

CRIN E10/E22 Students w/Exceptionalities
Student Learning Plan

Title: Counting with Cars!

Grade: Kindergarten

Subject Area: Mathematics - Specifically counting skills.

Content of the Lesson (“big picture”):

This lesson is meant to improve the counting skills of students. Correctly counting is vitally important in mathematics. If a student does not know the correct order of numbers, then he will have a very hard time doing any other mathematics including counting objects, skip-counting, or simple addition/subtraction.

Why this intervention:

Mr. Z is a student who is developmentally delayed. Among the content areas in which he is struggling, math is especially difficult. According to his IEP, he has trouble processing information, and both the special education teacher and general education teacher have found that Mr. Z cannot count accurately. This intervention is based on the article *Playing linear board games promotes low-income children’s numerical development* by Siegler and Ramani and is meant to improve Mr. Z’s ability to count accurately.

Intervention Objective:

After repeatedly participating in counting game, the student will successfully count from 1 to 10 along an unnumbered path with 90% accuracy.

Duration: Several games/ as many as time allows.

Related SOL’s:

K.5 The student will count forward to 30 and backward from 10.

Materials: Cars Counting Game game-board, spinner, and game pieces for four students, and counting bears.

Format: Small group mini-lesson.

Procedures:

- 1) Up to four students can play the game at once. Students should each sit at a corner of the game board. To begin, either the teacher can pick who should go first, or a name can be randomly drawn. The teacher should also determine the target number which will signal the end of the game. This should be based on the results of the targeted student’s pre-assessment needs.
- 2) Each child has their own game piece and path to follow. For this version of the game, the students will begin on the Cars logo.
- 3) After using the spinner to get the number of spaces to be moved, the active student should move his game piece while counting the numbers on the space aloud.
- 4) Each student takes a turn (clockwise order) spinning and moving their pieces.
- 5) On the following turns, the students count on from their current positions. For example, if a student is on 4 and needs to move two spaces, he would say, “5, 6.”
- 6) Students will continue taking turns spinning and counting aloud until one person reaches the target number. The game may continue if students want to determine a second, third, and/or fourth place.

Note: If any student makes a mistake saying the correct numbers, the teacher should direct the student's attention to the mistake, demonstrate, and then have the student count again.

Evaluation:

Pre-assessment: Ask student to count as high as he can using counting bears and take note of where he begins to incorrectly name numerals.

Formative: Make observations of students' performance during counting game activity. Intervene when mistakes are made and continue to monitor.

Summative: Ask student to count as high as he can using counting bears and look to see if there is any measurable improvement in counting ability after several games.

Differentiation:

- 1) The board is made for each student to play on a path of 30 spaces. As students master counting from 1-10, the target number can be increased to 15, 20, 25, and finally 30. This allows students to continue using the game as they develop their skills.
- 2) Students who need extra help can be paired with a partner for a variation of the game. The paths in opposite corners of the game board match, so students with matching paths can be considered a team. In order to win, both players must reach the target number. If one student struggles with counting, their partner can help them. This extension of the game also allows the game to last longer and all students to count higher.
- 3) Not all students need to be moving their pieces in the same direction. For students who have mastered counting upward, their game pieces can begin at the higher number and count backwards down to 1.

Accommodation:

- 1) To increase target student's exposure to the game, allow him to play repeatedly with several different groups of students.
- 2) Provide target student with sufficient time to respond and make sure to encourage correct responses with positive reinforcement through praise.
- 3) The game board theme was specifically chosen to be of high interest and especially motivating to the target student, Mr. Z. He can also be motivated to have active participation in the game through a reward system if he can demonstrate his effort in counting.
- 4) Mr. Z will play this game counting upwards from 1 and, at first, to a number he can reach on his own so that he can feel successful. Then he will be guided toward working beyond that.