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Learning Takes Flight: Empowering Growth through Dialogic Teaching in Individual Badminton Lessons

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Abstract
In the dynamic landscape of education, characterised by the need for resilience, the convergence of dialogic teaching and the passion for badminton presents a pathway to profound learning experiences. This article explores the intersection of these two realms, highlighting the invaluable insights and synergies they contribute within a robust educational framework. This qualitative investigation involves two experienced teachers and three Year 12 student athletes actively engaged in dialogic-based lessons. The data collection process encompasses recorded observations and interviews with the teachers and students and uses thematic analysis techniques to analyse the gathered information comprehensively. The findings reveal that dialogic teaching catalyses student engagement and growth, opens dialogues that stimulate metacognitive processes, promotes personal growth and respectful exchange of ideas, and extends the value of transferable skills beyond the court. The role of the teacher emerges as pivotal in shaping interactional behaviour and establishing an environment conducive to skill and knowledge acquisition. Through scaffolded dialogic interactions, students are guided towards critical thinking, enabling them to develop a more thorough understanding of the subject and refine their skills. The insights gained contribute to creating transformative learning experiences by promoting dialogue, resilience, and transferable skills, empowering students to excel in both badminton and their learning outcomes, preparing them for future challenges and fostering their holistic development.

Keywords: Dialogic Teaching, Metacognitive, Qualitative Inquiry, Teacher-Student Relationship

1. Introduction

As an ardent badminton enthusiast and player, I have benefitted from the sport's discipline, teamwork, perseverance, and personal growth that co-curricular engagements offer. This background led me to delve into dialogic teaching, eager to apply my knowledge and explore its transformative potential within education. Through engaging discussions and collaborative learning, I witnessed firsthand the profound impact of dialogic teaching on students' perspectives and critical thinking abilities. Observing their growth and genuine embrace of diverse viewpoints was genuinely inspiring. The significant effect on student focus, knowledge retention, and constructive feedback has reshaped my educational environment and has made an enduring impression on my students' personal development.

As Alexander (2020) highlighted, dialogic teaching is an effective approach that encourages students' involvement in meaningful conversations and discussions to enhance their understanding, critical thinking, and problem-solving

abilities. The methodology centres on purposeful classroom talk practices, emphasising the attitudes of both teachers and learners in the learning process. Rather than a fixed formula, dialogic teaching emphasises the contextualisation and interconnectedness of learning moments with the subject matter, recognising that discourse formats, instructional techniques, and classroom experiences contribute to the holistic learning experience.

Dialogic teaching creates a collaborative learning environment through engaging dialogues, stimulating thinking, and skill development. This approach offers numerous benefits for students and can also be applied in sports education, such as badminton, to enhance student athletes' fitness, skills, tactics, and success. Teachers play a crucial role in shaping interactions and creating a conducive learning environment. They exhibit effective communication and problem-solving skills, guiding students' educational experience through scaffolded instruction that encourages independent and creative thinking. Teachers foster intellectual autonomy by inspiring students, providing learning strategies, and promoting meaningful dialogue in a dynamic and enriching learning atmosphere (Zhang, 2022).

This study contemplates how teachers can further enhance the effectiveness of instruction through their interaction and guidance while considering the specific learning context (Damsa & Jornet, 2021), in this case, the learning context being badminton instruction. Teachers showcase adaptability in their instructional approaches to teaching badminton, considering the unique requirements and characteristics of the sport (Damsa & Jornet, 2021). They employ effective techniques to develop skills, address challenges, and create a supportive learning environment that enhances student engagement and progress.

The individual lesson model emphasises personalised instruction and targeted feedback, fostering practical and empathic learning between teachers and students (Saleh et al., 2021). Personalised instruction employs scaffolding strategies that bridge the gap between students' learning abilities and the desired outcome by providing the necessary support (Bruner, 1997). Some aspects include adjusting complexity, where tasks are broken down into smaller, manageable steps. Modelling involves teachers demonstrating the desired behaviour or process, providing a clear example for the students. Questioning helps guide students' thinking and encourages them to think critically about the task. Exchanging feedback on students' efforts helps them understand their progress, correct mistakes, and improve. As students become more confident and skilled, the scaffolding support gradually reduces, enabling them to take on more responsibility and facilitating effective knowledge and skill acquisition in a personalised learning environment.

The interaction between teacher and student involves negotiation, active listening, and openness to different viewpoints (Karrass, 2013). Dialogic teaching and learning create a space for mutual respect and co-construction of knowledge, leading to various emotions and valuable insights into students' learning experiences. Immersive engagement in enjoyable activities allows for a deeper understanding of the impact of dialogue on students' actions and learning outcomes.

2. Aim of the study

The aim is to examine how the interplay of dialogic teaching in badminton instruction promotes learning and critical thinking and shapes student behaviour and thought. The insights gained will guide the development of effective educational techniques and strategies to enhance student engagement in diverse contexts. Emphasising the importance of exploratory dialogue, this study highlights the benefits of active listening, questioning, and authentic interaction for creating a collaborative learning environment. Teachers play a crucial role in modelling and scaffolding this process, facilitating students' collaborative knowledge scrutiny and negotiation.

3. Purpose and Significance of the Study

The purpose is to explore how teachers can enhance the effectiveness of their instruction by considering the specific learning context, particularly in the case of badminton instruction and to seek to improve skill development, address challenges, and create a supportive learning environment that fosters student engagement and progress.

The study's significance lies in providing valuable insights to educators and researchers, helping them tailor instructional approaches to diverse learning contexts, especially in sports education like badminton. The findings support teachers' professional growth with practical and adaptable approaches to enhance their instruction, potentially improving student learning outcomes in badminton instruction.

4. Literature Review

3.1. Dialogic Teaching

Dialogic teaching utilises dialogue to enhance students' thinking, promoting learning and understanding. It enables teachers to identify needs, structure assignments, and assess progress effectively (Alexander, 2020). Dialogic teaching transcends ordinary discussion, distinguishing itself from traditional teaching methods centred on question-answer and listen-tell routines and informal conversations in casual contexts. Research on dialogic teaching recognises the critical role of classroom talk and interaction in promoting respectful discourse, exchanging ideas, considering multiple perspectives and engaging in critical inquiry.

Alexander (2020) states that dialogic teaching goes beyond a specific methodology and necessitates reevaluating instructional techniques and classroom dynamics, including teacher-student relationships and conceptions of knowledge. Rooted in evidence-based practices and fundamental educational principles, dialogic teaching employs diverse strategies and techniques to address educational goals, meet student learning needs, and adapt to specific subjects and contexts. In dialogic classrooms, learners engage in meaningful conversations, acquiring essential skills like active listening, thoughtful reflection, and respect for diverse viewpoints. Teachers establish clear ground rules and regularly review them with students to foster effective communication. Moreover, teachers go beyond conventional approaches, employing exposition, instruction, recitation, and rote learning methods. While the teaching methods serve their purpose, there is a need to increase the frequency of discussion and scaffolded dialogue in the learning process because it fosters interactive and engaging learning experiences for students. Facilitating these dialogue forms depends on effective classroom organisation, a favourable classroom climate, and strong relationships. The different types of talk and their dynamics in dialogic classrooms contribute to essential processes such as uptake, which involves responding to and building upon others' ideas; scaffolding, which provides tools to bridge understanding gaps; and handover, which ensures successful transfer and assimilation of new knowledge into the existing understanding (Alexander, 2020). Increasing dialogue and discussion aims to empower learners intellectually and socially by promoting active thinking, engagement, and decision-making in their learning process.

Limited empirical evidence exists on the effectiveness of implementing and evolving dialogic teaching principles in the classroom over an extended duration. Studying dialogic talk and its repertoire over time poses theoretical and methodological challenges, but it is essential to understand the connections between interactions and events. Contextualising discourse practices within the social context of the learning community and considering their function within that community is crucial in determining their effectiveness. A dialogic stance, evident in conversations that promote exploration and diverse viewpoints, should be analysed over time, including how teachers and students discuss and present content. Challenges arise in balancing student engagement and meeting curriculum goals, potentially hindering productive dialogue and interaction (Cui & Teo, 2021). In addition, one-way communication sometimes restricts student participation, further complicating the situation (Cui & Teo, 2021).

Teachers ought to cultivate a collaborative and inclusive classroom environment to enable effective dialogic teaching, encouraging student participation, regardless of their background or experience (Alexander, 2020). By fostering such an atmosphere, teachers can assist students in developing communication skills and enhancing their educational experiences, leading to the cultivation of critical thinking, problem-solving abilities, and other essential life skills (Alexander, 2020).

4.2. Teacher-Student Relationships

Koca (2016) emphasises the importance of establishing a strong teacher-student relationship, which is crucial for achieving shared goals and developing essential qualities such as trust, open communication, and sharing. These relationships play a pivotal role in shaping the understanding and meaning of interactions, providing stability and continuity while also adapting to the evolving needs of students over time (Koca, 2016).

Brinkworth et al. (2018) highlight that a connected, empathetic, and respectful teacher-student relationship is essential for effective real-time interaction. Such relationships facilitate students' understanding, interpretation, and thoughtful response to events, enhancing their learning experiences. Positive relationships in the learning environment significantly impact teaching effectiveness, learning outcomes, and student motivation. Evans et al. (2019) thoroughly analyse teacher-student interactions and demonstrate that effective relationships, imparting skills, knowledge, and know-how, improve learning, enhancing sense-making and situational awareness. These dynamic and developmental aspects of a learning relationship meet students' changing needs over time, leading to a more implicit learning mindset and improved comprehension of specific moments in the lesson and their context.

Teachers employ diverse strategies to guide students' actions and attention, considering individual understanding, skills, and independence (Brinkworth et al., 2018). Meaningful dialogues and immersive experiences deepen students' comprehension and critical thinking (Evans et al., 2019). Integrating these approaches fosters engaging learning environments for student success. Gillies (2019) emphasises that offering guidance to students and teachers enhances engagement. Through this cycle, teachers can provide targeted instruction, leading students towards independent and successful learning outcomes. Strategic interactions facilitate integrated learning experiences, promoting learners' engagement, elaboration, and adaptation to the learning moment (Díez-Palomar et al., 2021). This heightened awareness and adaptability foster active participation and deeper learning outcomes.

4.3. Bruner's Scaffolding

Bruner's scaffolding concept employs scaffolds to aid students' knowledge construction (Bruner, 1997). The scaffolding functions to simplify tasks, maintain goals, attract attention, gauge task-student gaps, control learning difficulties, and promote rational behaviours. Strategies like modelling, prompting, cueing, feedback, and questioning enhance students' understanding and foster learning independence (Bruner, 1997). Effective scaffolding helps students comprehend challenging educational content. The gradual release approach involves the teacher modelling, guiding, and encouraging independent work as students gain confidence and competence, aiming to cultivate autonomy and ownership in the learning process. Scaffolded dialogue (Alexander, 2020) fosters interactive discussions that promote diverse thinking, thought-provoking questions, and follow-ups for deep exploration. This dialogue unfolds within a well-organized and supportive classroom environment, extending contributions (Alexander, 2020).

4.4. Divergent and Convergent Thinking

Divergent and convergent thinking play valuable and complementary roles in problem-solving and decision-making. Hu et al. (2015) highlight that divergent thinking encourages creativity, exploration, and the generation of multiple possibilities. On the other hand, convergent thinking, as discussed by Cassidy (2004), emphasises analysis, evaluation, and the ability to arrive at the best solution or answer based on given criteria. With guidance from teachers, students learn to evaluate and refine their ideas, developing well-reasoned solutions based on solid evidence (Alexandre et al., 2020). Educators recognise the significance of integrating both types of thinking in learning environments to foster holistic cognitive development, enhance students' problem-solving skills and acquire skills necessary to tackle real-world situations (Alexandre et al., 2020).

Integrating divergent and convergent thinking within the framework of dialogic education is crucial in enhancing students' thinking, learning, and comprehension (Palmgren-Neuvonen et al., 2021), and by balancing these two types of thinking, students are encouraged to develop problem-solving skills and think creatively and independently (Alexandre et al., 2020). Alexandre et al. (2020) highlight that this approach fosters a learning

environment that promotes engagement and student participation and provides opportunities for learners to express their ideas and opinions without fear of judgement, creating a safe and inclusive dialogue space. Consequently, dialogue is a powerful tool to broaden, create and deepen learning spaces where students can engage in collaborative learning tasks that encompass divergent and convergent thinking, and the learning space refers to shared resources of ideas in dialogue (Palmgren-Neuvonen et al., 2021). Students are provided with this interactive and inclusive learning experience which empowers them to encourage independent and creative thinking, express their ideas without being criticised (Zhou et al., 2017), and develop problem-solving skills, leading to achieving optimal learning outcomes and creating a dynamic learning space (Palmgren-Neuvonen et al., 2021).

4.5. The Impact of Dialogic Teaching on Student-Teacher Engagement

Dialogic teaching has positively impacted student-teacher engagement, fostering active listening, critical thinking, and collaborative learning (Padros, 2020); it allows students to express their thoughts and ideas while promoting openness to alternative perspectives (Koca, 2016). This approach has proven to enhance learning outcomes across different domains, including sports skills training. Student athletes can improve their decision-making abilities through reflective practices, exploring new strategies, and effectively navigating unforeseen circumstances (Teo, 2019). This development fosters increased confidence and adaptability (Teo, 2019), enabling athletes to outperform opponents and contribute to their team's overall success (Harvey et al., 2020).

5. The Study

The insights will help identify essential aspects of teacher-student engagement that enhance dialogic teaching and provide personalised techniques for effective learning. Educators' personal beliefs and attitudes influence their teaching methods, and observing various approaches to dialogic teaching can provide an improved understanding of the relationship between real-time actions, developmental processes, and learning experiences.

The research questions of this study centre on identifying evidence of dialogic teaching in the lessons being examined. There are two research questions: First, how does dialogic teaching manifest in the lessons under study? Second, what evidence supports the benefits or drawbacks of dialogic teaching?

6. Qualitative Methodology

A qualitative methodology provides flexibility and enables a deeper understanding of the research topic, allowing for exploring unexpected findings and patterns that may arise during the research process; qualitative research provides detailed insights into social processes, behaviours, and attitudes, which can uncover subtleties that might be missed using the process (Mathison, 1988).

The researcher invited two teachers to participate and communicated with their students to inform them about the study. This approach was taken to prevent any potential influence or bias from the teachers in their students' decision to participate. There were sixteen students, and only three agreed to be recorded and interviewed. The eligibility criteria required teachers with at least ten years of teaching experience to ensure pedagogical expertise, one teacher being 42 years old and the other 39, allowing diverse perspectives based on life experience. The students were at the Year 12 level, with two students aged 17 years old and one student aged 18. Before the study began, a minimum teacher-student engagement period of one week was implemented, providing an opportunity for meaningful interactions. This engagement allowed them to establish rapport and cultivate a conducive learning environment. The two teachers and three students gave informed consent to their participation. The teachers were labelled Teacher A and Teacher B, while the three students were Student A, Student B, and Student C, respectively. Preserving participant anonymity upheld ethics, protected confidentiality, and respected privacy to avoid negative consequences from revealing identities in research.

7. Data Collection and Analysis

In-depth interviews with teachers and students yielded qualitative data, allowing participants to share their experiences, challenges, and perceptions in their own words. These interviews provided rich and detailed accounts of the dialogic interactions, strategies, and outcomes. Recorded audio and video footage of the lessons further facilitated an in-depth examination of how dialogic teaching unfolded in real-time. These insights were subsequently subjected to thematic analysis (Braun & Clarke, 2014), allowing for the identification of common patterns and themes.

8. Findings

8.1. Audio and Video Recordings

Table 1 presents coded qualitative data from transcript extracts. The table condensed and tracked essential information, efficiently summarising the findings.

Table 1: Coding Qualitative Data from Transcript Extracts

Transcript Extract	Codes
Dialogue between Teacher A and Student A	1. Guidance 2. Feedback 3. Height impact on serve 4. Instruction and demonstration 5. Student engagement 6. A supportive and encouraging approach
Dialogue between Teacher A and Student B	1. Conducting drills to improve the high serve 2. Emphasis on wrist action and follow-through for generating more power on the high serve 3. Encouragement of student questions 4. Explanation of advantages of pushing opponents to different court areas 5. Importance of hitting the shuttlecock in the back corner of the receiver's side 6. Low serve technique introduction 7. Strategically positioning opponents with high serve 8. Student enthusiasm for the lesson 9. Student gratitude for the guidance and instruction provided by Teacher A 10. Valuable coaching throughout the lesson
Dialogue between Teacher B and Student C	1. Adjusting serving angles 2. Analysing previous matches 3. Footwork improvement 4. Mental toughness 5. Net play improvement 6. Pre-game routine 7. Self-care and time management 8. Setting goals 9. Tactics in badminton gameplay. 10. Variety of serving targets 11. Visualisation techniques

Some statements could fit under multiple codes, encompassing various aspects of dialogic teaching. The themes identified from the audio and video recordings were analysed through thematic analysis, resulting in the following identified themes:

8.1.1. Theme 1: Teaching and Learning Techniques

Several key methods enhanced badminton players' proficiency. The guidance provided structured insights into techniques and gameplay strategies, ensuring comprehension of game intricacies. Thus teacher A explained to a student that he should "stand sideways to the net with your feet shoulder-width apart and knees slightly bent." Feedback offered constructive input for skill refinement, which, in contrast to the initial guidance, was in response to actions from a student, so the teacher might say, "The serve didn't work. Okay, let's try this position and start at the waist." Instruction and demonstration visually explained proper playing techniques. Student engagement was still more student-centred; for example, a student queried, "What if my right leg is positioned like this?" Student engagement thrived through interactive discussions and activities, fostering an active learning environment. Supportive and encouraging methods created a positive atmosphere for skill exploration.

Effective teaching and learning techniques in badminton instruction elevated students' skill mastery. Structured drills refined high serve execution, emphasising wrist action and follow-through for power. Hence, Teacher A explained to a student that he should "keep practising, and you'll master the high serve in no time! Let's work on some drills to improve your technique." The student completed his drills, and the teacher praised him and offered feedback.

Encouragement of student questions nurtured engagement and critical thinking. Another example was the instructor-guided precision in shuttlecock placement, including the impactful strategy of directing it to the receiver's corner. The serve technique added versatility to students' skillset. Effective badminton coaching combines techniques to hone mental and physical competence. Methods included match analysis for insights, teaching mental toughness for resilience, and instilling a pre-game routine for optimal performance preparation. Instructors also prioritised self-care and time management, ensuring players maintained their physical well-being and energy levels.

8.1.2. Theme 2: Skills and Strategies

Integral to badminton instruction was the cultivation of specific skills and strategic approaches. Students engaged in hands-on drills to improve their serves, enhancing proficiency in this pivotal manoeuvre. Teacher A demonstrated the low serve technique to Student A and guided him through the practice. Emphasising wrist action and follow-through increased the power of the serves and deepened movement mechanics understanding. Teacher A advised, "Let's hold the racquet handle as if you're shaking someone's hand. Now, move your thumb to the left to create a V-shape between your thumb and index finger." Manoeuvring opponents across different court areas underscored strategic understanding, enabling students to dictate the game flow. Recognising the advantage of aiming shuttlecocks at the back corner disrupted opponents' positioning and created tactical opportunities. A student asked, "What if I can draw my opponent to the back edge of his court?" The teacher responded, "When a high serve is delivered to the back corner, he must take many steps back to the centre of the court, which can exhaust him." Effective teaching strategies complemented this skill acquisition, with student enthusiasm underscoring their teachers' impactful guidance. This interplay of techniques and skills created a valuable coaching and learning experience that resonated.

A robust badminton game demands mastery of diverse skills and strategies. There were serving angle adjustments manipulated shots, while refined footwork enhanced agility, balance, and court coverage. Netplay mastery included net shots, blocks, and smashes, establishing frontcourt dominance. Goal setting fostered progress tracking and motivation. Tactical instruction ensured strategic choices during matches. Varied serving targets kept opponents guessing, while visualisation techniques enabled enhanced execution by mentally rehearsing gameplay scenarios.

8.2. Teachers' Interviews

This section presents the content and structure of the teachers' interviews. Three main questions were asked during these interviews to gather valuable insights into implementing dialogic teaching and using different communication approaches in the teaching space. The questions focused on essential competencies for effective dialogic teaching, the techniques employed by teachers to engage students in meaningful discussions, and strategies for maintaining a balanced approach during open discussions where the direction of conversation might be less controlled. Three questions were asked:

8.2.1. Question 1: What competencies are essential for teachers to implement dialogic teaching effectively?

The teachers' interviews' findings indicated that effective dialogic teaching implementation required teachers to possess diverse competencies. Their competencies included effective communication, promoting active student engagement, and contributing to dynamic and interactive learning environments. Teacher A thrived in discussion facilitation and subject guidance, while Teacher B's interactive approach and probing questions enhanced student engagement and critical thinking. They emphasised continuous improvement. Their dedication was centred on enhancing student experiences and fostering critical thinking skills.

8.2.2. Question 2: How do you use different forms of communication in dialogic teaching?

The teachers' interviews also revealed that Teachers A and B used diverse communication approaches in dialogic teaching. Teacher A reported, "I encourage active participation and show videos," while Teacher B commented, "I motivate my student to engage in discussion, use videos, and use simple thumbs-up gestures. My students remark that my expression turns serious when a mistake occurs." Teacher A encouraged active participation through inclusive discussions and innovative instructional videos to enhance understanding and enthusiasm. Teacher B motivated students through meaningful discussions, concise videos, and creative feedback gestures, all contributing to engaging and impactful learning experiences. Their receptiveness to feedback and adoption of student-centred teaching approaches fostered a conducive learning environment. An interesting statement was that Teacher B also used body language to communicate with his students.

8.2.3. Question 3: How do you maintain a balance in open discussions when you have little control over the direction the conversation takes?

Teacher A navigated the challenge of balancing open conversations by using guiding questions to steer discussions towards desired outcomes. The teachers prioritised acknowledging every opinion and encouraging active student engagement. Both teachers' approaches emphasised effective communication and student engagement, enriching the learning experience and facilitating meaningful interactions that allowed for a balanced control of the direction of the conversation. Teacher B also commented, "I give post-lesson discussions for students who want to explore and satisfy their curiosity in techniques." The teacher encouraged a habit of seeking knowledge, fostered a closer student-teacher relationship and promoted an environment where questions and guidance were comfortably exchanged. This approach enhanced critical thinking, promoted individualised learning, and reflected a commitment to supportive and proactive teaching.

8.3. Students' Interviews

This section examines interviews with students, and their responses revealed how dialogic teaching influences their badminton education. Four questions asked were:

8.3.1. Question 1: What did you enjoy most about your badminton lessons?

The students enjoyed friendly competitions, shared improvements with their peers, motivated their best efforts, and fostered celebratory progress. Student A commented, "I enjoy the competition," while Student B stated, "Teamwork teaches me collaboration and communication." Student C remarked, "It is a sport where I can improve and achieve new skills." They enthusiastically embraced the teamwork inherent in matches, which taught collaboration and effective communication. They also valued personal growth, finding constant improvement and skill acquisition rewarding, while a sense of accomplishment kept them engaged and motivated.

8.3.2. Question 2: Were there any aspects of the badminton lessons that you found challenging and would like to improve in the future?

Students discussed how they addressed challenges and recognised challenges in footing, emphasising the need for movement assistance, requiring help with backhand shots, highlighting increased practice positively, and identifying weak points in serving. These perspectives offered a comprehensive view of individual challenges, showing awareness and determination for improvement. These experiences highlighted the symbiotic relationship between student efforts and teacher support, eventually enhancing skills and self-assurance, and persistently engaging in active learning.

8.3.3. Question 3: How would you describe your teacher's teaching style in badminton lessons?

The students admired their teacher's teaching approach and caring attitude, valuing open communication, appreciating support beyond academics, and responding to encouragement in overcoming personal challenges. The students expressed admiration for their teachers' teaching approach, recognising the teachers' care for both physical skills and mental well-being. They appreciated the incorporation of exercises that enhanced focus and preparedness. In addition, the students acknowledged the teachers' emphasis on open communication and provisions for video teachings and independent problem-solving. Moreover, they lauded the teachers' focus on the basics and attention to detail. These perspectives revealed that teachers prioritise effective teaching methods, holistic well-being, and skill improvement. One interesting comment was Student A mentioning, "but [he] talks a lot to explain clearly …." This highlighted that the teacher's teaching style combined structure with verbosity, which, although at times less concise, underscored the teacher's commitment to delivering comprehensive information.

8.3.4. Question 4: Do you have any advice to share with your peers?

The students emphasised dedication and persistence in practice, promising rewarding results in technical proficiency. Student A disclosed, "The long hours of practising, you'll see amazing results." They highlighted self-assessment and growth through attentive self-listening after teachers' guidance. In addition, they stressed open-mindedness and discouraged quick judgements from fostering personal growth and skill enhancement. Student C noted, "It's important not to judge and avoid quick judgements." These perspectives guided students towards success by merging commitment, self-reflection, and an open mindset for continuous improvement.

9. Discussion

9.1. Research Question 1: How does dialogic teaching manifest in the lessons under study?

The responses reveal how both teachers actively communicate with their students, fostering an environment encouraging questions, discussions, and exchanging ideas. Specific examples of dialogic teaching practices are presented, such as introducing badminton techniques and inviting students to explore strategic positioning and improve mental toughness. The teachers' thoughtful responses to student inquiries, integration of instructional videos, and encouragement of meaningful discussions demonstrate the dialogic teaching approach in their lessons.

In addition, the interviews with Teachers A and B reaffirm the prevalence of dialogic teaching in their instructional practices. The teachers' possession of strong teaching skills, effective communication, and facilitation of conversations are evident. They also emphasise the importance of student engagement and creating inclusive learning environments. The teachers' receptiveness to student feedback and commitment to continuous improvement exemplify the student-centred teaching approaches that promote meaningful interactions and engaging learning environments. These practices promote effective student learning guidance and the development of critical thinking skills.

The students' responses reflect their enjoyment of friendly competition, teamwork appreciation, and recognition of the importance of qualities like persistence and self-reflection, underscoring the positive impact of dialogic teaching on skill advancement and growth mindset development. Also, their emphasis on attentive self-listening and following coaching guidance demonstrates the effectiveness of dialogic teaching in nurturing progress and improvement. The students value the teacher's personalised approach and feedback, enhancing their enjoyable and enriching learning experience. The supportive and meaningful learning environment is evident in teacher-student interactions and the students' perspectives.

9.2. Research Question 2: What evidence supports the benefits or drawbacks of dialogic teaching?

The evidence supports the positive impact of dialogic teaching on students' active engagement, motivation, and learning experiences. Teachers A and B foster student curiosity and critical thinking by encouraging questions and facilitating meaningful discussions. The students' enthusiasm for the lessons and their expressions of gratitude for the guidance provided by Teacher B further underscores the benefits of dialogic teaching in promoting a dynamic and interactive learning environment.

The teacher interviews also provide evidence supporting the benefits of dialogic teaching. Teachers A and B demonstrate their proficiency in strong teaching skills, effective communication, and facilitating meaningful conversations. Their prioritisation of student engagement and creating inclusive learning environments encourages self-expression and the sharing of perspectives. They foster enjoyable and supportive learning experiences by incorporating techniques like videos and thought-provoking discussions. Students can access and review targeted video content at any time during and outside regular teaching hours. This personalised approach caters to individual learning needs, encouraging students to pose questions, voice uncertainties, and actively seek clarification. This process nurtures a sense of autonomy and fosters a continuous learning mindset.

Moreover, a teacher's interesting approach involves using hand gestures while students observe his facial expressions. This highlights the connection between body language and tacit knowledge, as body language communicates unspoken elements of knowledge. Body language conveys thoughts and feelings without words, while tacit knowledge is gained through experience. The teacher intuitively expresses himself using subtle cues when evaluating students' performance. This impacts interactions as students pick up on these cues. This approach fosters an engaging learning environment where students actively construct meaningful knowledge.

The interviews uncover minimal significant drawbacks; however, the risk of excessive teacher talk time limiting student participation is notable. It is advised for teachers to thoroughly harmonise their instruction and dialogic engagements, ensuring ample chances for students to participate in their learning experience actively. The challenges rest in the potential for mixed interpretations of non-verbal cues in body language, leading to misunderstandings. Excessive talking can also overwhelm students and obscure the main message, posing another challenge. These factors can hinder effective communication and student engagement, thereby underscoring the importance of balancing clear verbal communication and creating room for student input. This equilibrium is essential for the success of dialogic teaching.

The evidence gathered from the interviews with teachers and students strongly supports the benefits of dialogic teaching in creating a positive and enriching learning environment. The dynamic and interactive nature of dialogic

teaching contributes to student engagement, motivation, and holistic learning experiences while fostering effective communication and positive teacher-student relationships.

10. Implications

The practical implications encompass fostering active student participation, enhancing critical thinking and understanding, and cultivating a supportive learning environment. By assuming the role of facilitators, teachers guide discussions and empower students to engage in their learning process actively. Dialogic teaching not only aids in developing practical communication skills but also cultivates a critical consciousness by encouraging students to challenge assumptions and explore alternative perspectives. In addition, this approach can transform students' attitudes, learning dispositions, knowledge acquisition, and cognitive progress, resulting in a more enriched educational experience.

Another implication is the enhancement of students' self-reflection and self-assessment skills. Implementing dialogic teaching can lead students to develop the capacity to critically assess their performance, recognise areas needing enhancement, and establish individual objectives through substantive dialogues and interactions with the instructor. This cultivation of self-reflective practices can bolster their self-awareness, boost their self-assurance, and foster a sense of responsibility for their learning experience, ultimately contributing to ongoing progress and advancement.

11. Limitations

One limitation is the study's exclusive focus on dialogic teaching in badminton instruction within co-curricular activities, potentially limiting its applicability to other sports areas and subject domains. This study's reliance on the experiences of only two teachers might restrict the extent to which the findings can be generalised to various contexts, particularly within the realm of sports teacher education.

Not only does the study utilise self-reported data from teachers and students, which may have introduced bias or inaccuracies, but also this study's focus on a specific period allows for a clear snapshot of the situation. However, by not considering the potential changes in teachers' and students' perspectives over time, the opportunity to capture the dynamic evolution of the subject may have been missed.

To enhance dialogic teaching in sports teacher education, increasing opportunities for in-service and pre-service teachers to engage in dialogic interactions, receive feedback, and foster reflection on their experiences is crucial. This also highlights the need for more professional development programmes primarily focusing on dialogic teaching in sports teacher education.

12. Conclusion

This study presents detailed insights into authentic teaching and learning behaviours, highlighting the dynamic nature of badminton skill acquisition. It emphasises how dialogic teaching fosters personalisation and visibility in the learning process, with real-time exchanges during individual lessons being pivotal for evolving teacher-student relationships. The study also reveals that effective dialogues enhance learning, showcasing teacher expertise and promoting positive student and teacher experiences. Furthermore, the study uncovers the role of trust-based connections in fostering creative possibilities within teacher-student relationships. Early lessons progress in small, manageable steps, from instrumental demonstrations to dialogic discussions, nurturing interactive and collaborative learning. Teachers balance flexibility and structure, integrating dialogue and instruction to facilitate growth in interpersonal relationships. This approach enhances communication, emphasising its significance within the learning environment.

Counterfactual curiosity (Fitzgibbon & Murayama, 2022) and critical thinking engage students in cognitive exploration. Teachers encourage questions, fostering inquiry and broadening comprehension. Teachers also integrate convergent and divergent thinking by structuring discussions that start with convergent thinking to

establish a shared understanding and then transition to divergent thinking for exploring diverse interpretations, solutions, and perspectives. Integrating personalised lessons and scaffolded dialogue amplifies exploration and critical thinking, enriching students' experiences. This approach equips students with adaptable skills, empowering them to navigate modern challenges.

The outcomes of dialogic talk can vary based on students' desired learning and developmental goals. Increasing teachers' understanding of the advantages of dialogic teaching and talking is crucial to elevating students' communication opportunities and skills. The key factor influencing opportunities and limitations is whether teachers and students have embraced a dialogic approach.

This study underscores the profound impact of dialogic teaching on students and educators. It fosters engagement, critical thinking, and creativity and prepares students for a multifaceted world. The synthesis of personalised approaches, scaffolded dialogue, and instructive modelling cultivates a culture of exploration and learning, nurturing the growth of 21st-century learners as active participants, and facilitating the process of understanding and skill development, and empowering learners to excel and embrace limitless possibilities.

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Conflict of Interest

The author declares that the study was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Biographical Notes

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