



Active Insight: Evidence in Action



Tip #829: Cooperative Problem-Solving Through Games

Overview

Cooperative games shift the focus of physical education from individual performance to collective problem-solving, building communication, strategic thinking, and mutual support alongside movement skills. When students work together to achieve a shared physical goal, such as maintaining possessions, completing a cooperative challenge, or navigating a constraint-based task, they develop the social and tactical skills that underpin effective teamwork in sport and life. These learning opportunities are most powerful when teachers pause gameplay to facilitate genuine tactical discussion.

Key Teaching Ideas

Cooperative game design works best when the rules are structured so that individual success is impossible without collective effort. Teachers can use constraint-led approaches, for example, requiring every team member to touch the ball before a shot can be attempted, to encourage communication and interdependence. Pausing gameplay for brief tactical discussions using open-ended questions such as "How can you create more space?" or "How are you supporting the player with the ball?" develops students' ability to analyse and adapt their strategies. The debrief after the game is as important as the game itself.

Practical Application

- **Possession-Based Challenges:** Teams score points by completing a set number of consecutive passes rather than by scoring a goal, requiring constant communication and spatial awareness to maintain possession under pressure.
- **Role-Dependent Gameplay:** Assign specific interdependent roles to team members so that each player must rely on others to succeed, for example, designating rescuers who are the only players allowed to unfreeze tagged teammates.
- **Tactical Time-Outs:** Pause gameplay regularly to ask teams open-ended questions about their strategy, then give them two minutes to discuss and implement a change before resuming.



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- **Asymmetrical Game Scenarios:** Create uneven team numbers or varied constraints to challenge students to adapt their strategies collaboratively, for example, a four versus two invasion game where the smaller team must focus heavily on defensive communication.
- **Shared Target Challenges:** Design target games where students must work together to achieve a cumulative score within a time limit, requiring shared decision-making about who attempts each target and in what order.

Next Steps

Further explore the [Active Education Australia website](https://activeeducationaustralia.edu.au) which offers tools for facilitating tactical discussions and student-led problem solving.

References and Research

1. Breed, R., & Spittle, M. (2021). *Developing Game Sense in Physical Education and Sport*: How game-centred learning develops tactical awareness, communication, decision-making and collaborative problem-solving through modified games.
2. Australian Sports Commission. *Playing for Life*: How modified games and inclusive, student-centred activities promote cooperation, engagement and purposeful learning through play.
3. Bunker, D., & Thorpe, R. (1982). *A Model for the Teaching of Games in Secondary Schools*: How Teaching Games for Understanding develops tactical thinking, teamwork and decision-making by placing game understanding before isolated skill instruction.