Using Classwide Peer Tutoring to Facilitate
Inclusion of Students with Disabilities in Regular Physical Education

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Abstract

Regular physical educators want to provide quality, individualized instruction to all their students. However, with class sizes of 25 or more, it is often difficult if not impossible for regular physical educators to go around and see all their students to give them instructional cues, corrective feedback, and reinforcement. This situation is compounded when students with disabilities who need more individualized attention and curricular/instructional adaptations are included in regular physical education. Regular physical educators are faced with the dilemma of spending too much time with the student with disabilities at the expense of the other students or run their program as usual at the expense of the student with disabilities. One solution to this problem is using peers as teachers. One approach to peer tutoring that has proven to be effective in regular education classrooms is classwide peer tutoring. Similar to Mosston's reciprocal style of teaching (Mosston & Ashworth, 1986), classwide peer tutoring involves students taking turns teaching each other specific skills. The purpose of this paper is to introduce classwide peer tutoring and provide an example of how it can be used to facilitate more appropriate inclusion of students with disabilities in regular physical education.
Using Classwide Peer Tutoring to Facilitate

Inclusion of Students with Disabilities in Regular Physical Education

Many school systems in around the country have adopted an inclusive philosophy for their students with disabilities (Snell & Janey, in press). As such, an ever increasing number of students with disabilities are being placed in their home school (the school they would attend if they did not have a disability) in regular education classrooms (Brown et al., 1991; Snell & Janey, in press; Stainback & Stainback, 1990). In terms of physical education, inclusion has resulted in many more students with disabilities being placed in regular physical education (Jansma & Decker, 1990).

Inclusion and the subsequent diversity that accompanies it can actually be beneficial to both students with and without disabilities (cf, Franca, Kerr, Reitz, & Lambert, 1990; Peck, Donaldson, & Pezzoli, 1991; Putnam, 1993; Snell & Janey, in press). Yet, diversity can be extremely difficult to deal with, particularly if regular physical education staff are not properly prepared (Lavay & DePaepe, 1987). Unfortunately, many regular physical educators do not feel that they have the training or competence to deal with diversity in regular physical education, particularly when it means providing appropriate supports and individualized education programs to students with disabilities (Block & Rizzo, 1993; Mathieson & Herring, 1990). For example, a recent statewide survey of physical educators in Virginia found that only 9 of the 104 physical educators who said they served students with disabilities had formal training in adapted physical education (Mathieson & Herring, 1990). Most of these respondents felt that they were not prepared to provide
appropriate planning, assessment, prescription, teaching, and evaluation for students with disabilities. In addition, very few counties in Virginia were found to have trained adapted physical educators who can provide consultative and direct support to regular physical educators (Mathieson & Herring, 1990). This picture is probably not unique to Virginia, and no doubt many regular physical educators across the country feel helpless when it comes to accommodating the needs of their students with disabilities. In turn, many students with disabilities are not receiving appropriate physical education services when included in regular physical education (Grosse, 1991).

What regular physical education teachers need is a technique that can be used to help them adequately deal with the diversity seen in inclusive physical education programs. Such a technique must be able to accommodate individual differences ranging from students who are very skilled to those with very limited skills. Such a technique also must provide quality instruction to all students including individualized instruction to students with disabilities. Quality instruction includes such factors as making sure all students (a) experience high levels of success, particularly during the early phases of learning, (b) work on skills geared to their individual abilities and needs, (c) know exactly what they should be working on, (d) receive direct instructional cues, (e) are given lots of opportunities to practice targeted skills with instructional and reinforcing feedback (e.g., "good throw John, but this time try to step with your other foot"), and (f) on-going monitoring or assessment of progress (Delquadri, Greenwood, Whorton, Carta, & Hall, 1986; Greenwood, Carta, & Kamps, 1990; Kelly et al., 1991). Finally, given budgetary cutback and larger class enrollments, such a technique
must be easy-to-administer and cost effective if it is to be used by regular physical educators.

Such a technique is class-wide peer tutoring (CWPT), a form of peer-mediated instruction. CWPT instructional techniques have been suggested as a viable supplement to teacher-mediated instruction in physical education settings (e.g., Byra & Marks, 1993; Goldberger, Gerney, & Chamberlain, 1982; Mosston & Ashworth, 1986). Many also have argued that peer-mediated instructional techniques (including CWPT) could be an effective means of providing quality instruction to students with disabilities who are included in regular physical education (e.g., Block & Krebs, 1992; Block & Vogler, 1994; Sherrill, Heikinaro-Johansson, & Slininger, 1994).

Classwide Peer Tutoring

CWPT was originally developed by a group of educators and researchers at the Juniper Gardens Children's Project at the University of Kansas to improve basic academic skills of children who were "at-risk" or who had mild disabilities (Delquadri et al., 1986; Greenwood, Carta, & Hall, 1988; Greenwood, et al., 1987). It is similar to the reciprocal style (style C) of teaching in physical education described by Mosston and Ashworth (1986). In essence, CWPT involves pairs of students working together and taking turns in the roles of tutee (practicing targeted skills) or tutor (providing instructional cues and feedback). Contrast this with traditional peer tutoring models in which one student (usually a skilled student or older student) tends to be the tutor the entire time while the other student (usually a less skilled student or student with a disability) tends to be the tutee the entire time (e.g.,
DePaepe, 1985; Long, Irmer, Burkett, Glasenapp, & Odenkirk, 1980; Webster, 1987). Tutee and tutor roles are highly structured and scripted. The tutee knows exactly what he/she should be working on while the tutor knows exactly what components of a skill to look at, how to give feedback, and how to mark the data sheet. In this way, tutees receive immediate feedback on virtually every performance increasing the likelihood of correct performance (Mosston & Ashworth, 1986). While peer tutoring is in effect, the teacher monitors the tutoring procedures, verifies data sheets, and awards bonus points for good tutor-tutee behavior (Delquadri, et al., 1986; Greenwood, Carta, & Hall, 1988; Greenwood, Carta, & Kamps, 1990; Maheady, Harper, & Mallette, 1991; Mathes, Fuchs, Fuchs, Henley, and Sanders, in press).

**General CWPT Procedures**

CWPT procedures have been described by Greenwood and his colleagues (e.g., Greenwood, Delquadri, & Hall, 1989; Greenwood et al., 1987; Greenwood, Terry, Mayer, & Finney, 1992), and include the following four critical components: (a) weekly competing teams, (b) highly structured teaching procedures, (c) daily point earnings with public display of student performance, and (d) direct practice of motor skills. Each week, the class is randomly divided into two competing teams. The teacher then assigns students within each team to tutoring pairs. In cases in which students cannot read or who have difficulty following the task sheets, triads can be formed with two students who can follow the procedures and one students who cannot. Teams and pairs remain the same for the entire week.
Once the class has been divided and partners established, the teacher introduces the skill focus for the week. Each student has a checklist that includes a picture of the skill, a listing of components of the skill, specific challenges to encourage practice of the skill, and feedback cues (see Figure 1 for an example). These checklists can have different focal points for lesser skilled students or students with disabilities who are at different levels of the skill. In addition, checklists that focus on completely different skills can be designed for students with disabilities who need work on other skill areas (e.g., child who uses a wheelchair and cannot jump rope might have a checklist that focuses on pushing their wheelchair over and around obstacles). The teacher then demonstrates the skill to the class while the children sit and watch. Children then stand up and attempt to perform the skill on their own. The teacher provides some general cues and feedback to the students while they practice the skill as a group. For review purposes, the teacher then has one partner dyad demonstrate CWPT procedures. The above process is usually followed each day just prior to the CWPT session to make sure that students have a basic understanding of the skill, how to perform it, and how to analyze it.

insert Figure 1 about here

Once the skill has been introduced and CWPT procedures reviewed, CWPT begins. Each CWPT session lasts anywhere from a few minutes to as long as 20 minutes. One method we have found to be effective is having one student in each pair serve as a tutor for a
set period of time (perhaps 2-3 minutes) or a set number of turns (perhaps 10-15 turns) while the other student serves as the tutee. They then switch roles for a similar amount of time or trials. The tutor begins by asking the student to perform the particular skill and challenge focusing on a particular component of the skill (e.g., throw the ball overhand towards the target, and I am going to watch and see if you step with the opposite foot). The tutee then performs the challenge while the tutor observes this component of the tutee’s performance. If the component is performed correctly (in the case above, the student steps with opposite foot), then the tutor says "good stepping and throwing" and awards the student two points. However, if the tutee responds incorrectly, then the tutor: (a) provides the correct response (demonstration or shows picture of correct performance), (b) requires tutee to then demonstrate the correct pattern three times, and (c) gives one point for correcting the performance. If the tutee fails or refuses to correct the performance, no points are awarded. The tutor then asks the tutee to perform the next challenge.

During CWPT, the physical education teacher moves about the gym and verbally rewards dyads for following CWPT behaviors correctly (rewards usually vary from 1-5 points depending on the behavior). Correct behaviors include: (a) providing clear, succinct presentation of challenges, (b) giving points appropriately, (c) following error correction procedures, and (d) providing supportive comments and assistance.

After each tutoring session, students total their daily points and record them on laminated scoreboards that is placed in front of the gym. At the end of the week, team totals are added up, and the team with the most points receives an award (e.g., five minutes of
free time in the gym on Friday).

**Student Training**

Students have to be trained in CWPT procedures, particularly how to observe skills and give feedback, if the program is to be successful. Training can take place during regular physical education and usually takes one to two 30 minute sessions. In addition, daily reviews of procedures should be provided to make sure students follow procedures correctly. We have found training procedures similar to those outlined by Harper, Mallette, Maheady, Parkes, and Moore (1993) to be effective. These procedures are as follows:

1. CWPT is demonstrated by the teacher with a volunteer student.
2. Two students then model CWPT procedures.
3. Dyads are formed and the entire group practices CWPT procedures for an abbreviated period under close supervision.
4. The group is brought back together to answer any questions.
5. New dyads are formed and the entire group practices CWPT procedures a second time for an abbreviated period under close supervision.
6. The group is again brought back together to answer any questions.
7. This procedure continues until the teacher feels that 90% can perform classwide peer tutoring correctly.

**Example of Classwide Peer Tutoring**

A second grade class of 20 students has been working on jumping rope. One of the students in this class has a relatively severe motor delay (approximately three years behind
her peers) and ataxic tendencies (poor overall coordination). Another student in the class has an attention deficit hyperactive disorder (ADHD) and behavior problems (can be non-compliant and belligerent to teacher and to peers). The remaining students in the class have varying motor skill levels ranging from high skilled to low skilled and everything in between (typical range for a second grade class). These students receive physical education five days per week, but only three days a week are used for specific skill work. They are served by one physical education specialist with no teacher assistants or other supports provided.

The physical education teacher has planned a two week jump rope unit (six class periods), and he planned on using CWPT during the skill focus part of the lesson plan (he chose not to split the group into two teams, so there was not team competition during this unit). The first day of the unit was for pre-assessment. The physical education teacher told the class that they would be involved in a jump rope unit for the next few weeks, and that today would be used for free time to practice jumping and for pre-assessment. The physical education teacher then gave all students jump ropes and went around pre-assessing the students on the components of jumping rope (see Figure 1). That evening, he determined the present level of performance for all students in the class and decided what component they would focus on the next few days. He then developed task sheets for jumping rope that included variations for students at different skill levels. Most students had sheets that had the student practicing all of the components of the jump but, based on pre-assessment data, practicing certain components more than others. For example, some students spent more time practicing "wrists make small circles" while other spent more time on "jumps on toes
softly." (see two contrasting sheets in Table 1). Since most of the students were at similar levels, many of the task sheets looked the same. Some students who already could demonstrate all the components of jumping rope had more challenging activities and jump rope stunts listed on their sheets (e.g., cross over, jumping backwards, straddle jumps). Since pre-assessment revealed that the student with a motor delay could not jump rope, a special sheet was made for her that focused on jumping over a rope that was placed on the floor (she was still learning how to jump by taking off and landing on two feet). She also spent some time practicing turning the rope over her head in attempts to coordinate turning with jumping. The physical education teacher labeled the task sheets, and they were ready to be given to each student the next day.

The next day (after warm-up activities) the physical education teacher reviewed the components of jumping rope. He took time to demonstrate and have the class focus on each component, and explained why each component was important. He then had all the students stand without jump ropes and take a few minutes to pretend that they were jumping rope and focus on each component. He then gave students their task sheets and paired them up (based on who could work well together rather than skill level - this was particularly important for the student with ADHD and behavior problems). The physical education teacher then spent a
few minutes reviewing the task sheets and reminding the group how to work together. He brought up one dyad to have them demonstrate how to focus on specific components of the skill, how to give feedback, and how to fill out the task sheets (students had done CWPT before with other skills, so this was more or less a review and introduction to the jump rope task sheet). This entire process took approximately seven minutes the first day, but subsequent days went much faster as students became more familiar with the skill and the task sheets.

Students then went off and worked in pairs for approximately 10 minutes. Students were told that one partner would practice the skill for 10-15 jumps while the other partner focused on specific components. They would then switch roles. For example, a student who was working on "jumps on toes softly" would jump five times in a row while his partner watched his performance. His partner would then comment on the jumps following the scripted feedback portion of the task sheet (most of the students had pretty much memorized how to give positive feedback and how to give corrective feedback). In this case, this student was jumping too high and his partner said "you are still bouncing too high, look at the picture and try again." After looking at the picture, the student began to demonstrate softer, lower jumps, and his partner then said "good, those were soft jumps." They then switched roles.

Across the gym, the student who had a motor delay was practicing jumping over a rope placed on the floor. She was given feedback by her partner on trying to bend her knees to a 45° angle in the ready position, keeping her feet together during take-off, and keeping