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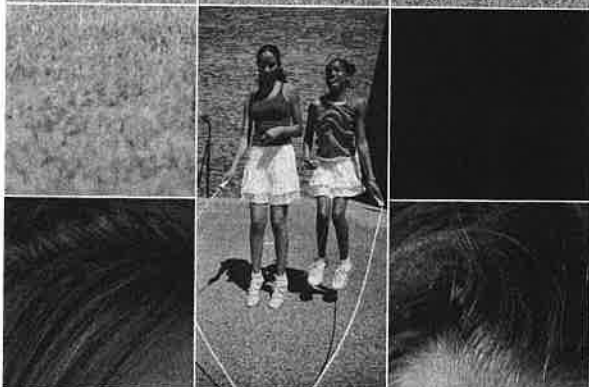
chapter

12

PEER TEACHING

*"I Teach You,
Then You Teach Me"*

Think back to when you were a child, trying to learn all of the many things children learn outside the formal schooling process. Besides your parents, who were your most frequent teachers? Most likely your friends, playmates, and siblings first taught you many of the basic social, communication, cognitive, and psychomotor skills that you took into and through your early years in school. You probably learned how to play sports, ride a bicycle, jump rope, sing songs, and play games like hopscotch by being told how and shown by your siblings and friends. It is rare for adults to be around while children play during the day in their neighborhood, so young people rely on each other to teach them how to do the many things they learn as they grow up. Even in school, you probably still learned much from your fellow students, although most of your academic teaching was carried out by your teachers. We have known for a long time that children can teach other children and that in some ways those peer teachers can be as or more effective than adult teachers. Wagner (1990) presents a history of Peer Teaching that begins as early as the classical Greek period with Aristotle and extends uninterrupted into modern-day



educational settings. Peer Teaching takes many forms and is conducted under a variety of labels, but its most fundamental feature is clear: to structure a learning environment in which some students assume and carry out many of the key operations of instruction, directly, assisting other students in the learning process.

The Peer Teaching model evolved from a number of teaching strategies that share the common feature of students helping other students learn. Many of these Peer Teaching strategies were developed as variations within Direct Instruction, so the basic operations of these models are often similar—differing mainly in who carries them out in class.

Three concepts related to the Peer Teaching model need to be clarified and kept in mind throughout this chapter. First, the Peer Teaching model obviously relies on strategies that use students to teach other students, but it becomes the Peer Teaching model *only* when a teacher plans for and follows a model-based approach—like the one presented in this chapter. Second, Peer Teaching is not the same as *partner learning*, in which students are paired together for one or more learning activities to learn “side by side.” In order for instruction to be Peer Teaching, one student must be given the explicit responsibility to carry out several key instructional operations normally assumed by the teacher. There must be a clear tutor–learner role delineation, even though those roles can be reversed on a regular basis. Third, Peer Teaching is not to be misinterpreted as Cooperative Learning (Chapter 10) on a smaller scale. True, Cooperative Learning does feature students teaching other students, but that model uses a very different overall plan and places students into small “teams” that stay together for an entire content unit. Also, in Cooperative Learning, students most often learn together rather than actually teach each other.

The most recognizable version of Peer Teaching in physical education is Mosston and Ashworth’s (2002) Reciprocal Style, in which one student is designated as the Observer (the tutor) and the other student is designated as the Doer (the learner). This style does maintain the most essential feature of Peer Teaching, but it is meant to be used as a temporary task structure and is not usually designed as the only instructional strategy in a content unit. Physical education teachers have been using the Reciprocal Style strategy for many years, but it differs somewhat from the Peer Teaching model presented in this chapter.

OVERVIEW

As mentioned earlier, the Peer Teaching model can be considered a variation of Direct Instruction. As you learned in Chapter 8, Direct Instruction places the teacher in charge of making and implementing nearly all content, managerial, task, and instructional decisions in a unit and lesson. In the Peer Teaching model, the teacher retains control over all of those same elements, except one: instructional interactions that occur during and after students’ learning trials. That important responsibility is delegated to students called tutors, who have been trained to observe and analyze other students’ practice attempts.

The reality for most physical education teachers is that because they have a large number of students in a class, it is practically impossible to directly observe every practice attempt made by every student as it occurs. Even when a teacher achieves a high feedback rate, each individual student is likely to receive only a few feedback comments in a lesson. To illustrate the point even more, let's assume that a teacher gives performance feedback in class at the rate of 2 per minute in a 30-minute lesson with 40 students. That means he makes a total of 60 feedback statements during the entire class. So, if those feedback comments are evenly distributed, each student would receive only 1.5 feedbacks *per class* from the teacher. If, say, each student averaged 30 skill attempts in class, only 5 percent of those attempts would have been observed by the teacher and given performance feedback. Even though there is some debate over the role of performance feedback in the learning process in physical education (Rink, 2003), it would be difficult to think that student learning would occur faster with so little feedback.

Terminology in the Peer Teaching model can sometimes be confusing. To reduce the potential for confusion, let's differentiate among four terms that will be used frequently in this chapter:

1. *Tutor*: A specific student temporarily assigned the role of teacher
2. *Learner*: A specific student who practices under the observation and supervision of a tutor
3. *Dyad*: A tutor-learner pair
4. *Student*: The general term used to describe students in class when they are not in the role of tutor or learner

The Peer Teaching model is based on an accepted trade-off intended to reduce the problem of too little teacher observation of practice attempts and very limited feedback received by students. Actual *opportunities to respond* (OTR) in class are essentially cut in half in the Peer Teaching model, since each student spends approximately one-half of the activity time as a tutor and approximately one-half practicing as a learner. However, when in the learner's role, each student in effect has a private tutor to observe and analyze each practice attempt—increasing the effectiveness of that learning time. And, when in that role, the tutor cognitively engages in a way that can increase her own comprehension of the task, thereby contributing to improved practice when it is her turn. Even though students typically get fewer OTR in Peer Teaching, the increased effectiveness of practice time will allow the teacher to cover considerably more, not less, content in a unit of instruction.

Proponents of Peer Teaching also point to the social learning that occurs within the model. Both members of the dyad become dependent on each other in ways that do not occur in other teaching models. The tutor must pay close attention to the task presentation and task structure given by the teacher, apply good concentration when observing skill attempts, have good verbal communication skills when giving cues and feedback, and be sensitive to the abilities and feelings of his temporary charge. The learner must be willing to

accept the tutor's comments, to ask questions when the tutor is not clear, and to practice diligently under direct observation of each attempt. As students alternate between these two roles in class, they begin to develop a relationship based on a shared level of responsibility not given to them in most other teaching models.

The Peer Teaching model also has great potential to enhance students' cognitive development in physical education. In order to be a good tutor, a student must grasp key performance cues and understand the relationship between those cues and the outcome of each practice attempt. Using golf as an example, it is not helpful for the tutor to simply state the obvious: "Your shot went off to the right." The tutor must be able to identify the source of mistakes and provide good learning cues for the next attempt: "It went to the right because you lifted your head on the backswing, and that caused you to open the club face. Be sure to keep your head down throughout the whole swing next time." In essence, the tutor is developing problem-solving skills that can improve his own level of understanding and performance of movement skills.

One of the things that makes Peer Teaching an instructional model and not just partner learning is the degree to which the tutors are prepared and trained for their role as teacher-of-the-moment. In order for the model to be most effective, the teacher must help tutors understand and carry out the operations for which they will assume responsibility. It is not simply telling one student to "go teach" another student. A good training plan for the tutoring role should include:

1. Clarification of the learning objectives
2. Expectations of tutors (what they should and should not do)
3. Task presentation and check for understanding
4. Task structure and check for understanding
5. How to communicate errors to learners
6. How to provide praise appropriately
7. How to practice safely
8. How to assess mastery or task completion
9. Knowing when to ask questions of the teacher

Keep in mind that the Peer Teaching model calls for the tutors to lead only a small portion of the instructional process; the teacher retains much of the decision making and leadership—much like the Direct Instruction model. Research by Ellis and Rogoff (1986) suggests that many students are not capable of seeing the big picture in a content unit, nor are they able to orchestrate more than a small portion of the complex learning environment. Tutors can carry out some of the teacher's plans for instructional operations, but the tutors are rarely able to make those plans on their own. Ellis and Rogoff report that tutors could handle only two of the three key instructional components typically carried out by the teacher: task management, instructional information, and social management. Therefore, the tutor's role is probably best limited to

receiving directions from the teacher and acting as the teacher's proxy in tasks with limited time and complexity. However, that limitation should in no way keep a teacher from selecting the Peer Teaching model in physical education. Due to the nature of many physical education learning activities, the tutor's ability to "be the teacher's eyes, ears, and voice" in directly observing the learner's practice attempts can serve a vital role in the learning process.

Greenwood, Carta, and Kamps (1990) compared the advantages of teacher-mediated and student-mediated instruction, and found that Peer Teaching fared quite favorably (see Exhibit 12.1). This analysis makes it clear that students can benefit greatly from engagement in the Peer Teaching model, despite some of the stated disadvantages. Actually, many of the disadvantages will be reduced or eliminated completely the more times a teacher uses this model and is able to anticipate some of the inherent problems.

In the end, the Peer Teaching model comes with the same stipulation as every other model in this book: when the model is selected to match a unit's learning goals, can meet the contextual demands for the unit, and is implemented according to the model's design, it will effectively increase student achievement of stated learning goals in physical education.

Comparing teacher-mediated and peer-mediated instruction.

EXHIBIT 12.1

TEACHER FACTOR	TEACHER-MEDIATED	PEER-MEDIATED
<i>Advantages:</i>		
Pupil/teacher ratio	High	Low
Engaged time	Variable	High
Opportunities to respond	Low	High
Opportunities for error correction	Low	High
Immediacy of error correction	Delayed	Immediate
Opportunities for help and encouragement	Few	Many
Opportunities for both competitive and cooperative learning experiences	Few	Many
Motivation	Teacher support	Peer plus teacher support
<i>Disadvantages:</i>		
Peer training requirements	Few	Many
Quality control requirements	Few	Many
Content coverage	Good	Variable
Peer selection	Not required	Required
Curriculum adaptations	Few	Many
Costs	High	Low
Ethical concerns	Few	Increased

From Greenwood, Carta, and Kamps (in Foot, Morgan, & Shute, 1990, p. 191)

