Classwide Peer Tutoring at Work

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Wanted: An effective instructional method for heterogeneous groups of students who function at highly varied skill levels. Method must be cost-effective and user-friendly and must keep my students actively involved.

Are these requirements too much to expect from any one instructional method? Although no one method can address all instructional needs, strong research support exists for classwide peer tutoring (see boxes, "What Does the Literature Say?" and "PALS Reading Results").

This article provides help for any teacher interested in improving student learning—for *all* students, both with and without disabilities. What are the steps for classroom use of classwide peer tutoring?

Guidelines for Implementing Classwide Peer Tutoring

Figure 1 lists 9 general guidelines for beginning to implement classwide peer tutoring. These guidelines will help you prepare students with minimal experi-

Serving in the role of tutor seems to be particularly beneficial for improved self-esteem of students with low achievement.

ence to work in collaborative dyads effectively.

Once students are familiar with the procedures, select the optimal content to be covered. It makes sense to start with simple drill and practice of letter sounds, spelling words, vocabulary words and definitions, or math facts before progressing to higher-order areas. We recommend attempting a transition to more challenging content only after students have become proficient with tutoring procedures. This provides time to "work the bugs out"—particularly related to logistics (e.g., smoothly transitioning to pairs) or social-skill issues that may emerge.

Figure 2 shows a sample script you could use for peer tutoring in spelling.

Preparing and Selecting Classroom Materials

You can use classwide peer tutoring with either standardized, commercially prepared materials or teacher-made materials. Selecting materials of the proper difficulty level is key. If materials are self-correcting (e.g., flash cards with the answers available) students may be paired, regardless of skill levels. In physical education, students can compare their partner's stance or body position with a written standard that shows observable steps for the correct positions. For reading, effective guided-prac-

Figure 1. Implementation Guidelines

- 1. Explain the purpose and rationale for the technique. Stress the idea of increased opportunities for practice and "on-task" behavior.
- 2. Stress collaboration and cooperation rather than competition.
- 3. Select the content and instructional materials for tutoring sessions.
- 4. Train students in the roles of tutor and tutee. Include specific procedures for (a) feedback for correct responses, (b) error correction procedures, and (c) score-keeping.
- 5. Model appropriate behaviors for tutor and tutee. Demonstrate acceptable ways to give and accept corrective feedback.
- 6. Provide sample scripts for student practice of roles. Divide the class into practice pairs and teams.
- 7. Let pairs practice roles of tutor as teacher circulates, provides feedback, and reinforcement.
- 8. Conduct further discussion regarding constructive and nonconstructive pair behavior. Answer questions and problem-solve as needed.
- 9. Let pairs switch roles and practice new roles as teacher circulates and provides feedback, and reinforcement. Repeat Step 8.

tice activities could include word lists or passages that contain previously learned words.

Clearly, we want our students to develop intrinsic motivation for reading and other school tasks, which is more likely to occur as students improve their skills and self-confidence. Yet, you may find extrinsic motivators, such as points, helpful for some students (e.g., those with long histories of reading failure or those with attention deficit/ hyperactivity disorder or emotional/ behavioral disorders). You might award students points not only for correct responses, but also for effort and for appropriate collaborative behaviors, to level the playing field for students with disabilities. Figure 3 presents a short case study and sample script, with adaptations for a student with behavioral disorders.

Making Assignments to Pairs

Some researchers suggest that teachers make *random* student partner assignments, whereas others say that teachers should pair students after pretesting student skill levels. One systematic method for pairing includes ranking students by achievement (high to low), dividing the list in two, and pairing the first student in List 1 with the first student in List 2.

Pay particular attention to social interaction. If two students are matched by following the split-list procedure, yet are socially incompatible, it may be prudent to pair them with more amenable partners.

You may also wish to create weekly or biweekly teams from the pairings for a friendly class competition. Keep in mind that some students will be sufficiently intrinsically motivated with the academic and social benefits of classwide peer tutoring, to preclude the need for additional reinforcers or for team competition. You should rely on students' intrinsic motivation whenever possible and to "fade," or decrease, the use of extrinsic motivators as soon they are no longer needed. When you do use teams, however, rotating pair and team membership frequently should encourage active participation of all members and increase opportunities to win.

Figure 2. Spelling—Sample Steps

Students working on the same spelling words are assigned to pairs. The "coach" should be able to read the definitions to check accuracy.

- 1. All students neatly write their spelling words on separate 3 x 5-inch cards. Words are checked against models for accuracy. Students write the definitions of the words, on the flip side of the cards, as needed.
- 2. The coach prompts the player to spell a word either orally (e.g., "Spell jargon") or in print (e.g., "Write jargon").
- 3. The player repeats the word and then spells ("jargon: j-a-r-j-o-n.)
- 4. The coach provides feedback for an incorrect oral response ("No, jargon is spelled ... j-a-r-g-o-n. Now you spell it").
- 5. The player repeats the correct spelling and the coach reinforces with "That's right."
- 6. Or the coach prompts the player to compare his or her spelling to the correct model ("No, jargon is spelled j-a-r-g-o-n. Now you spell it").
- 7. The coach asks for the definition ("What does jargon mean?") and provides appropriate feedback for either a correct or incorrect response.
- 8. The students switch roles and repeat the process in their new roles.

Figure 3. Case Study with Sample Script for Providing Feedback

Meet Joe, a bright sixth-grader with behavior disorders. Predictably, Joe has poor social skills and does not accept correction gracefully. Ms. K. wanted to prevent Joe from becoming defensive following his tutor's corrections, which Joe might try to escalate into an argument. Joe has a goal on his individualized education program (IEP) about accepting correction without becoming argumentative.

Ms. K. carefully selected Ben as a partner for Joe, because Ben is goodnatured and dependable. As the pair practiced giving and responding to feedback, Ms. K. emphasized the importance of staying with the following feedback script.

- 1. Following a correct response, the tutor says, "Yes, that's right."
- 2. Following an incorrect response, the tutor says, "Nice try, but the correct answer (or word) is _____. Now you say it. Good job!"
- 3. Because Joe needs frequent reinforcement, after every third response, the tutor says, "Good job! You're really working hard today."
- 4. Joe is awarded a separate token reinforcer, per his behavior management plan, for staying on task and completing the tutoring session without arguing.

Student Training

Don't forget to provide adequate student training before you begin a classwide peer tutoring program. Here are some helpful tips:

- Teach the students about the rationale and purpose of the model (i.e., "to help each other learn"). If you plan to use points and team competitions, emphasize collaboration rather than competition (i.e., "When we help each other, everyone wins").
- Model and discuss appropriate ways to provide corrective feedback. In an inclusive classroom or in other settings with two adults (teacher and assistant), you may want to use short skits to demonstrate examples and nonexamples of appropriate social behaviors. Role-playing with prepared scripts is another effective method of demonstrating positive ways for peers to interact with their partners. The goal here is to prevent students from becoming aggressive or demeaning to their partners. The teacher may target

What Does the Literature Say About Classwide Peer Tutoring?

Classwide peer tutoring has many advantages for implementation in inclusive or resource classes, as follows:

- Students with learning disabilities, emotional and behavioral disabilities, and mild mental retardation, as well
 as students at risk for failure or those with limited English proficiency, have benefited from the strategy.
- Teachers can use classwide peer tutoring across subject areas, not only in the basic skill areas of reading and math, but also in subjects such as science, social studies, physical education, foreign languages, and health/safety.
- This strategy keeps students actively involved and "on-task." Optimal use of the strategy includes "guided practice" activities that maximize students' active engagement with course content.
- The model has improved on early peer-tutoring models by specifying that members of each tutoring pair will alternate in roles of tutor and tutee. In inclusive settings, teachers often pair students with disabilities with their peers without disabilities; in resource or self-contained classes, students with disabilities can tutor one another successfully. Serving in the role of tutor seems to be particularly beneficial for improved self-esteem of students with low achievement, and all participants have the opportunity to improve their social skills. In addition, students with "mild" disabilities, as well as attention deficit/hyperactivity disorder and autism, generally respond positively to the structured format of classwide peer tutoring and the increased opportunity to respond and get immediate corrective feedback.
- Nearly two decades of research have supported the strategy as effective. Researchers at the Juniper Gardens Children's Project developed the original classwide peer tutoring model. Two-year and 12-year classroom follow-up studies indicated that classwide peer tutoring led to faster, more effective student learning outcomes than did teacher-mediated instruction (Greenwood & Delquadri, 1995; Greenwood, Terry, Utley, Montagna, & Walker, 1993). Further, at-risk first-graders who received a classwide peer tutoring intervention in spelling, math, and reading demonstrated long-term benefits, compared to students in control groups, with fewer referrals to special services and lower dropout rates in the 11th grade.

students, such as Joe (see Figure 3) for whom additional practice and supervision of the social skills aspects of the model is warranted.

- Pay close attention to logistics. People frequently overlook this component.
 More specifically, students should practice gathering materials, moving to their partners, and getting ready to work quickly and quietly.
- Demonstrate the role of "tutor" so that students learn how to ask questions and deliver content, appropriately. Delivering positive feedback and correction should be reviewed, practiced, and reinforced. Ensure that you accurately assign points when you use points and teams. Students must understand that learning the content and spending quality time on task is more important than accumulating points. In short, provide sufficient guided practice until students are fluent with the model's procedures.

Implementation in the Classroom

Classwide peer tutoring sessions are generally 15-30 minutes in length,

depending on the content. Ideally, students will smoothly proceed into assigned pairs with all necessary materials. The session begins when the tutor asks a question, points to a content item or flash card, or assigns a reading passage. Next, the tutee responds to the presented item orally or with paper and pencil as necessary. For a correct response, the tutor provides verbal reinforcement ("That's right!") and awards points, on a schedule selected by the teacher. For example, three correct answers may be worth 1 point. When the response is incorrect, the tutor provides the correct response, and the tutee practices the correct response. After 10 minutes, students switch roles for a second 10-minute session. The teacher is responsible for keeping track of time, circulating among the pairs to monitor implementation, and awarding additional points. At the end of the session, points are tallied.

At the end of the week, the secondplace team may provide a silent cheer for the first-place team and vice versa. New partner assignments are made. Because of this rotation, students are given more opportunity to be on the "winning" team. Students with disabilities also have genuine opportunities to become contributing members of their teams. Posttests and content assessments are given separately from the classwide peer tutoring sessions.

Reading Model Implementation

To use peer tutoring in reading instruction, employ the pair assignments and motivational procedures described previously. Reading activities consist of three areas: passage reading with partners, paragraph shrinking or telling the main idea, and prediction relay (see box, "PALS Reading Results"). Due to the increased content demands, tutoring sessions may need to be increased to 35 minutes.

Partner Reading

In partner reading, the more-proficient reader begins oral reading for 5 minutes. The less-proficient reader performs as tutor or "coach." The students then switch roles. The less-proficient reader has heard the material read, and should have less difficulty now with the material.

Errors are pointed out during the reading. The tutor points to the misread word, and states, "You missed this word. Can you figure it out?" If the reader correctly identifies the word, the tutor asks for a rereading of the sentence. If the reader cannot identify the word, the tutor provides it. Self-corrections are not counted as errors. Errors consist of omissions, additions, or waiting over 4 seconds to supply the word. Points may be awarded as desired (e.g., for correctly read sentences, self-corrections, and effort).

Second, students use retelling activities to improve reading comprehension. Following reading, the students retell what they have read for 2 minutes. The tutor prompts the reader by asking, "What did you learn first? Second?" The tutor may assist the reteller as necessary. After 2 minutes, the students switch roles. Ten points are awarded if the partners believe they put forth a good effort.

PALS Reading Results

Recent studies involving large-scale applications of classwide peer tutoring have demonstrated that this type of instruction is more effective for improving students' reading achievement than traditional reading classes. More specifically, researchers at Vanderbilt's Peabody College developed a peer-assisted learning strategies (PALS) reading intervention and validated the model in urban schools in Grades 2-6 (Fuchs, Fuchs, Mathes, & Simmons, 1997). Daily PALS sessions consisted of three strategic reading activities designed to improve reading fluency and comprehension, as follows:

- Partner reading with retell—The "reader" (or tutee) reads aloud, receiving immediate corrective feedback for word-calling errors.
- Paragraph shrinking—The reader states the main idea (i.e., who or what the passage was about); gives a
 10-word summary; and provides a sequential retelling of the important events of the passage.
- 3. Prediction relay—The students predict what is likely to happen next in the passage. In addition, arranging for the stronger readers in each pair to read first, provides an opportunity for the weaker readers to preview the passage and review difficult words before it is their turn to read.

More recently, researchers extended the strategy to a first-grade PALS program for beginning readers that combined phonological skill training with the three-step comprehension strategy described here (Mathes, Grek, Howard, Babyak, & Allen, 1999). Sessions began with student practice in letter sounds, word segmenting, and sound blending. Second, students engaged in "pretend" reading (i.e., making predictions based on story illustrations). Third, students alternated roles of reader and coach to allow repeated readings of simple passages. The session concluded with story-sequence retelling (e.g., "What happened first? Next?")

Teachers and students alike have been enthusiastic about their use of classwide peer tutoring. Teachers often report that students improve academic skills, on-task behaviors, and social skills. Students comment that they enjoy both playing the role of the teacher and receiving extra help with their skills.

Paragraph Shrinking

Paragraph shrinking is a strategy designed to improve reading comprehension. Students are instructed to identify who or what the paragraph is about (subject) and summarize the main idea (e.g., What happened to the important who or what) in 10 words or less.

You may create samples or select models of student summaries to help tutors decide whether specific summations are accurate. If after two tries, the reader is incorrect, the tutor provides the answer and roles are exchanged. Tutors award 1 point each for identifying the subject, stating the main idea, and summarizing in 10 words or less.

Prediction Relay

To implement prediction relay, use larger portions of connected text. Students take turns predicting what will likely happen in the next half-page of text. After the text is read, the student sum-

Read More About Classwide Peer Tutoring...

Articles

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Web sites

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http://www.nwrel.org/scpd/sirs/9/c018.html

Northwest Regional Education Laboratory School Improvement Research Series.

http://www.cgcs.org/services/whatworks/achievement/p25.htm

Peer-Assisted Learning Strategies (PALS) in Reading.

http://www.dundee.ac.uk/psychology/kjtopping/pal.htm

Peer Assisted Learning.

http://www.ldonline.org/ld_indepth/reading/peer_assisted.html

Peer-Assisted Learning Strategies in Reading.

http://www.lsi.ukans.edu/~tech%20grant/CWPTLMS/ProjectInfo/blueprint.htm

A document for those considering the CWPT-LMS for their school.

http://www.itma.vt.edu/Abingdon/sword/portfolio/research.htm

Anne Sword's Educational Research.

marizes the half-page using the "10 word rule" and predicts what the next half-page will be about. Students switch roles after 5-minute blocks, and the responsibilities of the tutor are the same as for the first two activities. One point is awarded for each correctly completed activity.

Final Thoughts

Do you want not only effective but *cost-effective* instructional techniques? Try the proven classwide peer tutoring procedures developed by Juniper Gardens Children's Project or the Peabody PALS reading procedures. These methods provide effective ways to actively involve students of diverse skill levels in inclusion as well as resource settings, and have additional benefits for students' self-esteem and improved social skills.

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