

Math Vocabulary or Computation Intervention Strategy – Class-wide Peer Tutoring (CWPT)

For: Students in 1st grade and above who have not reached the benchmark/target score on the AIMSweb Computation (M-COMP) or Concepts and Applications (M-CAP) assessments, or who have difficulty with math vocabulary/concepts, or who are not fluent with any type of computation problem (basic facts or more complex).

Materials:

- Curricular materials of math vocabulary words and/or flashcards or sheets of computation problems, either mixed problems or one type of problem depending on the student's needs; one set of problems per student pair
- Index cards to use for recording points
- A timer or watch
- A poster-sized team points chart; stars or stickers, if desired
- Answer sheets corresponding to the sheets with problems listed above (For complex problems, all the steps to solving the problem should be visible to the student.)

Recommended Duration and Frequency: This intervention should be conducted 5 times per week for 20-30 minutes per session in the regular classroom or with a small group of students (20 minutes for younger students; 30 for intermediate). Monday through Thursday, the intervention time should be used for peer tutoring. The 5th day of this intervention should be used for assessment. Monitor the student's progress once a week or twice monthly using the AIMSweb M-COMP probes. When the student's score is at the benchmark/target for 3 consecutive monitors and teacher observation confirms that the skill has been transferred to classroom work, the intervention may be discontinued.

Steps for Intervention:

Note: Before beginning this intervention, the student must be instructed on the appropriate behaviors associated with peer tutoring. Follow steps 1 – 4 to introduce and train the class in the CWPT procedures:

1. Explain to the students that they will be learning an enjoyable new way of working together to learn their math vocabulary and/or become more accurate and “automatic” with computation problems.
2. Demonstrate and/or role-play with another student the following:
 - a. Use “inside” or “6-inch” voices
 - b. Speak only to your tutoring partner
 - c. Stay on task
 - d. Stay with your partner
 - e. Use kind, encouraging words.

3. Explain to the students how the CWPT program will work. (See implementation procedures below.)
4. Conduct a few practice sessions with students, asking them to exhibit the appropriate behaviors listed in #2 above, until you feel the students are ready to begin the CWPT program.

Intervention Implementation Procedures

Note: The entire CWPT procedure takes 20 minutes per day for primary students and 30 minutes per day for intermediate students. Each student tutors for 5 minutes (10 for intermediate) and is tutored for 5 minutes (10 for intermediate). An additional 5 – 10 minutes is needed to sum and post individual and team points. The tutoring process below will need to be explained to the students the first time it is implemented, so the initial session or two may take a little more time.

5. Pair up students for tutoring. Often, the best pairing is low student to average student, and high student to average student. Or, if you wish to differentiate the tasks by level, more homogeneous pairings can be used. Pairs will stay together for one week.
6. Ask students to move to their tutoring areas (paired desks, etc.). Designate one partner in each pair as the first tutor and distribute tutoring materials (problem sheets, flashcards, etc.) and index cards for keeping track of points.
7. Set the timer for 5 minutes (10 for intermediate). The tutor presents the items one at a time (i.e. flashcards, problems, vocabulary words...), and the tutee responds either orally or in writing, depending on the wishes of the intervention or the appropriateness to the task.
8. The tutor checks the answer on the key provided. If the answer is correct, the tutor awards 2 points on the tutee's point sheet. If the answer is incorrect, the tutor provides the correct response, asks the tutee to write or say the correct response 3 times, and then awards 1 point for the correction. Tutors present as many problems as possible within the time provided.
9. After 5 minutes (10 for intermediate), the students switch roles and repeat Steps 6 - 7 for another 5 minutes (10 for intermediate).
10. During tutoring, the interventionist moves around the room and monitors by moving around the room, answering questions, giving corrective feedback, and awarding bonus points (1 point per pair per session) for correct tutoring procedures and appropriate behavior.
11. When the time ends for the 2nd tutoring session, have each team report the number of total points earned (or if desired, the number of individual points). Record the point totals for each team on a Team Points Chart posted in the room.
12. Celebrate points and have students give a round of applause, etc.
13. On Friday, administer a test on the materials the students have practiced. Have team pairs switch and correct each other's papers, and award 5 (or 10) points for each correct answer. Total up the points per team (or individual) and enter the scores on the Team Points Chart. Total up the number of points per team for the week. Celebrate the totals, determining "winners" or "highest points", if desired. Also, if desired, administer a pretest of the material to be covered next week. Have students exchange papers and correct. Use these scores to help determine student tutoring pairs for the coming week.
14. **Progress Monitoring:** Monitoring the student's progress weekly or weekly or twice monthly using the AIMSweb M-COMP or M-CAP assessment, or for vocabulary, a teacher-made or curriculum vocabulary assessment using words tutored.

Vocabulary or Computation Intervention Strategy – Class-wide Peer Tutoring– Integrity Check

Interventionist:_____ **Date:**_____ **Grade Level:**_____

Tier_____

Integrity Monitor:_____

Note: It is recommended that an integrity observation be completed on a Monday through Thursday for this intervention. Fridays are used for assessment (pre- and post-testing).

Descriptor - Student	Yes	No	N/A
Student has scored below benchmark on the AIMSweb M-COMP or M-CAP universal screening or has difficulty with basic facts, computation problems, or math vocabulary as demonstrated on classroom tests or activities.			
Student is in Grade 1 or higher.			
Student is paired with another student who is at least average in ability.			

Descriptor - Materials	Yes	No	N/A
Student pairs have flashcards or a sheet of problems without answers, flashcard answers or a sheet of the same problems with the answers (and steps to solve the problem, if complex), and index cards to record points.			
Interventionist has posted a Class Team Points Chart, and is recording daily points. (Stickers or stars may be used, if desired.)			
Interventionist has a timer.			

Descriptor - Interventionist	Yes	No	N/A
The Interventionist maintains an environment conducive to task completion (quiet, manages behavior issues, engages student, monitors progress, etc.)			
Student has previously been or was instructed in the procedures for the peer tutoring, including appropriate tutoring behaviors.			
(If this is the first day of the intervention) The Interventionist describes the steps of the tutoring task to the students.			
Student pairs are instructed to move to a tutoring area (paired desks, etc.) and are given the tutoring materials, including an answer key.			
The Interventionist sets the timer for 5 minutes (10 for intermediate) and instructs the students to begin tutoring, designating which student is the tutor.			
The interventionist monitors the group during tutoring, providing feedback and assistance when needed, ensuring the tutors are providing one problem at a time, awarding points, and correcting errors, and the tutees are responding as desired.			
After 5 (10) minutes, the interventionist instructs the students to switch roles and resets the timer for another 5 (10) minutes.			
The interventionist continues to monitor the group during tutoring, providing feedback and assistance when needed, ensuring the new tutors are providing one problem at a time, awarding points, and correcting errors, and the tutees are responding as desired.			
The interventionist instructs students to tally their points. Points are recorded on the Team Points Chart, and the number of points is celebrated in some way.			
Student's progress is monitored using AIMSweb M-COMP, M-CAP, or a curricular or teacher-made assessment at least twice monthly.			

Class-wide Peer Tutoring Integrity Check Summary:_____ of _____ applicable components are observed.

Notes: