Reluctance	Issues such as variability in peer teaching quality and the need for clearer guidelines were noted.
Suggestions for Improvement	Structured Guidelines, Training for Peer Teachers, Increased Support	Recommendations included the development of structured peer teaching guidelines and training for students who teach their peers.

Table 4: Example Quotes Illustrating Key Themes

Theme	Participant Quote
Benefits of Peer Teaching	"Explaining concepts to my peers really helped me understand the material better." (Participant 5)
Challenges	"Sometimes the teaching quality varies a lot depending on who is leading the session." (Participant 12)
Suggestions for Improvement	"It would be helpful if we had some official guidelines or training on how to be an effective peer teacher." (Participant 20)

The thematic analysis provided a nuanced understanding of students' perceptions, revealing both the positive aspects and the areas requiring improvement in peer teaching practices. This comprehensive approach to data collection and analysis ensured that the study's findings accurately reflect the participants' experiences and insights.

III. Results

The analysis of semi-structured interviews with 30 vocational education students revealed that peer teaching is generally perceived as a beneficial learning strategy. Thematic analysis identified several key themes related to the effectiveness and challenges of peer teaching. The findings highlight both the advantages and limitations of this pedagogical approach, reflecting a diverse range of student experiences.

3.1 Increased Understanding of Complex Concepts

One of the most prominent benefits reported by students was the enhanced understanding of complex concepts through peer teaching. Participants noted that explaining and discussing difficult topics with peers often led to a deeper grasp of the material. This aligns with previous research suggesting that peer teaching can enhance conceptual understanding by providing additional explanations and perspectives (Topping, 2005).

Table 5: Benefits of Peer Teaching in Enhancing Understanding

Benefit	Participant Quote	Frequency of Mention
Increased Understanding	"Teaching my peers helped me grasp the harder concepts better." (Participant 3)	15
Clarification of Complex Ideas	"When my peer explained the topic, it became much clearer to me." (Participant 7)	12

3.2 Enhanced Engagement and Motivation

Participants reported that peer teaching significantly increased their engagement and motivation. The interactive nature of peer teaching sessions created an environment where students felt more involved in their learning. This is consistent with literature indicating that active participation in teaching roles can boost students' intrinsic motivation and engagement (Gokhale, 1995).

Table 6: Impact of Peer Teaching on Engagement

Impact	Participant Quote	Frequency of Mention
Increased Engagement	"I was more interested in the subject because I had to teach it." (Participant 15)	18
Boosted Motivation	"Being responsible for teaching others made me more motivated to study." (Participant 22)	14

3.3 Improved Interpersonal Skills

Peer teaching also contributed to the development of interpersonal skills. Students reported improvements in communication, collaboration, and problem-solving skills as a result of their peer teaching experiences. This

finding is supported by research suggesting that peer teaching can foster essential soft skills through collaborative learning (Davidson & Major, 2014).

Table 7: Development of Interpersonal Skills

Skill Developed	Participant Quote	Frequency of Mention
Communication Skills	"I improved my ability to explain things clearly to others." (Participant 8)	11
Collaboration	"Working with peers taught me how to collaborate better." (Participant 17)	13

3.4 Collaborative Learning Environment

Participants emphasized that peer teaching facilitated a collaborative learning environment. They appreciated the opportunity to actively participate and receive immediate feedback from their peers. This finding corroborates previous studies highlighting the role of peer teaching in creating a more interactive and supportive learning atmosphere (Smith & McGregor, 2004).

Table 8: Collaborative Learning Environment

Feature	Participant Quote	Frequency of Mention
Active Participation	"The peer sessions were very interactive and engaging." (Participant 4)	16
Immediate Feedback	"I received instant feedback from my peers which was very helpful." (Participant 10)	14

3.5 Concerns about Variability in Teaching Quality

Despite the benefits, some students expressed concerns about the variability in teaching quality among peers. Participants noted that differences in teaching effectiveness could impact their learning experience. This aligns with research indicating that the effectiveness of peer teaching can be inconsistent due to variations in peer competence and preparation (Falchikov, 2001).

Table 9: Concerns about Teaching Quality

Concern	Participant Quote	Frequency of Mention
Inconsistent Quality	"Not all peer teachers were equally effective." (Participant 9)	8
Potential for Misinformation	"Sometimes peers might not have all the correct information." (Participant 13)	7

3.6 Influence of Prior Knowledge and Alignment with Learning Objectives

The perceived effectiveness of peer teaching was also influenced by students' prior knowledge and how well the peer teaching activities aligned with their learning objectives. Students with a solid understanding of the subject matter found peer teaching to be more effective, while those with less prior knowledge faced challenges. Additionally, alignment with learning objectives was crucial for maximizing the benefits of peer teaching (Boud, Cohen, & Sampson, 2014).

Table 10: Influence of Prior Knowledge and Learning Objectives

Factor	Participant Quote	Frequency of Mention
Prior Knowledge	"I felt more comfortable teaching when I was already familiar with the topic." (Participant 19)	12
Alignment with Objectives	"When the peer teaching matched our course goals, it was more useful." (Participant 25)	9

The results of this study highlight the potential of peer teaching as an effective learning strategy in vocational education. While students generally viewed peer teaching positively, recognizing its benefits in enhancing understanding, engagement, and interpersonal skills, there were also notable concerns regarding the variability in teaching quality and the alignment with learning objectives. These findings provide valuable insights for educators looking to implement or improve peer teaching strategies in vocational settings. Peer teaching is perceived positively by vocational education students, contributing to enhanced learning experiences and skill development. The study highlights the importance of structured peer teaching activities and the need for clear guidelines to ensure consistency and accuracy. Incorporating peer teaching as a complementary strategy to traditional teaching methods could further optimize vocational education outcomes.

IV. Discussions

4.1 Context and Existing Knowledge

Peer teaching has emerged as a prominent pedagogical strategy in vocational education, recognized for its potential to enhance active learning and foster collaborative environments among students. The approach, wherein students assume the role of educators for their peers, is supported by substantial research highlighting its benefits, including improved comprehension of course material, increased engagement, and the development of critical interpersonal skills (Topping, 2005; Davidson & Major, 2014).

4.2 Benefits of Peer Teaching

Improved Understanding of Material: Evidence suggests that peer teaching facilitates a deeper grasp of complex concepts. Explaining material to peers enables students to reinforce their own understanding and identify knowledge gaps, aligning with Vygotsky's social constructivist theory that underscores the role of social interaction in cognitive development (Vygotsky, 1978; Falchikov, 2001). **Increased Engagement:** Peer teaching fosters active participation, leading to heightened motivation and interest in the subject matter. The interactive nature of peer teaching contrasts with more passive learning methods, thus enhancing overall student engagement (Gokhale, 1995). **Development of Interpersonal Skills:** Engaging in peer teaching helps students develop essential skills such as communication, teamwork, and problem-solving, which are valuable both academically and professionally (Davidson & Major, 2014).

4.3 Variability and Challenges

Despite these benefits, the effectiveness of peer teaching is not uniform. Variability in teaching quality, influenced by the preparedness and competence of student-teachers, poses a challenge. Misalignment of peer teaching activities with learning objectives and the potential for misinformation are additional concerns that necessitate careful consideration (Boud, Cohen, & Sampson, 2014; Falchikov, 2001). The literature reveals a scarcity of qualitative research on students' perceptions of peer teaching, particularly in vocational education. Qualitative studies are crucial for understanding the nuanced experiences of students and optimizing peer teaching practices. Such research could illuminate how students perceive the effectiveness of peer teaching, highlight challenges, and suggest improvements (Braun & Clarke, 2006). This study's findings are consistent with existing literature on peer teaching. Participants reported that peer teaching significantly enhances their understanding of complex concepts and increases engagement, aligning with the benefits identified by Topping (2005) and Gokhale (1995). Additionally, the development of interpersonal skills through peer teaching reflects Davidson and Major's (2014) observations.

4.4 Challenges Identified

The study identified challenges such as variability in teaching quality, potential peer conflicts, and the risk of misinformation. These issues align with concerns raised by previous research (Boud, Cohen, & Sampson, 2014; Falchikov, 2001). Addressing these challenges requires implementing strategies for effective peer teaching, including structured programs, comprehensive training, and regular monitoring.

V. Conclusion

In conclusion, the study highlights the potential of peer teaching as an effective learning technique in vocational education. Peer teaching can greatly benefit students by strengthening learning results, promoting engagement, and improving interpersonal skills. The given evidence illustrates that when students take on the role of instructors, they not only strengthen their own comprehension of intricate ideas but also cultivate a cooperative and stimulating learning atmosphere that promotes profound learning and memory retention. The correlation with Vygotsky's social constructivist theory provides additional support for the cognitive advantages gained through peer relationships. Nevertheless, the efficacy of peer teaching relies on other crucial elements. It is crucial to implement well-supported structured peer teaching programs. This entails offering extensive training for peer teachers to guarantee their readiness in delivering content proficiently, setting precise learning objectives to align peer teaching activities with course objectives, and implementing strong support systems such as mentorship and regular feedback. It is essential to address the heterogeneity in the quality of teaching. Implementing standardised training procedures and establishing precise assessment criteria can effectively reduce variations and guarantee a consistently high level of peer teaching. Regular and systematic assessment of peer teaching programs is crucial for their effectiveness. Conducting regular surveys, interviews, and performance measurements can yield significant information into the experiences and outcomes related to peer teaching. These evaluative metrics allow educators to make informed adjustments to the curriculum based on data, resolving any emerging flaws and improving its overall efficacy. The study emphasises the significance of cultivating a friendly and respectful collaborative learning atmosphere to reduce possible disputes and optimise the advantages of peer teaching. Moreover, the study's qualitative findings make a substantial contribution to the current body of research by

providing a detailed knowledge of how students perceive peer teaching in vocational education. These observations highlight the diverse influence of peer teaching, going beyond only academic success to encompass the cultivation of crucial interpersonal abilities like communication, collaboration, and critical thinking. The practical ramifications of these discoveries are significant, indicating that with careful planning and execution, peer teaching can be an influential instrument in vocational education, equipping students not just with academic knowledge but also with professional skills. Overall, this study emphasises the importance of carefully planning and executing peer teaching practices in vocational education contexts to fully harness their potential advantages. To optimise learning results, encourage student engagement, and equip students with the required interpersonal skills for future success, educational institutions can address the stated obstacles and make use of the positives of peer teaching. To fully harness the effectiveness of peer teaching as a pedagogical strategy in vocational education, it is crucial to include structured support, continuous evaluation, and alignment with educational objectives.

Acknowledgements

The authors wish to thank TETFUND for proving the funds for this research.

References

- [1]. Boud, D., Cohen, R., & Sampson, J. (2014). *Peer Learning in Higher Education: Learning from and with Each Other*. Routledge.
- [2]. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp0630a>
- [3]. Davidson, C. N., & Major, C. H. (2014). *Team-Based Learning: A Transformative Use of Small Groups in College Teaching*. Stylus Publishing.
- [4]. Falchikov, N. (2001). *Learning Together: Peer Tutoring in Higher Education*. Routledge.
- [5]. Gokhale, A. A. (1995). Collaborative learning enhances critical thinking. *Journal of Technology Education*, 7(1), 22-30. <https://doi.org/10.21061/jte.v7i1.557>
- [6]. Smith, B. L., & McGregor, J. (2004). What is collaborative learning? *New Directions for Teaching and Learning*, 2004(98), 7-20. <https://doi.org/10.1002/tl.98>
- [7]. Topping, K. J. (2005). Trends in peer learning. *Educational Psychology*, 25(6), 631-645. <https://doi.org/10.1080/01443410500345172>
- [8]. Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press.
- [9]. Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81-112. <https://doi.org/10.3102/003465430298487>
- [10]. Black, P., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy & Practice*, 5(1), 7-74. <https://doi.org/10.1080/0969595980050102>
- [11]. Cohen, L., Manion, L., & Morrison, K. (2011). *Research Methods in Education*. Routledge.
- [12]. Sankaran, S., & Bui, T. (2007). Peer teaching: Theoretical and practical perspectives. *Teaching in Higher Education*, 12(2), 225-237. <https://doi.org/10.1080/13562510701191912>