

# Math Intervention Project

A critical teaching skill is analysis of student work to determine the need for re-teaching/re-engagement. In this assignment, you will analyze a given mathematics assessment, determine content that requires re-teaching or intervention, design 3-5 connected re-engagement lessons to address the given content, implement the lessons addressing the areas of challenge or need with 1-5 students, assess the students on the given content, and analyze the learning. This assignment will be reviewed using the attached rubric.

This assignment has 6 sections which you will submit as one document on Angel. Also, place a hard copy of this project in your Field Experience Binder. Be sure to use a pseudonym for all student names and remove student names from student work samples. All narrative components should be single spaced, using Ariel 11 point font.

More specifically, each section should contain the following:

1. The Assessment and Context for Learning – Select one math assessment that has been given to the whole class. This can be an assessment administered by your cooperating teacher in a previous unit. In a narrative of one page or less, describe the context for giving this assessment and the specific standards/objectives measured by this assessment. Provide a copy of the given assessment.

2. Analysis of Student Learning - Create a chart, such as one created in Excel, to summarize the results for the whole class. Be sure to summarize results for each of the standards/objectives listed in section 1. In a narrative of one page or less, discuss the patterns of learning for the whole class in relation to conceptual understandings, procedural fluency, and mathematical reasoning/problem-solving skills.

3. Analysis of Learning for Focus Students – Based on your analysis in section 2, determine one area where student(s) struggled. Select up to 5 student work samples that demonstrate this area of need. In a narrative of one page or less, describe this area in need of re-engagement with the underlying mathematical concept. Use specific examples from the student work samples to support your discussion (i.e., mathematical errors, confusions, misunderstandings).

4. Develop a Plan to Re-engage Students - Based on the analysis in section 3, write a targeted learning objective(s) to re-engage the student(s) in this area. The central focus of the content should be connected with Common Core State Standards and be reflective of one conceptual understanding, procedural fluency, and mathematical reasoning/problem solving skill.

5. The Intervention Plan - Create 3-5 connected re-engagement lessons of 15-20 minutes in length designed to address the areas of need. Use the Childhood Education Lesson Plan template. Implement these lessons with the students whose work you discussed in section 3. After teaching each lesson, reflect on your teaching practice and student learning (use the questions in the Childhood Education Lesson Plan template). In addition to submitting the lesson plans, also submit student work samples from at least three lessons that demonstrates evidence of students' mathematical understanding (e.g. informal assessment or exit ticket).

6. Final Analysis – In a narrative of two pages, thoroughly describe the effectiveness on the strategies you selected to develop the students' mathematical understanding in the area of need. Cite specific evidence from the student work samples selected for section 5 that confirms your understanding of student learning in the targeted area.

Teacher:  
Topic:

Date:

## RUBRIC for Math Intervention Project

The following rating scale is used to evaluate the teacher candidate's performance on each section of the Math Intervention Project.

- 2 = Met                      The teacher candidate has demonstrated clear evidence of meeting the target criteria
- 1=Developing              The teacher candidate has begun to demonstrate evidence toward meeting the target criteria, but has not yet met it.
- 0= Not Met                 The teacher candidate has not demonstrated evidence of meeting the target criteria.

<u>Section 1: The Assessment and Context for Learning</u> – The teacher candidate demonstrates a thorough understanding of the assessment tool and the standards/objectives assessed by this tool. The assessment tool is included.	2	1	0
<u>2. Analysis of Student Learning</u> – The teacher candidate summarizes the results of the assessment in a comprehensible chart with a thorough analysis describing patterns of learning for the whole class.	2	1	0
<u>3. Analysis of Learning for Focus Students</u> – Using student work samples, the teacher candidate appropriately identifies and discusses an area for re-engagement.	2	1	0
<u>4. Develop a Plan to Re-engage Students</u> – The teacher candidate creates a targeted learning objective based aligned with standards.	2	1	0
<u>5. The Intervention Plan</u> – The teacher candidate plans and implements 3-5 connected lessons. Reflections on teaching practice and student learning are included, as well as student work samples.	2	1	0
<u>6. Final Analysis</u> – The teacher candidate thoroughly describes the effectiveness of teaching strategies and the students' learning of the mathematical concept, as evidenced in student work samples.	2	1	0

Comments: