

# Implementing a Peer Tutor Program: Strategies for Practitioners

Jean-Paul Barfield, Steve Hannigan-Downs and Lauren J. Lieberman

## Abstract

With the integration of students with disabilities into regular physical education classrooms, practitioners are challenged to provide adequate supports to insure beneficial learning environments. The use of students as peer tutors is one such support. Peer tutoring enhances motor performance, cognitive comprehension, attitudes, and physical education academic learning time (ALT-PE) of both tutees and tutors with differing abilities. Empirical research lends credence to the implementation of peer tutoring programs, but few strategies to include peer tutoring in the physical education setting have been documented. In this article four peer tutoring implementation strategies are discussed: (a) dyads with specific instruction, (b) peers to increase the ALT-PE of students with disabilities, (c) cross-age peers, and (d) class-wide peers. These strategies represent techniques that practitioners can use to enhance and assess the motor and cognitive capabilities of students both with and without disabilities. The recruitment and training of peer tutors, implementation of the tutor program, and assessment of tutee and tutor performance gains are detailed for each strategy. Checklists of the peer tutoring implementation strategies are provided to enhance program success.

## Implementing a Peer Tutor Program: Strategies for Practitioners

The integration of students with disabilities into regular physical education classrooms is now the rule rather than the exception (Houston-Wilson, Dunn, van der Mars, & McCubbin, 1997). As a result, physical education practitioners are having to adapt teach-

ing strategies to meet the demands of new classroom dynamics. Practitioners are forced to use creative practices to insure that all students with disabilities are taught in an appropriate instructional environment. The use of students, or peer tutors, to enhance the necessary support for students with disabilities is one such practice (Block, Oberweiser, & Bain, 1995). Peer tutors are financial and academic assets that increase one-on-one instruction for students with disabilities at the primary and secondary levels (Block et al., 1995; Fulton, LeRoy, Pickney, & Weekley, 1994; Houston-Wilson, Lieberman, Horton, & Kasser, 1997).

## Peer Tutor Benefits

The major advantage of peer tutors for students with disabilities is the enhancement of academic learning time in physical education (ALT-PE) (DePaepe, 1985; Hill & Miller, 1997; Houston-Wilson et al., 1997a; Lieberman, Newcomer, McCubbin, & Dalrymple, in press; Webster, 1987). Resultant of increased learning time, peer tutoring increases motor performance as well as social and communicative acts (Goldstein, Kaczmarek, Pennington, & Shafer, 1992; Houston-Wilson et al., 1997a; Romer, White, & Haring, 1996). It has also been found to minimize problem behaviors, increase opportunities to respond, and enhance activity comprehension and physical activity levels (Fuchs, Fuchs, Mathes, & Simmons, 1997; Houston-Wilson et al., 1997a; Lieberman, 1995; Martella, Marchand-Martella, Miller, Young, & Macfarlane, 1995).

Peer tutoring in the physical education classroom setting improves the skills of the tutee as well as the tutor (Lieberman, 1995). For students without disabilities, peer tutoring enhances disability awareness as well as

provides academic gains through constant repetition of a skill (Cushing & Kennedy, 1997; English, Goldstein, Kaczmarek, & Shafer, 1996). However, students with mild disabilities can also instruct and critique critical components of a skill and therefore be effective tutors (Balenzamo, Agte, McLaughlin, & Howard, 1993; Marchand-Martella & Martella, 1993). The factor that makes peer tutoring most practical and efficient is that neither race nor gender affects tutoring effectiveness (Beirne-Smith, 1991). With the overwhelming benefits to both tutor and tutee, empirical research promotes the implementation of peer tutoring (Block et al., 1995; Byra & Marks, 1993; Houston-Wilson et al., 1997a; Lieberman, 1995; Long, Irmer, Burkett, Glasenapp, & Odenkirk, 1980; Roswal et al., 1995). However, few strategies are presented in the literature for the physical education setting. The purpose of this article is to provide practical strategies for developing peer tutoring programs in physical education classrooms.

### *Goals and Objectives of a Peer Tutoring Program*

Depending on the individual needs of the tutor and tutee, different goals and objectives for the peer tutoring program may exist within one physical education classroom. However, if there is one common goal for all peer tutor programs, it is to afford students of all ages and ability levels an opportunity to interact and participate together in an integrated learning environment. Specific objectives of the peer tutoring program may include:

- To afford extra opportunities for physical fitness and motor abilities for all students;
- To provide appropriate peer models fostering age-appropriate social interactions for students with disabilities;
- To offer students with motor difficulties effective skill demonstrations using skilled peer tutors;

- To increase opportunities to perform skills appropriately for students with disabilities;
- To provide appropriate models for behavior;
- To encourage the desire to participate and improve in physical activity;
- To foster and allow students with disabilities the opportunity to establish extended friendships outside the physical education class;
- To increase awareness and sensitivity of peers toward students with disabilities and encourage more favorable attitudes toward this population; and
- To increase understanding of nondisabled peers that all people have individual strengths and needs.

### *Developing a Peer Tutoring Program*

Once the practitioner has decided to implement a peer tutoring program and identified qualified students who may be interested (Table 1), he/she should contact parents of prospective tutees and tutors to obtain permission for the involvement of the child (Table 2). Information should also be provided which defines the tutoring program as a method to enhance the learning environment for both the tutee (unidirectional) and the tutor (bi-directional). That is, all students can benefit from participation in a peer-tutor program. These include opportunities to have peer instruction, provide leadership, and ideally empower a dynamic new relationship based on understanding and responsibility.

Regardless of the peer tutoring methodology, peer training is an essential ingredient to every tutoring program (Houston-Wilson et al., 1997a; Lieberman, 1995). Characteristics of peer tutor training include: (a) disability awareness (Houston-Wilson et al., 1997b), (b) clear instructions (Martella et al., 1995), (c) teaching strategies (Lieberman, 1995) (d) role play (English et al., 1996; Martella et al., 1995), (e) feedback for tutors (English et al., 1996; Martella et al., 1995), and (f) tutor

Table 1. Peer Program Interest Form<sup>1</sup>

Name \_\_\_\_\_ Age \_\_\_\_\_  
Address \_\_\_\_\_  
Telephone \_\_\_\_\_ School \_\_\_\_\_

Are you interested in participating in a physical education class with other students who may have some type of disability?  
( ) Yes ( ) No

If yes, why would you like to participate in this class?

Have you ever played with another student who has a disability? If so, where?

What activities are you most interested in?

What period do you have free for the peer-tutoring training session to be held October 1st through October 15th?

If you don't have a free period, what is the best time for peer-tutor training?

Are you willing to meet during lunch or after school?

Please return by September 15th to:  
Ms. Jones Room 16

<sup>1</sup> Teachers should target specific classes to recruit tutors and distribute interest forms via teachers of those classes

Table 2. Parent Permission Form

Dear Parent of Guardian

Your (son/daughter)/name of student has expressed an interest in joining the Bubb School peer-tutoring program. I would like to take this opportunity to notify you of your child's acceptance into this program and with your permission, hope they will join us for this unique program.

The peer-tutoring program is designed to have students with and without disabilities working together in the physical education class. Several goals of this program are to:

- afford extra opportunities for physical fitness and motor activities for all students with and without disabilities
- provide appropriate peer models fostering age-appropriate social interactions for students with disabilities
- offer students with motor difficulties effective skill demonstrations using skills peers
- provide appropriate models for behavior
- foster increased motivation and desire to participate in physical activity
- increase awareness and sensitivity of peers toward students with disabilities and foster more favorable attitudes toward this population
- encourage and allow students with disabilities the opportunity to establish extended friendships outside the program

We would like to invite you and your child to our orientation meeting on Thursday, September 19th, from 7:00 - 8:00 p.m. in room 16 at Bubb School. Pending your approval of your child's participation, peer-tutor training will begin on Monday, October 1st and last two weeks, each session lasting 20 minutes.

If you should have any further questions, please do not hesitate to contact me at (555) 555-5555.

Sincerely,

Ms. Barbara Jones  
Peer Tutor Program Coordinator

quizzes (Houston-Wilson et al., 1997a; Lieberman, 1995). Peer training can be time consuming, however, tutor training is a necessary investment to insure quality tutor effectiveness.

## Evaluating Student Performance

Evaluating tutor/tutee progress may take one of several different forms. Most commonly these include: (a) skill product, (b) skill process, and (c) physical education academic learning time (ALT-PE). When assessing product outcomes, the practitioner may measure student performance against a class or national average (Davis, 1984). For example, the percent of successful soccer kicks or the finish time of a run sprint are product outcomes. Process outcomes focus on the critical skill elements of an activity (Davis, 1984). Instead of recording the successful soccer kicks, the practitioner assesses how many critical components the student performed during one kick. The use of ALT-PE is especially useful for students with behavioral problems who have difficulty staying on-task for periods of time. This form of assessment not only allows the instructor to recognize that a student may need a particular cue or prompt to stay on-task, but also allows the teacher to evaluate the effectiveness of using the peer tutor to help the student with the activity.

Rubrics present an assessment format or criteria for activities (Hensley, 1997; Routman, 1994). In physical education, rubrics can be used to identify critical components of specific skills (see Table 3), establish a successful outcome determinants for each grade on an activity, and/or determine the amount of time each student must participate on specific tasks (see Table 4). Rubrics can also be used to establish baseline components that students must complete prior to beginning another skill. Rubrics are practical assessment measures in that peers, practitioners, or individuals themselves can evaluate performance (Block, Lieberman, & Connor-Kuntz, 1998). Students have the right to know what they are being judged on and have a right to be part of the evaluation process (Routman, 1994). Activity or skill component rubrics provide practical goal clarification and student evaluation standards while facilitating instruction (Hensley, 1997).

Table 3. Critical Components of a Floor Hockey Shot

		Trial 1	Trial 2	Trial 3	Trial 4	Trial 5
1. Preparation	Grip includes power hand 6-12" below weaker hand	Needs Improvement/ Good/ Excellent <sup>2</sup>				
	Shoulders turned toward target					
2. Execution	Upper body rotation backward					
	Head remains down					
3. Follow-Through	Upper body rotation forward					
	Stick finishes out in front					

<sup>2</sup> Tutors should initial N.I., G., or E. to identify tutee expertise on skill completion.

Table 4. Outcome Determinant for Participation in Floor Hockey Games

		Day 1	Day 2	Day 3	Day 4	Day 5
Kevin played the puck which entered his immediate area	0 - 25% of the time					
	26 - 50%					
	51 - 75%					
	76 - 100%					
Kevin moved toward the puck which was outside of his area	0 - 25%					
	26 - 50%					
	51 - 75%					
	76 - 100%					
Kevin communicated with teammates (visually or verbally) when he wanted the puck	0 - 25%					
	26 - 50%					
	51 - 75%					
	76 - 100%					
John showed teamwork when he passed the puck	0 - 25%					
	26 - 50%					
	51 - 75%					
	76 - 100%					

### Peer Tutoring Strategies

Appropriate peer tutoring program development is dependent upon the population (e.g., an inclusive physical education class with many students with disabilities v. one student in class with a disability), situation (e.g., one meeting each week v. daily class contact), and teaching unit (e.g., throwing skills v. aquatics). Four common strategies which address these dynamics include: (a) dyads with specific instruction, (b) peer to increase the ALT-PE, (c) cross-age peers, and (d) classwide peers.

Since different situations will warrant various tutoring strategies the practitioner must decide which program would be most beneficial to the students. Regardless of the peer tutoring strategy selected, the development of any peer tutoring program involves: (a) recruiting and training appropriate peers, (b) implementing specific teaching strategies, and (c) evaluating student outcomes. The following summarizes critical aspects of each strategy and describes rationale for the possible inclusion of each within the physical education class. In order to describe tutoring techniques within this paper, John represents the tutor and Kevin represents the tutee.

### Strategy 1: Dyads and Specific Instruction

The objective of the dyads with specific instruction program is to pair one tutor without a disability with one tutee with a disability to enhance tutee skill performance. Tutee candidates include children with attention deficits or children who only follow one- or two-part commands. Example of candidates may include students with autism, mental retardation, attention deficit disorder, or learning disability. This strategy can help students experience gains in skill development, fitness development, or station-work completion.

Recruitment of dyad peer tutors is strictly intraclass. Practitioners match peer tutors/tutees across personal interests (i.e., sports, music) and ability levels. This peer tutor/tutee relationship is long-term, therefore the key tutor factor is volunteer interest. Class surveys are an efficient tool to determining the interest of a student in working with a peer with a disability. Survey questions consist of explicit tutor duties (i.e., "Would you want to spend the physical education period helping a student with a disability?"). Surveys exploring activity interests are also given to the potential tutee. Once students with high interest are delimited, the practitioner matches an appropriate tutor with the tutee.

The training of the selected tutor(s) occurs prior to peer tutoring implementation,

and again before each major activity change. The implementation of the tutor program focuses on the least prompts and positive feedback philosophy (Houston-Wilson et al., 1997b). Least prompts consists of tutor cueing, modeling, and physical assistance (if necessary) to the tutee (Dunn, Morehouse & Fredricks, 1986). The practitioner meets with the selected tutor initially to describe the least prompts philosophy, and uses of positive specific and positive general feedback. This meeting needs approximately a 20-30 minute time commitment and can be accomplished before school, or during recess periods. When implementing least prompts, the practitioner specifies how many cues (verbal or visual) John can use to entice Kevin to throw a bean bag before John models the throw. The practitioner then determines the amount of time John can model the bean bag toss before physically assisting Kevin. Positive general and positive specific feedback reinforce appropriate skill performance and clarifies why the skill is performed successfully (i.e., "nice job, Kevin, stepping forward on your throw, and good follow through").

During a second meeting, the practitioner role plays the tutee participating in a specific activity, and the prospective tutor cues appropriate skill components. The practitioner provides feedback to enhance tutor effectiveness. An additional exercise might include providing students with a disability awareness activity (e.g., blindfold basketball). Again, this second training should take no more than 30 minutes. At the conclusion of this training, the tutor is tested on the appropriate times to use least prompts and positive reinforcement. Once the tutor understands the methodology, the peer tutor program is ready for implementation.

For implementation to be successful, the practitioner completes least prompt flash cards describing critical components prior to class. Flash cards are essential because each disability is unique. An adapted physical education specialist may be an asset to the for-

mation of appropriate least prompt strategies for each tutee. For example, if the activity is an individual task, such as a soccer instep kick, the flash card has the appropriate cueing commands, ("Kevin, kick the ball with your shoelaces"), modeling components (John communicates the critical components as he simultaneously performs the components), and physical assistance ideas only as needed (John pushes Kevin's foot through the ball, only after Kevin makes no attempts to kick the ball). If the activity is a team sport, the tutor probably does not need a flash card. Team sports move at a pace for which only cueing and reinforcement are practical. During the course of the peer tutoring, the tutor records assistance techniques that were successful and those techniques that were not successful. Daily review of this log by the tutor and instructor outlines which strategies lead to positive outcomes.

Two methods accomplish assessment of the tutee: (a) peer recording, and (b) self evaluation. Peer recording consists of the tutor recording tutee completion of expected skills. For example, John, through use of a rubric (Table 4), records the percentage of time Kevin played a floor hockey puck which entered his immediate area on Monday, and again on Friday. Tutee self-evaluations also provide useful assessment measurements. Kevin can record successful outcomes on a wall chart or record the percentage of successful attempts (e.g., 7 out of 10) in a personal portfolio.

A critical component of the assessment process which frequently is overlooked is obtaining feedback from the students. That is, providing the tutor, tutee and parents with evaluation forms (Table 5) which can help identify strengths and weaknesses about the program. This may also include interviewing the students as a group, individually, communicating with parents, or asking for written evaluation to help the teacher bolster the existing or improve future peer tutor programs.

Table 5. Peer/Participant Evaluation Form

Are you a (circle one):      peer              participant

Which person did you work with \_\_\_\_\_

1. Did you enjoy being/having a peer participant in physical education?  
                  Yes              No              Not Sure
2. Would you like to continue being a peer participant in physical education?  
                  Yes              No              Not Sure
3. Did you enjoy working with a peer/participant in physical education?  
                  Yes              No              Not Sure
4. Did you find the physical education class more exciting since you were a  
 peer/participant?  
                  Yes              No              Not Sure
5. What did you learn from this experience as a peer/participant?
6. Would you choose to play with a peer/participant outside of the physical education  
 class?  
                  Yes              No              Not Sure
7. What changes would you make to improve this experience for other  
 peers/participants?

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

### *Strategy 2 - Peers to Increase ALT-PE*

Using peers to increase the ALT-PE of students with disabilities consists of a rotation of intraclass tutors with the same tutee. Each class participant tutors the tutee (unidirectional approach) for a specified period of time (e.g., for one week or an entire unit). The objective of the alternating dyads is to target children with developmental delays or attention deficits and help these children increase time on task. Tutors with above average skills can provide cues, prompts, and encouragement for the tutee in order to assist students who need more opportunities to execute successful tasks or trials. Candidates for tutees may include students with mental retardation, learning disabilities, cerebral palsy, orthopedic impairments, attention deficit disorder, and visual impairments.

Training tutors to increase the ALT-PE of students is performed as a class activity. The actual training is disguised as partner drill ex-

ercises. For example, a class dyad (or pair) performs a soccer pass. One student instructs the second student on the critical components of the skill. As the second student performs or completes the skill, the first student reinforces the accomplished critical components. Both students practice these support skills with their partner. This peer support provides both positive reinforcement and goal clarification for each skill or activity. Again, the practitioner trains tutors not to focus on skill enhancement only but also to increase the ALT-PE for tutees (Houston-Wilson, et al., 1997a).

Implementing peer tutor programs to increase the ALT-PE of students with disabilities is not complicated. The initial tutoring week commences once the practitioner recognizes attention deficits providing roadblocks to student learning. The tutor accompanies tutee throughout the class period, continuously reinforcing goals and maintaining attention through the use of cues, positive specific feedback or simply using the tutees first name. Periodic monitoring of tutor reinforcement by another observer (e.g., adapted physical educator) allows the physical educator to focus on the class.

Peer assessment is not necessary for this tutoring program. Again, the tutor is not focusing on enhancing performance, only channeling the attention span of the tutee. An adapted specialist or practitioner records the ALT-PE or the increased activity time of the tutee. Any assessment performed by the tutor will detract from the on task time. For example, if John is charting the number of basketball lay-ups Kevin makes, then Kevin may lose focus while John is shuffling papers or returning scores to the teacher.

### *Strategy 3 - Cross-Age Peers*

Cross-age peer tutoring consists of an older, advanced skill tutor assisting a younger tutee (e.g., a sixth grader working with a third grader). This tutoring occurs either outside of regular class time or during the tutee class

time (depending on tutor availability). The objective of cross age peer tutoring is to refine or enhance tutee skill by providing advanced instruction. Children with severe cerebral palsy, mental retardation, or orthopedic impairment benefit the most from this type of peer tutoring. Cross-age peer tutoring is effective for students as young as six years old and program benefit (in regard to skill enhancement) is strictly aimed at the tutee (Beirne-Smith, 1991).

Recruitment for cross-age peers may be time consuming initially. The practitioner draws participants from a large data base (entire school or school system); therefore one must allow 2-4 weeks recruitment time prior to training. Recruitment methods include: (1) flyers, (2) teacher/ principal nomination, and (3) practitioner invite. Flyers posted around the school(s) should include the contact teacher, the weekly time requirements, and the focus of the tutoring. If students are volunteering their time to work, then they obviously have interest. With teacher/ principal nominations, interest may be a concern, but the responsibility level of each candidate should be high. Student recruitment can be accomplished either by school mailings (Table 1) or practitioner selection of tutor candidates from current physical education classes (Houston-Wilson et al., 1997a). Practitioners should note that cross-age peer tutoring may comply with community service requirements among secondary schools. With the teacher/ principal nominations and student invites, interest forms should be completed by the candidates to discern the possibility of a long-term commitment.

The training of cross-age peers must be substantial to meet the needs of tutees with severe disabilities. Three to four training sessions for each tutor may be necessary. During the first training session, the practitioner discusses the characteristics of the specific disability and requires tutor outside reading on the tutee disability prior to the second session. During the second training, the tutor views vid-

eotape of the tutee participating in class activities (English et al., 1996). The video screening allows tutor comprehension of communication acts and social behaviors of the tutee. The practitioner also interjects intervention strategies specific to the disability. For example, the videotape displays Kevin slightly raising his left arm. The practitioner reveals to John that when Kevin raises his arm, Kevin wants feedback on how he performed the skill. Here the tutor will learn appropriate positive specific feedback, positive general, and/or corrective feedback techniques. The videotape analysis takes at least two sessions. The final training exercise again takes the form of role-play by the practitioner and tutor quiz. For example, if a tutor is to work with a tutee who uses sign-language as their primary form of communication, a short sign language quiz of key terms (e.g., "stop", "run", "throw") would be appropriate. To insure training to implementation effectiveness, simulation must approximate tutee ability and tutor comprehension. Instructors may also incorporate the tutees into the training program to insure complete tutor understanding.

Cross-age tutoring can occur at the tutee physical education class (dependent on tutor availability), before school starts, or at the immediate conclusion of the academic day. With principal permission, tutor inclusion into the tutee physical education class may be the optimal choice. Otherwise, a 20-30 minute tutoring session during regular/ adapted physical education class or after school, three times per week, is a suitable option. The practitioner gives the tutor the critical components of the skill for each week. The tutor then attempts to reinforce steps toward the intended outcome through the system of least prompts. Adapted physical educator consultation may initially be necessary to discern effective tutor methods. For example, a visually impaired student works on throwing activities. John stands at different distances and tells Kevin to "aim here Kevin." Kevin assesses the weight of the object and attempts to throw the ob-

ject toward John. Feedback provided by John, which describes the throw, enables Kevin to comprehend the flight distance of heavy and light objects. The cross-age tutor program is strictly a one-to-one tool and serves to supplement or enhance previous or on-going instruction. Again, daily measurement of tutee performance indicates the amount of tutor effectiveness.

#### *Strategy 4: Classwide Peers*

The classwide peer tutoring program aims at skill comprehension gains by all students in the physical education class, not specifically those with disabilities. Students with a diagnosis of mild cerebral palsy, mental retardation, autism, learning disability, attention deficit disorder, deafness, and developmental delay can be effective tutors as well as tutees in the classwide program. The objective of classwide tutoring is to direct reciprocal learning among all students not disclosing which students in the inclusive classroom may have a disability or have lower skill levels.

The recruitment of participants is simple, the entire class becomes both the tutor and tutee. The practitioner then decides how to pair the students. Do students rotate partners each week? Do students maintain a partner with similar abilities for long periods of time? Do students remain partners with distinct performance abilities for long periods of time? Individual class make-up and input regarding the student(s) with a disability dictate which rotation system works best.

The training for the classwide peer tutoring program is accomplished during class time (as seen within the peers to increase the ALT-PE of students strategy). The actual training is disguised as partner drill exercises. As Kevin performs a fitness test, John instructs and / or critiques (whichever methodology the practitioner chooses) Kevin on the critical components of the sit-up. Once Kevin completes the test, John completes the fitness test and Kevin instructs/ critiques John on sit-ups. Regardless of the teaching meth-

odology the practitioner chooses, both students in the dyad receive one-to-one instruction and goal clarification. With this reciprocal learning technique students with disabilities participate in a tutor role (Houston-Wilson et al., 1997a). Practitioners must recognize that students with mild disabilities are capable of being effective peer tutors (Marchand-Martell & Martella, 1993).

The implementation of the classwide tutoring program resembles typical physical education environments. To begin the class, practitioners describe and demonstrate the activities to be performed and the critical components of these activities. Then, students form dyads to practice the particular skill. When the practitioner pauses instruction, students tutor one another according to the practitioner preference of methodology (Hawkins, Brady, Hamilton, Williams, & Taylor, 1994). Task cards or checklist are necessary for the tutors to accurately comprehend and critique the critical components (Houston-Wilson et al., 1997b). When the practitioner assesses class skill and tutoring weaknesses, the practitioner instructs skill and tutoring adjustments. Rubrics of major components can establish performance guidelines and then be used for assessment (Block et al., 1998). Again, when the practitioner pauses, the dyads initiate reciprocal learning.

Baseline ability measures (e.g., time on task) should be recorded prior to the implementation of a peer tutoring program to insure accurate evaluation of student progress. Initial measurements compared to monthly and quarterly assessments indicate student skill gains. Rubrics of critical skill components can be utilized to assess monthly and quarterly gains. Different tutoring methodologies can also be implemented and measured to distinguish the best classwide tutoring program for each specific class.

#### *Conclusion*

The four peer tutoring strategies discussed in this article and summarized in Table 6 in-

Table 6. Critical Components of Different Peer-Tutoring Strategies

<u>Summary of Dyads with Specific Instruction Strategy</u>			
	<u>Achieved</u>	<u>Date</u>	
<b>Recruitment:</b>			
• Peer tutors are intraclass	( )	---	
• Surveys delimit students with high interest in becoming a tutor.	( )	---	
<b>Training:</b>			
• Discussion and role-play of least prompts and positive feedback philosophies	( )	---	
• Practitioner determines number of appropriate cues and models prior to assistance	( )	---	
<b>Implementation:</b>			
• Uni-directional and/or Bi-directional (reciprocal)	( )	---	
• Least prompts flash cards	( )	---	
• Tutor log of successful techniques	( )	---	
<b>Assessment:</b>			
• Peer records tutee completion of critical components	( )	---	
• Tutee self-assesses successful outcomes of activity	( )	---	
• Tutor evaluation can be self-assessment, or peer assessment	( )	---	

<u>Summary of Peers to Increase ALT-PE Strategy</u>			
	<u>Achieved</u>	<u>Date</u>	
<b>Recruitment:</b>			
• Each student without attention difficulties rotates as tutor for one week	( )	---	
<b>Training:</b>			
• Class activity - all students form dyads, then critique and reinforce accomplished critical components	( )	---	
<b>Implementation:</b>			
• Tutor accompanies tutee for one week or unit	( )	---	
• Tutor uses cues and students first name to maintain attention	( )	---	
• Tutor continually clarifies goals and maintains tutee attention	( )	---	
<b>Assessment:</b>			
• Practitioner or Adapted Physical Educator records increased tutee activity time	( )	---	
• No peer evaluation of tutee - decreases attention	( )	---	

<u>Summary of Cross-Age Peers Strategy</u>			
	<u>Achieved</u>	<u>Date</u>	
<b>Recruitment:</b>			
• Flyers and other informational pamphlets	( )	---	
• Teacher/ Principal nominations (High School students for community service requirements)	( )	---	
• Practitioner invite (from physical education classrooms)	( )	---	
• Practitioners must insure prospective tutor interest level	( )	---	
<b>Training:</b>			
• Discussion of disability and outside reading	( )	---	
• Videotape analysis of tutee activity	( )	---	
• Role-play and feedback	( )	---	
• Tutor quiz	( )	---	
<b>Implementation:</b>			
• Tutee physical education class	( )	---	
• Once to three times per week before school starts or at the conclusion of the school day	( )	---	
• System of least prompts	( )	---	
<b>Assessment:</b>			
• Peer evaluation of tutee	( )	---	
• Practitioner assessment of tutor	( )	---	

<u>Summary of Classwide Peers Strategy</u>			
	<u>Achieved</u>	<u>Date</u>	
<b>Recruitment:</b>			
• Each student is both a tutor and tutee	( )	---	
• Practitioner determines tutor rotation method	( )	---	
<b>Training:</b>			
• Practitioner determines tutoring methodology	( )	---	
• During class time, students practice tutoring methodology	( )	---	
<b>Implementation:</b>			
• Resembles typical physical education instruction	( )	---	
• During designed pauses in practitioner instruction, dyads tutor one another on critical components	( )	---	
<b>Assessment:</b>			
• Practitioner compares baseline measures to weekly or monthly skill and comprehension assessments	( )	---	
• Rubrics are practical in both instruction and assessment process	( )	---	

clude: (a) dyads with specific instruction, (b) peers to increase the ALT-PE of students with disabilities, (c) cross-age peers, and (d) class-wide peers. These strategies represent practitioner techniques to enhance and assess the motor capabilities of students both with and without disabilities. Every physical education classroom is unique and practitioners may need to adapt the focus of a peer tutoring strategy or combine strategies to benefit the classroom needs. Regardless of the strategy, peer tutoring programs enhance the learning environment of students with disabilities in the physical education classroom. While these peer tutoring strategies are aimed at helping students with disabilities, one must not forget that students with disabilities can also be effective tutors. Future research should explore strategies for developing the role of students with disabilities as tutors and which techniques work best.

**REFERENCES**

Balenzamo, S., Agte, L., McLaughlin, T. & Howard, V. (1993). Training tutoring skills with preschool children with disabilities in a classroom setting. *Child and Family Behavior Therapy, 15*(1), 1-36.

Beirne-Smith, M. (1991). Peer tutoring in arithmetic for children with learning disabilities. *Exceptional Children, 57*(4), 330-337.

Block, M., Lieberman, L.J., & Connor-Kuntz, F. (1998). Authentic assessment in adapted physical education. *Journal of Physical Education Recreation and Dance, 69*(3), 48-55.

Block, M., Oberweiser, B. & Bain, M. (1995). Using classwide peer tutoring to facilitate inclusion of students with disabilities in regular physical education. *The Physical Educator, 52*(1), 47-56.

Byra, M. & Marks, M. (1993). The effect of two pairing techniques on specific

- feedback and comfort levels of learners in the reciprocal style of teaching. *Journal of Teaching in Physical Education*, 12(3), 286-300.
- Cushing, L. & Kennedy, C. (1997). Academic effects of providing peer support in general education classrooms on students without disabilities. *Journal of Applied Behavior Analysis*, 30(1), 139-151.
- Davis, W. (1984). Motor ability assessment of population with handicapping conditions: Challenging basic assumptions. *Adapted Physical Activity Quarterly*, 1(2), 124-140.
- DePaepe, J. (1985). The influence of three least restrictive environments on the content motor ALT and performance of moderately mentally retarded students. *Journal of Teaching in Physical Education*, 5 34-41.
- Dunn, J., Morehouse, J. & Fredricks, H. (1986). *Physical education for the severely handicapped: A systematic approach to a data-based gymnasium*. Austin, TX: Pro.Ed.
- English, K., Goldstein, H., Kaczmarek, L. & Shafer, K. (1996). "Buddy skills" for preschoolers. *Teaching Exceptional Children*, 28(3), 62-66.
- Fuchs, D., Fuchs, L., Mathes, P. & Simmons, D. (1997). Peer-assisted learning strategies: Making classrooms more responsive to diversity. *American Educational Research Journal*, 34(1), 174-206.
- Fulton, L., LeRoy, C., Pickney, M. & Weekley, T. (1994). Peer education partners: A program for learning and working together. *Teaching Exceptional Children*, 26(4), 6-11.
- Goldstein, H., Kaczmarek, L., Pennington, R. & Shafer, K. (1992). Peer-mediated intervention: Attending to, commenting on, and acknowledging the behavior of preschoolers with autism. *Journal of Applied Behavior Analysis*, 25(2), 289-305.
- Hawkins, J., Brady, M., Hamilton, R., Williams, R. & Taylor, R. (1994). The effects of independent and peer guided practice during instructional pauses on the academic performance of students with mild handicaps. *Education and Treatment of children*, 17(1), 1-28.
- Hensley, L.D. (1997). Alternative assessment in physical education. *Journal of Physical Education, Recreation, and Dance*, 68(7), 19-24.
- Hill, M. & Miller, T. (1997). A comparison of peer and teacher assessment of students' physical fitness performance. *The Physical Educator*, 54(1), 40-46.
- Houston-Wilson, C., Dunn, J., van der Mars, H. & McCubbin, J. (1997a). The effect of peer tutors on motor performance in integrated physical education classes. *Adapted Physical Activity Quarterly*, 14(4), 298-313.
- Houston-Wilson, C., Lieberman, L., Horton, M. & Kasser, S. (1997b). Peer tutoring: A plan for instructing students of all disabilities. *Journal of Physical Education Recreation and Dance*, 68(6), 39-44.
- Lieberman, L.J. (1995). *The effect of trained hearing peer tutors on the physical activity levels of deaf students in inclusive elementary school physical education classes*. Unpublished doctoral dissertation, Oregon State University, Corvallis.
- Lieberman, L.J., Newcomer, J., McCubbin, J., Dalrymple, N. (in press). Effects of cross-aged peer tutors on the academic learning time with students with disabilities in inclusive elementary physical education. *Brazilian Interna-*

- tional Journal of Adapted Physical Education*.
- Long, E., Irmer, L., Burkett, L., Glasenapp, G. & Odenkirk, B. (1980). PEOPLE. *Journal of Physical Education Recreation and Dance*, 51(7), 28-29.
- Marchand-Martella, N. & Martella, R. (1993). Evaluating the instructional behaviors of peers with mild disabilities who served as first-aid instructors for students with moderate disabilities. *Child and Family Behavior Therapy*, 15(4), 1-17.
- Martella, R., Marchand-Martella, N., Miller, T., Young, R. & Macfarlane, C. (1995). Teaching instructional aides and peer tutors to decrease problem behaviors in the classroom. *Teaching Exceptional Children*, 27(2), 53-56.
- Romer, L., White, J., & Haring, N. (1996). The effect of peer mediated social-competency training on the type and frequency of social contacts with students with deaf-blindness. *Education and Training in Mental Retardation and Developmental Disabilities*, 31(4), 324-338.
- Roswal, G., Mims, A., Evans, M., Smith, B., Young, M., Burch, M., Croce, R., Horvat, M. & Block, M. (1995). Effects of collaborative peer tutoring on urban seventh graders. *The Journal of Educational Research*, 88(5), 275-279.
- Routman, R. (1994). *Invitations: Changing as teachers and learners K-12*. Portsmouth, NH: Heinemann.
- Sherrill, C., Heikinaro-Johansson, P. & Slininger, D. (1994). Equal-status relationships in the gym. *Journal of Physical Education, Recreation, and Dance*, 65(1), 27-31, 56.
- Webster, G. (1987). Influence of peer tutors upon academic learning time - physical education of mentally handicapped students. *Journal of Teaching in Physical Education*, 6, 393-403.