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STEP Standard 6 - Analysis of Student Learning

Post-Test Data: Whole Class -Once you have assessed your students' learning on the topic, collect and analyze the post-test data to determine the effectiveness of your instruction and assessment.		
	Number of Students Pre-Test	Number of Students Post-Test
Highly Proficient (90%-100%)	4	18
Proficient (80%-89%)	15	5
Partially Proficient (70%-79%)	5	1
Minimally Proficient (69% and below)	0	0
Post-Test Analysis: Whole Class		
<p>Based on the whole class post-test data, my interpretation of the students' learning is that the majority of the class mastered the learning goal of understanding fractions as numbers. Prior to this February 5-day unit, the class was introduced to fractions in December right before the holidays. The reason for this brief overview of fractions was due to the fact that the class was taking the NWEA test in January when they came back from winter break and they had not gotten to the unit on fractions yet. To help prepare them for the test, Mrs. Weaver introduced the class to fractions and their functions. Since the pre-assessment scores were so successful, I raised the percentage in my measurable lesson objectives from 80% accuracy (proficient) to 90% (highly proficient) in order to challenge all of the children more. By the end of the 5-day unit, the entire class (except for 1 student) was proficient, where as 18 were highly proficient, in reading, writing, and drawing equivalent fractions, whole numbers, fractions greater than/less than one, and line plots and lengths. Although many of the students struggled initially with the concept of line plots, a vast majority successfully mastered that section/topic on the post-test.</p>		
<p>The post-assessment data indicates that the instructional strategies and learning activities were effective. The evidence that supports this conclusion is that out of 24 students, 18 scored highly proficient, 5 scored proficient, and only 1 student scored partially proficient. Flexible grouping styles, such as whole class, collaborative groups, and paired-partners, as well as, using visual aids and technology integration successfully fostered student engagement and active learning. In addition, small group instruction and paired-partners provided students with extra support and guidance when needed. Furthermore, students who were struggling with any concepts of fractions received one-on-one teacher instruction to help strengthen their skills. All of the group centers and learning activities were hands-on and engaging which promoted productive academic discourse and higher-order thinking skills which enabled most of the class to demonstrate a strong</p>		

understanding of fractions as numbers by attaining the goal of being highly proficient.

Post-Assessment Analysis: Subgroup Selection

The subgroup that was selected for the post-assessment analysis are the male students in the class. All (5) five students who did not score highly proficient on the post-test were male. There are total of 11 boys in the class, and almost half of them scored proficient (4) or partially proficient (1) on the post-test. All of these male students have difficulty remaining engaged in whole group instruction and rarely participate in class discussions. Therefore, a variety of grouping styles and learning activities were utilized throughout the 5-day unit that actively engaged these students which enabled (4) of the males increase their pre-test assessment scores from partially proficient to proficient, whereas (1) male stayed the same at partially proficient.

Post-Assessment Data: Subgroup (Gender, ELL population, Gifted, students on IEPs or 504s, etc.)

	Number of Students Pre-Test	Number of Students Post-Test
Highly Proficient (90%-100%)	0	0
Proficient (80%-89%)	0	4
Partially Proficient (70%-79%)	5	1
Minimally Proficient (69% and below)	0	0

Post-Assessment Analysis: Subgroup

Based on my analysis of this male subgroup post-test data, my interpretation of the student learning is that a majority of the male students (4 out of 5) improved their scores on their post-assessment to proficient, even though they did not reach the class goal of highly proficient. However, (1) of the males scored the same on the post-assessment as partially proficient. Various grouping configurations, such as small group and paired partners were utilized throughout the 5-day unit. In addition, interactive learning centers and technology integration were incorporated to fully engage these students to foster student interest and learning of the topic of study, as well as, increase their scores on the post-assessment.

Based on this male subgroup, the post-assessment data indicates that the instructional strategies and learning activities were effective. The evidence that supports this conclusion is that 4 out of the 5 male students raised their post-tests scores from partially proficient to proficient. Although these male students did not attain the class goal of highly proficient, they still achieved success by improving their scores. All (4) of the male students responded favorably to learning activities that highly engaged them, such as using chrome books to play online fraction games, as well as,

the hands-on cutting pizza play-doh into fractions. These interactive centers not only increased the students' interest in learning about fractions, but also minimized student misconceptions, such as confusing numerators and denominators or incorrectly identifying and partitioning equal fractions. Although (1) of the male students did not improve his score on the post-assessment, he was still engaged in the learning activities for the most part. To help aid in all of these students' understanding in regard to the unit's objective, I will have to differentiate my instructional strategies and learning tasks to best meet their individual needs and abilities. I can effectively achieve this by providing them with quality small group and/or one-on-one instruction. I can also utilize peer tutoring in which they are paired with higher-level students to provide them extra guidance and support. In addition, using more visual aids and verbal cues, as well as, preferential seating can help these male students increase learning and achieve academic and personal success.

Post-Assessment Data: Remainder of Class

	Number of Students Pre-Test	Number of Students Post-Test
Highly Proficient (90%-100%)	4	18
Proficient (80%-89%)	15	1
Partially Proficient (70%-79%)	0	0
Minimally Proficient (69% and below)	0	0

Post-Assessment Analysis: Subgroup and Remainder of Class

When analyzing the data of the male subgroup as compared to the rest of the class, none of the (5) boys received highly proficient scores. However, 4 out of the 5 did increase their scores from partially proficient to proficient. I believe that, overall, my instruction for this unit was effective. However, I do feel that I can improve the quality of my teaching strategies and lesson activities by providing the students with more timely feedback, as well as, engage in more student-teacher collaboration to increase their interest in learning which enables them to develop a better understanding of the skills and concepts being taught.

With the post-assessment indicating that a vast majority of the students have met the challenging learning objectives for this unit of 90-100% as highly proficient, the next step for instruction is for the students to learn how to compare fractions. The students will build on their previous understanding and learned skills of the functions of numerators and denominators. In addition, they will expand their knowledge by comparing fractions with the same denominators, as well as, the same numerators. Furthermore, the students will continue to make meaningful connections

with fractions and how they can be used in real-life experiences. Therefore, the learning objective for the following unit is: By the end of the fractions unit, the students will be able to use models to compare fractions with both the same denominators and numerators with 80% accuracy.