

Treatment Integrity Measure for Interspersing Techniques:

Steps to follow:	Yes or No Response:
Materials	
1. Math computation worksheets with a mixture of easy and difficult problems	
2. Answer keys for the worksheets OR	
3. 3 x 5 flash cards with problem on front and answer on the back	
Procedure	
1. Identify one or more challenging problem types for the student that are matched to his/her current capabilities	
2. Identify easy problem types the student can complete quickly	
3. Create math computation worksheets with easy problems interspersed at a fixed rate among challenging problems	
4. If the student is completing the worksheet intervention individually, have a 1:1 ration of interspersed problems (one difficult to one easy)	
5. If you are using the flashcards follow the same steps listed above for identifying types of problems to place on the flash cards (Steps 1-2)	
6. Print the problem on the front of the card and provide the answer on the back of the card	
7. Start by having the majority of the deck consisting of easy problems and mix in more difficult ones	
8. Use worksheets or deck of flash cards for repeated practice to build fluency of facts	

$$\frac{\# \text{ of "yeses" }}{11} \times 100 = \text{ \% }$$

Count the total number of "yeses" from the yes/no column. Divide this number by the total number of possible "yeses" (i.e. 11) and multiply that number by 100 for a percentage of treatment integrity.	$\frac{\# \text{ of "yeses" }}{11} \times 100 = \text{ \% }$
---	--

Treatment Integrity Measure for Explicit Timing:

Steps to follow:	Yes or No Response:
Materials	
1. Stopwatch or watch with a second hand	
2. Kitchen timer with bell	
3. Sets of math worksheets with 100 basic math problems on the front of the sheet stapled together into a packet	
4. Pencil	
Procedure	
1. Set the kitchen timer with an amount of work time (15, 20, or 30 minutes)	
2. Inform the student that the timer is set for an amount of work time. Inform them that you will also be timing them with a stopwatch in 1 minute intervals.	
3. At the beginning of each timing say "Pencils up, ready, begin!"	
4. At the end of the 1 minute interval say "Stop" and have the student draw a line after the last problem answered. Repeat the procedure throughout the set time interval for the work period	
5. When the kitchen timer rings, announce that the work period is over.	
Evaluation	
1. Calculate the average number of correct problems per minute by counting the total number of problems correct for the period and divide them by the number of 1 minute intervals	
2. Compare the average number correct per minute over time to evaluate if the student is becoming more fluent (faster)	
3. Have the student complete this activity 3-5 times per week	

$$\frac{\# \text{ of "yeses" }}{13} \times 100 = \text{ \% }$$

Count the total number of "yeses" from the yes/no column. Divide this number by the total number of possible "yeses" (i.e. 13) and multiply that number by 100 for a percentage of treatment integrity.	$\frac{\# \text{ of "yeses" }}{13} \times 100 = \text{ \% }$
---	--

Treatment Integrity Measure for Cover, Copy, and Compare:

Steps to follow:	Yes or No Response:
1. Materials	
Did the classroom teacher or school provide training sheets of 10 math problems, with the problems listed down the left side and the answer provided for each problem?	
Did the school or classroom teacher provide a 3 x 5 Index Card?	
Did the school or classroom teacher provide pencils?	
2. Procedure	
Did the school or classroom teacher give the student training sheets?	
Was a session conducted in which the classroom teacher taught the procedure for Cover, Copy, and Compare.	
a. The student silently reads the first problem and answer on the training sheet on the left side of the paper	
b. Cover the problem with an index card	
c. Write the problem and answer from memory on the right side of the page	
d. Uncover the problem and answer on the left side to check the written response	
e. Evaluate the response	
3. Evaluation	
If the student has the correct answer, were they instructed to proceed to the next problem?	
If incorrect, was the student instructed to repeat the procedure until the problems is correct	
Has the student completed worksheets 3-5 times per week?	

Treatment Integrity Measure for the Reciprocal Peer Tutoring and Parental Involvement:

Steps to follow:	Yes or No Response:
Materials	
1. Reinforcement Menus with activity rewards	
2. Introductory parent letter	
3. Team Score Cards consisting of a 3 x 5 index card or one sheet of plain paper	
4. Stickers for score cards	
5. Flash cards with math problems printed on the front and the problems plus computational set ups and the answers printed on the back, one problem per card with one set per pair	
6. A plain sheet of paper divided into four sections "Try 1," "Try 2," "help," and "Try 3"	
7. Problem Drill sheets with 16 problems, one per student per session	
8. Reward certificates	
Procedures	
1. Tell the student that they will be learning to work in teams to help each other do well in mathematics and that their parents will be invited to provide support and rewards in that effort.	
2. Send a letter to parents that provides information about the intervention and invites them to consider several options for involvement	
3. Divide the class into pairs. Provide each team with a Reinforcement Menu listing activity rewards. Help each pair select a reward	
4. Meet weekly with each team to help the students select their team goal (the number of problems they believe they can answer correctly as a team).	
5. After each pair has chosen a team goal, have the pairs record their expected individual contributions to the team (each student's individual goal), the sum of the individual goals (each pair's team goal), and their choice of reward on the team score card.	
6. At the beginning of each tutoring session, give a set of flash cards to each pair and tell the students to choose who will act as "teacher" first	
7. Have the teachers hold up flash cards for the students and tell the student to work the problem on their worksheets in the section marked "Try 1" while their teachers observe their work	
8. If the problem is solved correctly, the teachers praise the students and present the next problem. If the solution is incorrect, the teachers give students instructional prompts read from a prompt card and tell them to try again in the section marked "Try 2"	
9. If the student does not solve the problem correctly on the second try, teachers help them by computing the problem in the "Help" section. As the teachers work the problem, they explained what they are doing at each step and answer students' questions. Then the teacher tells the students to work the problem again in the "Try 3" section. If teachers have trouble answering students' questions, they ask the classroom teacher for help.	
10. After 10 minutes, signal pairs to switch roles for a second 10 minute tutoring segment	
11. During tutoring segments, walk around the room supervising and identifying useful strategies teachers can use to help their students.	
12. After the second tutoring segment, distribute a problem drill sheet to each student and have students work on their own for a fixed period of time such as 7 to 10 minutes	
13. Then have the students switch papers with their team partner. Have them use an answer sheet to correct their partner's work or provide the correct answers yourself as the students check papers	
14. Have the pairs first determine their team's total score by counting the number of problems each team member completed correctly and then compare their team score with their team goal to determine if they have "won" (met their goal).	
15. If a team wins, give the students a sticker to put on their score card for that day. After three wins, deliver the reward and give them reward certificates to take home to their parents. Parents sign the certificates and indicate the type of reward provided and any additional concerns.	
16. Remind students to return the reward certificates to you so that you can keep track of the home based rewards.	

$$\frac{\# \text{ of "yeses" }}{24} \times 100 = \text{ \% }$$

Count the total number of "yeses" from the yes/no column. Divide this number by the total number of possible "yeses" (i.e. 24) and multiply that number by 100 for a percentage of treatment integrity.	$\frac{\# \text{ of "yeses" }}{24} \times 100 = \text{ \% }$
---	--