

An Assignment that Develops Teacher Candidate Ability to Assess and Analyze Impact on Middle School Student Learning

Susan L. Stockdale, Ph.D.
Kennesaw State University
sstockda@kennesaw.edu

L. Lynn Stallings, Ph.D.
Kennesaw State University
lstalling@kennesaw.edu

NMSA/NCATE: Standards 3 and 5

Outcome-based accountability for teacher education programs emphasizes teacher candidate ability to assess and analyze student learning, reflect on findings, and adjust instruction so that they positively affect the learning of all of their students. One assignment in our program has been pivotal in demonstrating our teacher candidates' knowledge, skills, and dispositions related to assessing, analyzing, and affecting student learning. This Impact on Student Learning assignment is required twice, once during their methods block and student teaching. The goal of the assignment is to promote assessment practices and teacher candidate reflection of the assessment process as one that

- a. views assessment as an embedded and integral source for making instructional decisions,
- b. creates formal assessments that relate closely to the content and form of classroom instruction,
- c. utilizes a variety of assessments (that reflect high expectations) to evaluate learning for all students,
- d. uses the results to improve the quality of instruction for every student, and
- e. promotes reflection upon and improvement of professional teacher candidate performance.
- f. Samples of this assignment will be shared, as will the instructions and a rubric. The evolution of the assignment and the rubrics will be discussed.

Handouts include

- Instructions for assignment
- Rubric for assignment

Directions for the “Impact on Student Learning Analysis”
To be completed by each candidate in every program area at least one time during
TOSS, STUDENT TEACHING, and the GRADUATE Program

Purpose:

This assessment is to give you the opportunity to tie together many pieces of the assessment process to help you:

- 1) determine the effect of instruction on all your students’ learning (NCATE/PSC Standards 1, 3, 4)
- 2) guide decisions about future instruction and plans to improve upon every student’s performance (NCATE/PSC Standards 1, 3, 4)
- 3) communicate performance results to others (NCATE/PSC Standard 2)

Method:

Select a class/group of students whom you are teaching and a lesson/activity/unit/skill on which to evaluate the impact on every student’s learning. Decide on a method of collecting data on your impact upon student learning using an assessment that will generate data suitable for analysis, such as a pre- and post-test. The assessment(s) you choose should be aligned with your objectives. The assessments can be of the authentic/alternative or traditional nature or a combination of both.

In assessing the impact of your lesson on all students’ learning, you will need to interpret the results within the contexts of the setting and student diversity. Contextual factors are important for teachers to know because they often help explain student behaviors and achievements. In your analysis, you need to investigate these contextual factors of the class you evaluated:

- geographic location, community and school population, socio-economic profile and race/ethnicity,
- physical features of setting, availability of equipment/technology and other resources,
- student characteristics such as age, gender, race/ethnicity, exceptionalities (disability and giftedness), achievement/developmental levels, culture, language, interests, learning styles or skill levels.

Analyzing and Reporting the Data:

Perform the analysis on three levels:

- Whole group: Compile the data as a whole group by using simple descriptive techniques. If you gave a pre-test, compare the pre-and post-test results.
- Sub group: You should compile the data into groups for comparison (select two) from those identified under student characteristics. This analysis should include the contextual factors of exceptionalities, ethnicity, race, socioeconomic status, gender, language, religion, sexual orientation, and geographical area (NCATE/PSC Standard 3, Element 3; Standard 4, Elements 1 & 4).
- Individuals: Select two students who represent different levels of performance and examine the data you have on them.

Reflecting on the Data:

After analyzing and reporting the data, reflect on your performance as a teacher and link your performance to student learning results using the “Impact on Student Learning” Rubric as a guide for reflection. Evaluate your performance and identify future action for improved practice and professional growth.

Additional Prompts for Reflection:

- Select the learning objective where your students were most successful.
- Select the learning objective where your students needed more opportunity to grow.
- Consider the individual items on your assessment and their effectiveness in measuring student learning. Upon which items were your students most successful? Least successful? Reflect on reasons for the levels of performance on those items, including student prerequisite knowledge, student motivation, instructional strategies, and item design.
- What instructional strategies did you use? Reflect on relationships between teaching strategies and performance on related objectives.
- What other forms of assessment (including informal assessment such as questioning, large/small group response, etc) did you use? Reflect on the appropriateness of the assessments and on the relationships between the feedback you got from those assessments and performance on related objectives.

In each case, provide two or more possible reasons for these outcomes. Consider your objectives, instruction, and assessment along with student characteristics and other contextual factors that you can influence to continue to have a positive impact on student learning.

Reflect on the possibilities for professional development.

- Describe at least two professional learning goals that emerged from your insights and experiences with this assignment.
- Identify two specific steps you will immediately take to improve your performance in the critical areas(s) you identified.

Organization of the Paper for Submission (refer to preceding sections for specific information):

Introduction - In this section, describe the occasion, the setting, the students and the instructional unit they were engaged in. Provide an outline of the content of the unit you taught. It is also here that contextual factors are described.

Assessments - Provide a complete description of each assessment including, but not limited to purpose, instructions, scoring (provide copy of rubric if one was used), score sheet, equipment, administrator details, and connection with the instructional unit.

Analyzing and Reporting Data - Wherever statistical techniques, charts, or other representations are used, describe them adequately in the narrative. Provide the rationale for each of the statistical techniques used, a description of the findings, and meaningful interpretation (finding and matching patterns, categorizing, drawing inferences, and making meaning from the data).

Reflection on What You Learned – Based on the results you obtained and analyzed, write a reflection (using the section above on “Reflecting on the Data” as a guide) on what you think the results say about what students learned as a result of the instructional unit. Discuss the implications of the results to instruction and what should be changed or given different or greater emphasis if the unit were to be taught again. Be specific about the implications to a teaching method, assignments/activities that students might complete to minimize knowledge gaps or increase understanding. Identify any changes you would make

in preparation, procedures, and data collection if you were able to administer the assessments again.

NOTE: Please refer to the rubric for a detailed description of the criteria developed for evaluating the quality of your work. As you write each section, be sure to consult the rubric as a guide to the important features.

IMPACT ON STUDENT LEARNING ANALYSIS RUBRIC
MGE TOSS PILOT
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Refer to the instructions for this assignment for details about expectations for each criterion.

CRITERIA	L1	L2	L3
INTRODUCTION - Setting			
• School & Community (location, population, SES, etc.)			
• Classroom & Resources (availability of technology, other resources)			
• Students (age, gender, race/ethnicity, exceptionalities, achievement/developmental levels, culture, language, learning styles, etc. <i>as appropriate</i>)			
• Unit/Lesson/Content			
ASSESSMENT(S)			
• Connection with unit			
• Purpose			
• Instructions for completing assessment to student			
• Scoring explanation & example (rubric provided if applicable)			
• Score sheet summarizing student scores			
ANALYSIS			
• Statistical techniques, charts, graphs included as appropriate			
• Rationale for use of statistical techniques & representations			
• Findings (report comparisons)			
○ Whole group			
○ Two subgroups			
○ Two individuals			
• Interpretation of reported data			
REFLECTION			
• On teacher's performance			
• On assessment instruments			
• Links to impact on learning (assessment results)			
• Future actions			
○ Professional development goals (2)			
○ Immediate actions (2)			

L1 – Candidate provides little or no evidence. Little understanding of expectations with regard to criterion. Description missing or poorly communicated. No data reported. Analysis lacking, incomplete, or done using inappropriate methods. Descriptive reflection.

L2 – Candidate provides limited evidence. Criterion is addressed minimally or apparently misunderstood. Description not elaborate enough to provide clear representation. Data reported, but incomplete or poorly organized. Analysis carried out but may be lacking or additional analysis needed. Reflection mostly descriptive with some insights.

L3 – Candidate provides clear evidence. Evidence to support criterion is present. Description provides adequate detail. Data is complete and logically organized and represented. Analysis is thorough and correct. Reflection is rich, establishing link between instruction and learning outcomes.