

Morgan Schwarz

EDUC 450

Dr. Alanna Lienig

06 December 2016

## Formal Assessment Plan

### Introduction

According to the Office of Learning and Teaching, “Meaningful learning occurs when learners are actively involved and have the opportunity to take control of their own learning...” Current learning theories emphasize the importance of learning with understanding. This means that curriculum and teaching approaches should emphasize understanding rather than memorization. They should provide opportunities for students to “dig deep” into the material which will allow for a better understanding of conceptual knowledge. Assessment processes, then, should enable students to demonstrate deep understanding of concepts rather than surface knowledge and recall of facts. Assessment should be able to reveal the quality of students’ understanding and thinking as well as specific content or processes.

### Learning Objective/Target

Assessing students is vital for student learning and tracking student progressing. At the completion of the lesson, students will be able to accurately (80% or above) multiply multi-digit numbers, using efficient and generalizable procedures, based on knowledge of place value, including standard algorithms. The student has met his/her goal and learning objective when they have achieved a score of 80% or higher on their individual work. The level of thinking that this formal assessment and learning goal pertains to is application (Bloom’s Taxonomy). Students will be able to execute and find the solution to a given multi-digit multiplication problem.

### Pre-Assessment

A pre-assessment is essential to gauge the students' baseline knowledge of the material. With this type of assessment, an oral review is appropriate. The assessment will involve using base ten blocks to show different numbers of units (ones). The teacher will then conduct an oral review of regrouping ones as tens and ones through exercises. This will be done with small group interventions (math groups) with a record sheet to record student's baseline and progress scores. The scores will then be divided (raw score/problems attempted) to find the percentage of the problems correct. Reminder: The learning goal is 80% or higher. The assessment is appropriate as this is new material for many students; therefore, it is important not to "grade" their work; instead, it is important to nonchalantly converse with the students to gauge their understanding of the material while briefly reviewing previous material presented to the students.

### Instruction and Guided Practice

During instruction and guided practice it is important to note the students who are struggling and the students who need to be challenged. When a student or group of students is having difficulty learning, the teacher will pull that student(s) aside during independent work time and work with them in a small group setting. Doing so will allow the teacher see exactly where the student(s) are struggling and help them correct their problems. If the teacher sees that a student looks bored and he is going through the problems very quickly because they are easy, the teacher will ask the student to help his peers. If no one needs help the teacher will assign the student some problems that are more challenging. The teacher will use assessments to help him/her see how well the students grasp the content and to guide their instruction (i.e. whether I need to reteach or skip ahead). The assessments used are broken down into three categories: pre-assessment, formative assessment, and summative assessment. The pre-assessment will be a review of regrouping by way of oral questioning using base ten blocks. The

formative assessment will a number of assigned practice problems for the students to do independently. The problems a student is assigned will depend on how well the student is doing with the concept. The summative assessment is a worksheet that will fit all levels of learning. These assessments are appropriate for measuring learning goals because the students will be practicing and showing how well they understand the concept and the teacher will be able to see how well they are doing with understanding the concept.

### Self-Assessment

Throughout the learning process of this concept, students will be able to continually self-assess in order to reach their goals. During pre-assessment they can determine what part(s) of the concept they remember and what part(s) they need to practice. Throughout the formative assessment the students can practice the concept to make progress toward their goal of accurately multiplying multi-digit numbers. As they practice they can focus on areas that are difficult in order to master the concept. When they get problems wrong they will be encouraged to fix those problems and then show them to a peer or the teacher to verify that they did it correctly. Once it is time for the summative assessment the students can show how much they have learned and whether or not they have reached the learning goal. When the summative assessment is returned to the student, he can reflect on what he well and what he could continue to work on as he continues to build onto this concept by learning a new one.

### Summative Assessment

The summative assessment is a thirty question worksheet in which the problems look similar to the practice problems on the students' formative assessment. Students that are below grade level will not have to do the challenging problems at the end of the worksheet. The teacher will compare the student's sheet to the answer key. If a student has an incorrect answer, the teacher will mark the problem wrong.

Each problem will be worth one point. The student's score will be a ratio of the number of problems the student answered correctly (raw score) out of the total number of problems. The percentage correct can be determined by dividing the number of problems correct (raw score) by the total number of problems. That is where the student will see if they met the learning goal. If the percentage is 80% or above, the student reached the learning goal. If the percentage is below 80%, the student did not reach the learning goal. If below 80%, the teacher will work with the student to raise his percentage in order to reach the learning goal. The assessments are appropriate for measuring learning because students can self-assess and the teacher can see how well the students are doing based on their scores. They also allow students to show their mastery in the concept being learned: multiplying multi-digit numbers.

### Grading

The final summative assessment will be graded and returned to students with feedback. At this time, students are able to ask questions and to clarify the steps in which they may have missed. The grade will be the raw score (number correct) which will also be found as a percentage to give the students an awareness if they have achieved the learning goal/target or not. The percentages will then be used on an A-F scale. Any students receiving a C or below will be required to learn the material again and receive additional practice so they are able to achieve the learning target with the rest of their peers. In math, it is important to emphasize and remind students to never give up.

## Works Cited

Office of Learning and Teaching. "Current Perspectives on Assessment." *Assessment and Reporting Unit*(2002): n. pag. Sept. 2005. Web. 05 Dec. 2016.