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## THE ROLE OF GROUP COMMUNICATION IN COLLABORATIVE LEARNING IN PHYSICAL EDUCATION

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### Abstract

*Collaborative learning in physical education emphasizes cooperation among students to achieve common goals thru structured physical activities. One of the key factors for the success of this learning model is group communication. This article aims to examine the role of group communication in improving the effectiveness of collaborative learning in physical education. This research uses a literature study approach by reviewing previous research findings related to group communication, collaborative learning, and physical education. The study results indicate that group communication plays an important role in building coordination, increasing student engagement, fostering mutual trust, and developing social and emotional skills. This article also discusses the practical implications for physical education teachers in designing communication-based learning strategies. Thus, group communication is an important foundation for the success of collaborative learning in physical education.*

**Keywords:** *group communication, collaborative learning, physical education*

### Abstrak

*Pembelajaran kolaboratif dalam pendidikan jasmani menekankan kerja sama antarpeserta didik untuk mencapai tujuan bersama melalui aktivitas fisik yang terstruktur. Salah satu faktor kunci keberhasilan model pembelajaran ini adalah komunikasi kelompok. Artikel ini bertujuan mengkaji peran komunikasi kelompok dalam meningkatkan efektivitas pembelajaran kolaboratif pada pendidikan jasmani. Penelitian ini menggunakan pendekatan studi literatur dengan menelaah hasil-hasil penelitian terdahulu terkait komunikasi kelompok, pembelajaran kolaboratif, dan pendidikan jasmani. Hasil kajian menunjukkan bahwa komunikasi kelompok berperan penting dalam membangun koordinasi, meningkatkan keterlibatan siswa, menumbuhkan rasa saling percaya, serta mengembangkan keterampilan sosial dan emosional. Artikel ini juga membahas implikasi praktis bagi guru pendidikan jasmani dalam merancang strategi pembelajaran berbasis komunikasi. Dengan demikian, komunikasi kelompok merupakan fondasi penting dalam keberhasilan pembelajaran kolaboratif di pendidikan jasmani.*

**Kata kunci:** *komunikasi kelompok, pembelajaran kolaboratif, pendidikan jasmani*



## A. Introduction

Physical education (Penjas) plays a strategic role in the national education system because it encompasses cognitive, affective, and psychomotor aspects. Not only does it emphasize physical fitness, but Penjas also serves as a means of character development, social skills development, and the internalization of values such as sportsmanship, cooperation, and responsibility.<sup>1</sup> In the context of 21st-century learning, physical education is seen as an effective medium for developing collaboration and communication competencies, two core skills essential for both social life and the workplace.

Historically, the approach to physical education (PE) learning in Indonesian schools has often focused solely on mastering motor skills, with instructional methods that tend to be teacher-centered. This has resulted in suboptimal development of students' social-emotional aspects, even though

these dimensions are equally important in modern education. Therefore, collaborative learning models that emphasize active student involvement have been introduced as a strategic alternative. In physical education, emphasis is placed on physical activity, social interaction, and collaboration. Students are required not only to master motor skills but also to develop the ability to work together.

One frequently used learning strategy is collaborative learning, where students work in groups to achieve a common goal. Group communication is crucial because without effective communication, team coordination is difficult and learning objectives cannot be optimally achieved. Communication serves not only to convey instructions but also as a means of building togetherness, resolving conflicts, and creating a pleasant learning atmosphere. In this model, students are required to work together in groups, solve problems together, and

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<sup>1</sup> Bailey, R. (2006). Physical education and sport in schools: A review of benefits and

outcomes. *Journal of School Health*, 76(8), 397-401.



achieve collective goals through team interaction.

In practice, the success of collaborative learning is largely determined by the effectiveness of group communication. Group communication here includes both verbal (instructions, discussions, clarifications) and non-verbal (gestures, expressions, body language) communication, which serves as a medium for coordination and interaction among group members.

Communication is not only a means of exchanging information, but also an instrument for building mutual trust, strengthening team cohesion, and resolving emerging conflicts. Without good communication, collaboration tends to be unequal: some members are dominant, others passive, and misunderstandings often arise that hinder the learning process.<sup>2</sup> Field research indicates that a number of students still face barriers to effective communication when working in groups. Some are

passive, reluctant to express opinions, or tend to wait for instructions from the teacher. Meanwhile, some students are overly dominant, stifling the participation of other members. This phenomenon hinders the achievement of collaborative learning goals, as the fundamental principles of collaboration are equal participation and positive interdependence.

In addition to internal student factors, teachers also often face challenges in facilitating communication. Not all Physical Education teachers possess adequate pedagogical communication skills, particularly in managing group interactions. As a result, even when collaborative strategies are implemented, student communication is ineffective. Yet, within the framework of active and competency-based learning (student-centered learning), the teacher's role as a communication facilitator is crucial. Dari

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<sup>2</sup> Slavin, R. E. (1995). *Cooperative learning: Theory, research, and practice*. Allyn & Bacon.



perspektif psikologi pendidikan,<sup>3</sup> Vygotsky's theory of the Zone of Proximal Development (ZPD) explains that students learn more effectively through social interactions with more competent peers. This interaction is only possible if communication within the group is open, directed, and constructive. In other words, group communication is a fundamental prerequisite for scaffolding or learning support in collaborative learning.

In a policy context, the Independent Curriculum emphasizes the development of the Pancasila Student Profile, one element of which is the ability to work together and communicate. This emphasizes that strengthening group communication is not merely a methodological choice, but rather a requirement of the national education system. Therefore, research on the role of group communication in collaborative learning in Physical Education (PE) is relevant and urgent, as the results can

provide theoretical and practical contributions to the development of holistic learning strategies.

Thus, it can be emphasized that group communication is not merely a complementary component in collaborative PE learning but also a key foundation that determines its effectiveness. Without effective communication, the goals of collaboration will not be achieved, and PE's potential as a vehicle for developing students' social character will be less than optimal.

## B. Methodology

The method used is a literature review. In Group communication is the process of exchanging messages between individuals in small groups with the goal of reaching an agreement or completing a shared task. According to DeVito (2013), group communication involves organized interactions among members who share common interests or goals.<sup>4</sup> In the context

<sup>3</sup> Littlejohn, S. W., & Foss, K. A. (2011). *Theories of human communication*. Waveland Press.

<sup>4</sup> J. A. DeVito, *Human Communication: The Basic Course* (Boston: Pearson, 2013), 45.



of physical education, group communication serves as a means of coordinating movements, developing game strategies, and resolving conflicts between students.

Group communication can be divided into two main forms: verbal and nonverbal. Verbal communication includes verbal instructions, discussions, and directions. Nonverbal communication, on the other hand, encompasses body movements, facial expressions, eye contact, and body language, which serve as signals during physical activity.

Nonverbal communication is often more dominant in dynamic situations, such as sports and field activities. In addition to conveying messages, group communication also serves to build group identity, foster solidarity, and strengthen motivation among members.

Therefore, in collaborative learning, group communication is not only a technical aspect but also a socio-psychological one that influences the quality of student interactions. Littlejohn

& Foss define group communication as collective interaction between members that generates shared meaning to achieve a consensus or specific goal.

Group communication is the process of interaction between individuals working together in a small group to achieve a specific goal. In physical education, group communication includes verbal (instructions, discussions, strategies) and nonverbal (body movements, facial expressions, eye contact) communication, which serves as a means of coordination among team members.

In the context of physical education and sports, group communication is an important tool for unifying strategies, clarifying instructions, and building effective teamwork. Group communication is the process of interaction between individuals who share a common goal. Littlejohn & Foss define group communication as interaction that involves the creation of collective meaning to achieve a consensus or specific



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goal.<sup>5</sup> Linear vs. Transactional Model: Initially, communication was understood in a linear fashion (Shannon & Weaver, 1949), where messages travel from sender to receiver. However, this approach did not adequately explain group dynamics. The transactional model later emphasized that communication is a simultaneous, two-way process, where each group member is both sender and receiver of messages. Initially, communication was understood through Shannon & Weaver's Linear Model (1949), in which messages move one way from sender to receiver. This model emphasizes the basic elements: sender, message, channel, receiver, and noise.<sup>6</sup>

However, in group communication, particularly in sports, the linear model was deemed inadequate because it failed to reflect the dynamic nature of interactions. In response, the Transactional Model was born, emphasizing that communication is a

simultaneous, two-way process. Each group member acts as both sender and receiver of messages simultaneously. For example, in a futsal match, the player giving the pass also reads the movements of his teammates to determine the direction of the ball.

**Cohesion and Group Dynamics Theory:** Tuckman (1965) explains five stages of group development, including forming, storming, norming, performing, and adjourning.<sup>7</sup> Forming: 1) the stage of introduction, building familiarity, and establishing group identity; 2) Storming: differences of opinion, conflict, or competition emerge between members; 3) Norming: the group begins to agree on rules, norms, and interaction patterns; 4) Performing: the group functions effectively, focused on a common goal; 5) Adjourning: the stage of completion or

<sup>5</sup> Littlejohn, S. W., & Foss, K. A. (2011). *Theories of human communication*. Waveland Press.

<sup>6</sup> Shannon, C., & Weaver, W. (1949). *The Mathematical Theory of Communication*. University of Illinois Press.

<sup>7</sup> Tuckman, B. W. (1965). Developmental sequence in small groups. *Psychological Bulletin*, 63(6), 384–399.

disbandment of the group after the task is completed.

At each stage, communication plays a different role: from simply building rapport and resolving conflict to creating effective coordination. This theory is evident in sports or physical education. For example: 1) During the storming stage, strategic conflicts can arise, making communication a tool for negotiation; 2) During the performing stage, communication serves to convey tactical instructions quickly and accurately. Group cohesion, demonstrated through a sense of togetherness, emotional support, and commitment to goals, is greatly influenced by the quality of communication between members.

**Verbal and Non-Verbal Communication:** In Physical Education, non-verbal communication (gestures, eye contact, body language) often predominates over verbal communication. This is because many physical activities require quick instructions, such as hand signals in volleyball or signals in soccer. Group

communication occurs not only through words or verbal instructions, but also through movements, expressions, body language, tone of voice, and specific symbols. In physical education lessons, nonverbal communication often plays a dominant role. Examples: 1) Hand signals in volleyball to indicate attack strategy; 2) A whistle or voice signal from a physical education teacher to direct students during practice; 3) A soccer player's body language (e.g., turning their head, opening their arms, or glancing) to signal readiness to receive a pass.

This non-verbal communication has the advantage of being quicker, more practical, and easier to grasp in dynamic physical activities.

### **1. The Function of Group Communication in the Physical Field**

In the context of physical education and sports, group communication plays a strategic role, including: 1) Building coordination: ensuring team movements are synchronized; 3) Strengthening



cohesion: creating a sense of togetherness, support, and motivation; 4) Solving problems: addressing strategic conflicts or tactical errors; 5) Transferring knowledge: conveying movement instructions or game strategies; 6) Optimizing performance: Effective communication results in quick responses in competitive situations.

## 2. Integration of Theory with Practice in Physical Education

When linked to the above theories, then.

The Transactional Model emphasizes that each member of the physical education team always responds simultaneously to each other. Tuckman's stages demonstrate that communication is key to maintaining a smooth transition from forming to performing. Verbal and nonverbal communication are the primary means of physical education instruction.

Collaborative learning is rooted in Vygotsky's social constructivism theory, which emphasizes the importance of

social interaction in building knowledge. Collaborative learning is a learning approach that focuses on cooperation among members of small groups to achieve common goals. This model emphasizes the importance of interaction between students in an effort to collectively achieve desired outcomes. Collaborative learning is effective because it integrates cooperation, shared responsibility, and positive interdependence among students. In physical education, collaborative learning is typically realized through team games, group projects, or group exercises that require the active involvement of all members.

The basic principle of collaborative learning is positive interdependence, where group achievement is highly dependent on the efforts of each member. Therefore, students are guided to prioritize the common good rather than self-interest.

Furthermore, collaborative learning emphasizes face-to-face interaction, which plays a crucial role in





creating effective communication within the group. Johnson & Johnson (1999) stated that collaborative learning involves positive interdependence, individual responsibility, face-to-face interaction, social skills, and group evaluation.<sup>8</sup> In physical education lessons, collaborative learning is particularly appropriate because physical activities typically require coordination, interaction, and teamwork. Examples include team games (soccer, volleyball, basketball) and group activities (gymnastics, outbound activities, traditional games).

In Indonesia, the implementation of collaborative learning in Physical Education (PE) has begun to be emphasized in the 2013 Curriculum and is increasingly relevant in the Independent Curriculum, which prioritizes student-centered learning.

Physical education is unique: its activities are based on movement, cooperation, and team play. Emphasized

that physical education is not only beneficial for physical health, but also for the development of social skills, discipline, and moral values. Physical education is also often a vehicle for character development. The values of sportsmanship, leadership, cooperation, and resilience can be cultivated through team play. However, research shows that the communication aspect is often neglected, resulting in student collaboration appearing superficially without any meaningful exchange.

The Relationship Between Communication, Collaboration, and Physical Education: Effective communication strengthens team cohesion. Students trained in communication in sports demonstrate improved social skills and reduced conflict. In collaboration-based physical education learning, communication serves as a bridge between physical skills and cognitive-affective outcomes.

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<sup>8</sup> Johnson, D. W., & Johnson, R. T. (1999). *Learning Together and Alone: Cooperative, Competitive, and Individualistic Learning*. Allyn & Bacon.



Group communication is the primary foundation of collaborative learning. Without effective communication, collaboration will not function optimally. The role of group communication in the context of collaborative learning is: 1) Communicating ideas and strategies: Group members exchange ideas to complete physical tasks; 2) Building shared meaning: Members agree on rules or strategies; 3) Managing conflict: Differences in opinion or strategy can be managed through open communication; 4) Increasing motivation: Positive communication (encouragement, praise, appreciation) can strengthen group members' morale.

### C. Results and Discussion

#### The Role of Group Communication in Physical Education

The study results show that group communication has a significant impact on physical education learning,

particularly in collaborative learning and team activities. Some of the key roles of group communication can be explained as follows:

#### Communication as the Foundation of Coordination

Coordination in team games like soccer, basketball, and volleyball relies heavily on communication. Verbal communication, in the form of instructions, directions, and motivation, helps students understand game strategies. In physical education activities, such as soccer, volleyball, or traditional games, communication serves as the primary means of coordination. Verbal instructions from the teacher or team members enable students to develop strategies. Without clear communication, coordination errors often occur.<sup>9</sup>

In team games like soccer or basketball, verbal (instructions,

<sup>9</sup> J. A. DeVito, *Human Communication: The Basic Course* (Boston: Pearson, 2013), 45.



commands, support) and nonverbal (hand signals, body position) communication are used to build coordination. Without communication, team strategies can easily fail. Physical education teachers can train students to use simple codes or signals to increase coordination speed. Meanwhile, nonverbal communication such as hand signals, body movements, and eye contact accelerates responses on the field. This aligns with the view that communication is the main foundation of coordination, because without it, a well-developed strategy can easily fail. Physical education teachers can train students to use simple signals to increase movement coordination speed.

### **The Role of Communication in Increasing Participation**

Inclusive group communication encourages active participation from all students. In the context of physical education, certain, more skilled individuals often dominate, leaving other students passive. Through inclusive communication, teachers can create space

for all students to contribute, for example, by asking each team member to share their opinions or strategies before a mini-game begins. This way, participation is not monopolized by dominant students but also involves other group members fairly. Inclusive communication creates a classroom climate that encourages all students to participate. For example, teachers can give all team members the opportunity to share their strategy plans before the start of a mini-game. This way, participation is not dominated by only dominant students. Group communication goes beyond conveying instructions; it also serves as a medium for building motivation among members. In collaborative learning, verbal encouragement such as "Let's do it!" or "We'll win" has been shown to increase students' enthusiasm for learning and self-confidence.

This form of communication has a positive psychological impact, especially for students who lack confidence in their abilities when engaging in physical activities. Observations also showed that

students who actively motivated their peers tended to create a more conducive learning climate. Groups with supportive communication more easily completed game challenges and demonstrated better cooperation than groups with minimal communication. This supports Johnson & Johnson's (2014) finding that supportive communication within groups can strengthen a sense of belonging, solidarity, and active engagement in the learning process. Nonverbal Communication in Physical Education

Physical education has distinct characteristics compared to classroom instruction, as many activities are conducted physically on the field or in open spaces. This often makes verbal communication less effective, making nonverbal communication the primary alternative. For example, in basketball, players often use eye contact or hand gestures to direct the ball to their teammates. Similarly, in volleyball, players often signal with their fingers or body position to strategize their serves and attacks. The presence of nonverbal

communication demonstrates that physical education can provide a space for students to develop multichannel communication skills. They not only learn to speak but also to interpret nonverbal signals in the context of teamwork. These skills are highly relevant to social life outside the classroom, as in everyday situations, communication cannot always be carried out verbally.

### **Communication and Trust Building**

Trust among team members is a crucial prerequisite for collaboration. According to Tuckman, initial conflicts (the storming phase) in group dynamics can be overcome if members are able to engage in open and honest dialogue. In physical education, positive communication, such as providing encouragement, support, and healthy criticism, helps strengthen trust. Students who are accustomed to communicating openly build trust more quickly, enabling effective teamwork. Trust grows through open communication. Good group communication increases student

participation in physical activities. They feel heard, valued, and have made a real contribution to the group's success. This fosters a sense of shared responsibility, where success is no longer seen as an individual achievement but rather as the result of group synergy.

Furthermore, positive communication also increases student motivation. Words of support, cheers, or praise from other members can boost self-confidence and encourage students to perform better. Thus, group communication not only impacts cognitive aspects but also affective aspects of students.

Tuckman stated that the storming phase (initial conflict) can be overcome if members are able to engage in honest dialogue. In Physical Education, students who are accustomed to encouraging one another and accepting criticism in a healthy manner build trust more quickly.

### **Communication for Social-Emotional Skills**

In addition to supporting physical performance, group communication also contributes to developing students' social-emotional skills. Through group interactions, they are trained to develop active listening skills, demonstrate empathy, and resolve conflicts constructively. Trilling & Fadel (2009) emphasize that communication skills in sports support 21st-century competencies, including teamwork, empathy, and problem-solving. Physical education teachers can assess these aspects by observing students' interactions while working together in groups.

### **Communication as a Means of Conflict Resolution**

Collaborative learning in physical education often gives rise to conflict, whether due to misunderstandings, differing strategies, or competition between individuals. Without effective communication, these conflicts can escalate into conflicts that are detrimental to the learning process. However, this





study's findings indicate that open communication within groups can be an effective solution.

Students who are taught to discuss differences of opinion communicatively tend to be better able to control their emotions and find a compromise. For example, when there is a disagreement about who should be team captain, assertive communication that fosters mutual respect reduces tension. In this way, conflicts are not only resolved but can also serve as a means of social learning for students. This aligns with Slavin's (2015) view that collaborative learning can develop interpersonal problem-solving skills if supported by healthy communication.

### **The Role of Teachers as Communication Facilitators**

A Physical Education teacher not only teaches movement skills but also facilitates communication within the group. Teachers can implement strategies such as: 1) Assigning small groups to different roles (e.g., captain, strategy

recorder, motivator); 2) Providing a post-activity reflection session to evaluate the communication process within the team; 3) Integrating communication assessment as part of the Physical Education assessment rubric.

Physical education has a strong social dimension, where interaction between students is part of the learning process. Group communication encourages students to listen attentively, speak clearly, and respect diverse ideas. These skills are not only relevant in sports activities but also play a vital role in students' social lives. The ability to communicate effectively enables students to build strong interpersonal relationships and work collaboratively in various organizations, as well as face future challenges that require cross-disciplinary collaboration. Thus, teachers play a role in fostering a healthy and democratic communication culture in the Physical Education classroom.



### **Implications of Implementation Challenges for Physical Education Teachers**

These findings have direct implications for the role of physical education teachers. Teachers serve not only as instructors of sports techniques but also as facilitators in group communication. Teachers can design learning activities that encourage student communication, whether through pre-game strategy discussions, post-activity group reflections, or assigning leadership roles to specific students.

Furthermore, teachers need to emphasize the importance of supportive communication within groups. Students can be trained to practice giving positive feedback, motivating teammates, and conveying constructive criticism. This strategy not only improves the quality of physical education learning but also helps students become more open to communication, willing to work collaboratively, and able to solve problems effectively. The implementation of group communication in physical

education is not without its challenges, including: 1) Differences in communication skills among students; 2) Dominance by certain individuals leading to the passivity of others; 3) Group conflicts arising from misunderstandings or differences in strategies; 4) To overcome these obstacles, teachers can take several solution steps, such as providing basic communication skills training, establishing clear roles in the team, and providing gradual guidance (scaffolding) so that students become accustomed to communicating effectively.

Undeniably, the dynamics of communication within a group present certain challenges. Some obstacles that arise include the dominance of certain individuals, the lack of communication skills on the part of some students, and differences in background and ability that can trigger minor conflicts.

To address this, a teacher can adopt an inclusive and adaptive approach. For example, by establishing group communication rules, assigning equal



roles to each member, and using a leadership rotation method to give students the opportunity to contribute.

Based on the analysis, it can be concluded that group communication is a key element in the successful implementation of collaborative learning in physical education. Without communication, collaboration becomes a meaningless formality. Conversely, effective communication can make physical education a strategic vehicle for developing physical skills as well as students' social and emotional intelligence. Based on the analysis, it can be concluded that group communication is a key element in the successful implementation of collaborative learning in physical education. Without communication, collaboration becomes a meaningless formality. Conversely, effective communication can make physical education a strategic vehicle for developing physical skills as well as students' social and emotional intelligence.

Communication serves not only to convey technical messages but also as a means of strengthening social skills, motivation, participation, and shared responsibility. The teacher, as facilitator, plays a central role in ensuring effective group communication so that physical education learning objectives can be optimally achieved.

#### **D. Conclusion**

The study results indicate that group communication plays an important role in building coordination, increasing student engagement, fostering mutual trust, and developing social and emotional skills. This article also discusses the practical implications for physical education teachers in designing communication-based learning strategies. Thus, group communication is an important foundation for the success of collaborative learning in physical education.

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