

Math Survey-Level Assessment

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EDPS 515: Curriculum-Based Assessment

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Math Survey Level Assessment
CONFIDENTIAL

Student Name: Sada McMurphy

Date of Report: 03/15/2024

Date of Birth: 12/06/2015

Chronological Age: 8:3

Grade: 3rd

School: New Dawn Elementary School

Name of Examiner: Jennifer Aussicker

REASON FOR REFERRAL

Sada has been referred by her teacher, Mr. Preacher, for making mistakes on math papers due to inattention, although he believes that she is capable of such work.

BACKGROUND INFORMATION

Sada is a third grade student in a general education classroom setting. Sada lives at home with her biological parents and younger twin brothers, Peter and Parker, who are in kindergarten. Her kindergarten, 1st, and 2nd grade report cards reflect average to above average work and good behavior. She has had near perfect attendance since kindergarten and, at least once per school year, has been named a “Good Citizen.” Sada does not have any standardized test scores available, but performed at or above the expected levels in reading and math during previous years. Sada does not receive any accommodations or special services, does not have an IEP or 504 plan, and a recent screening by the school nurse revealed intact hearing and vision.

ASSESSMENT METHODS

- *Teacher Interview- Mr Preacher*
- *Student Interview- Sada McMurphy*
- *Classroom Observation- 2/20/2024*
- *Permanent Products- Addition and Subtraction Mixed Skill Probe*

INTERVIEW RESULTS

Teacher Interview- Mr. Preacher

The current curriculum used by the New Dawn Elementary School is called Everyday Math. In this curriculum, math is taught for 60 minutes, with approximately 45 minutes spent in full group and small group instruction and 15 minutes spent on independent seatwork. Mr. Preacher notes that Sada struggles with independent work at times, but she has better performance at the board and in small groups. Mr. Preacher stated that her math papers contain “careless errors” due to speed and inattention. Mr. Preacher does not consider Sada to be failing, but “behind” other students. Mr. Preacher describes Sada as kind, conscientious, and a hard worker. Additionally, she does not seem frustrated with her math performance and willingly takes corrections from Mr. Preacher and her peers. Mr. Preacher reports a good relationship with Sada’s parents and sends home practice work that they complete with her.

Student Interview- Sada McMurphy

Sada reported that her favorite school subject is “All of them!! I love Mr. Preacher and my friends!” Sada stated that her best subject is Physical Education, since she plays on two soccer teams, including a recreational team and a traveling team. She is able to be competitive and excel at the game on the teams. She also enjoys science with Mr. Preacher since he does fun things, such as blowing up a volcano they made, playing with magnets, and having a weather station. Sada finds Writing to be the most difficult subject. She explains, “I have really good ideas, but some of the words are hard to spell and I think my handwriting is messy, but I do okay at it, I guess.” For fun, Sada plays soccer, having friends over, having sleepovers and eating pizza with friends. If Sada had three wishes, her wishes would be as follows: (1) to play soccer professionally when she grows up; (2) to have Ella and Maya live at her house because they are her best friends; (3) to have a giant snowstorm so she can make a giant snowman, go sledding, and have a day off.

OBSERVATION

Classroom Observation- Tuesday, February 20, 2024 from 9:00-10:00 AM

Sada was observed in the classroom on Tuesday, February 20, 2024 from 9:00 to 10:00 AM. The setting of the room included 24 students and 1 teacher present; desks were pushed together in

groups of four to form small cooperative groups; and the room was brightly decorated with children's artwork and multiple academic posters. For the first 40 minutes, students participated in large group instruction in fractions. Next, the students were placed in small skills groups. In this skills group, Sada and three other students were seated at their desks playing a fractions game as Mr. Preacher circulated. Sada was observed to participate and enjoy the game. For the remaining 20 minutes, the students were completing a worksheet as part of independent seatwork. Students were seated in their cooperative groups and were assigned a worksheet that included fractions. Once finished, students reviewed their answers and graded one another.

CURRICULUM-BASED MEASURE

Addition and Subtraction Mixed Skill Probe — Third Grade

Digits Correct	Digits Incorrect	Full Correct Responses	Accuracy
59	17	16	77.6%

Sada was administered a survey-level assessment (SLA) for math at the third grade level. SLAs are a set of informal tests or probes to pinpoint the skills a student does or doesn't have. Survey level assessments help determine if a student is appropriately placed in the curriculum (instructional level) and to establish a baseline math level to compare when progress monitoring the effectiveness of an intervention, if one is determined to be needed.

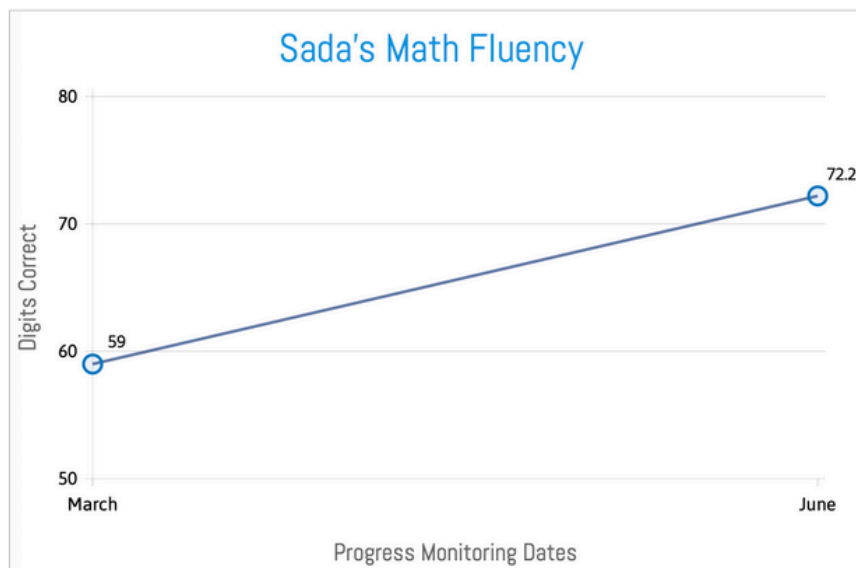
Sada was given an addition and subtraction mixed skill probe in which she needed to solve up to twenty-five three-digit addition and subtraction problems within two minutes as best as she could. It was necessary for Sada to use math skills like carrying over, regrouping, and borrowing to correctly solve the math problems. Sada correctly solved 16 problems, however, when comparing the digits that were correct to the digits incorrect, Sada is placed at the mastery level for third grade math. This mastery level is achieved by having twenty or more correct digits in a probe. It is also required to have an accuracy rating of 90% or higher to achieve the mastery level. Sada's accuracy level is 77.6%, which does not meet the necessary standards of mastery. Rather, her accuracy percentage places her at the frustration level (85% accuracy and below). It

should be noted that Sada had difficulty with carrying over and borrowing, and her most common mistakes were disregarding the operation sign.

Summary

Sada is a third grade student in a general education setting that was referred for an evaluation of her math performance to date by Mr. Preacher, her third grade teacher. Previously, Sada has had great success in math- performing at or above grade level. More recently this year, Mr. Preacher has observed Sada making mistakes on math papers, possibly due to inattention. Methods of assessment such as interview results, classroom observation, and permanent products indicate that Sada is below average in math compared to other students in her grade.

Goal Setting



Sada currently scores in the mastery level for correct digits on the addition and subtraction mixed skill probe, however, she scores in the frustration level for accuracy. She scored a total of fifty-nine out of seventy-six digits correct, resulting in an accuracy rate of 77.6% in two minutes. Depicted above is the necessary increase in fluency for Sada to reach mastery level in math fluency by the end of the school year in June. In order to reach this level, Sada must compute three-digit addition and subtraction problems within two minutes with ninety-five percent accuracy. This equates to 72.2 digits correct out of a total of seventy-six possible digits correct.

Recommendations

Sada's goal is to compute three-digit addition and subtraction problems within two minutes with ninety-five percent accuracy. In order to do so, Sada must have a rate of improvement (ROI) of 13.2 digits. If she accomplishes this, she can be placed in the mastery accuracy level. In order to meet this goal, Sada must gain at least one digit per week. It would be beneficial to Sada to receive math fluency support to achieve this goal, specifically support that improves her computation accuracy rate.

Below include recommendations to implement that will aid Sada in improving her accuracy:

1. *Self-monitoring fact fluency:* In this intervention, students monitor their fact fluency during time drills. Students review their initial fluency and set a goal. For example, the number of correct facts or a 'score to beat,' They practice the skill and take regular time drills for 5-10 minutes. Ensure the student has sufficient practice materials, including worksheets with the type of problem the student is focusing on. When the student hears the timer, they circle the problem they are working on, count the number of problems completed since the previous sound, and record the number of completed problems. At the end of the period, the student adds the total problems completed and compares it to the previous day to see if they beat their score.
2. *Cover, copy, compare:* Choose up to 10 math facts for the student to practice. Write the facts along the left side of a piece of paper. The student reviews the math facts and folds the paper so they can only see the problem, not the answer. They then complete the facts. Finally, the student lifts the paper to compare their answers with the correct responses. They complete this process until they have learned all the math facts.
3. *Intermixing challenging and easy problems:* Build a math practice sheet that incorporates a 1:1 ratio of problems that are easy and challenging for the student. For example, they may provide a mix of two-digit multiplication problems, intermixed with addition problems.

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