

Apprentice Teaching Significant Unit of Study
Candidate Work Sample (CWS)
SCIENCE
TSM 495C/595 Secondary Science
NSTA Assessment Five

Directions: The purpose of this Key Assessment is to engage you in the planning and reflection process of “what, why and how” to teach in a manner that will impact student learning. This assessment provides

and InTASC Standards 1-10. (www.nsta.org/pd/ncate/docs/2012NSTAPreserviceScienceStandards.pdf) (http://www.ccsso.org/documents/2011/intasc_model_core_teaching_standards_2011.pdf)

The requirements are clarified in the rubric below, with explanations of what is required to receive a passing score. You need to receive a score of 2 or 3 for each item on the rubric. A final score of 1 for any of these categories would prevent you from passing the student teaching course! You may need to work with the CWS faculty evaluator to have the opportunity to revise your paper. Please read through the rubric below to gain a general understanding of the requirements for your CWS. Be sure to note what constitutes a passing score and the emphasis on providing evidence through student work and quantifiable data as a common requirement.

EVIDENCE OF STUDENT LEARNING RUBRIC

Item	Descriptors: NSTA & InTASC	Emerging 1	Basic 2	Professional 3
1 The Learner and Learning: Learning Differences Learning Environments Overview of school context, demographics and implications for instruction.	<p>School Community, Context and Learning Environment: The Teacher Candidate uses information about the learning-teaching context and student individual differences to plan instruction and establish a learning environment.</p> <p>(InTASC 2, 3)</p>	<p>The Teacher Candidate demonstrates limited or incomplete evidence of understanding how school community, classroom, and individual characteristics of students influence instructional decisions and/or the learning environment.</p>	<p>The Teacher Candidate clearly articulates information about the school community, classroom, and individual characteristics of the students, and how this information was used to plan instruction and create a learning environment.</p>	<p>The Teacher Candidate clearly articulates information about the school community, classroom, and individual characteristics of the students, and how this information was used to plan instruction and create a learning environment. Selected instructional strategies demonstrate high-level understanding of how to address classroom contextual factors to create a learning environment.</p>

<p>Instructional Practice:</p> <p>Assessment</p> <p>Planning for Instruction</p> <p>Instructional Strategies</p> <p>Scientific Inquiry</p>	<p>appropriate.</p> <p>(NSTA 2b) (InTASC 4, 5) (InTASC 6, 7, 8)</p>			
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The candidate develops lesson plans that show all students are expected to collect and interpret data using science-specific technology in order to understand scientific processes, relationships and patterns.

(NSTA 3b)
(InTASC 4, 5)
(InTASC 6, 7, 8)

The candidate provides evidence of engaging students in inquiries that contribute to their students' understanding of science concepts and relationships through empirical observations, data collection and making logical inferences.

(NSTA 5c)
(InTASC 4, 5)
(InTASC 6, 7, 8)

The Teacher Candidate does not provide evidence of

	<p>The candidate uses a variety of teaching strategies to engage and motivate all students in learning.</p> <p>(NSTA 3a) (InTASC 6, 7, 8)</p>	<p>The Teacher Candidate does not demonstrate the use of multiple teaching strategies used to engage and motivate all students throughout instruction.</p>	<p>The Teacher Candidate demonstrates the use of multiple teaching strategies used to engage and motivate all students throughout instruction.</p>	<p>The Teacher Candidate demonstrates the effectiveness on student learning of using multiple teaching strategies to engage and motivate all students throughout instruction.. Articulates how strategies were designed to meet the needs of all learners.</p>
	<p>The candidate applies ongoing fair and equitable assessment strategies to analyze student learning and evaluate preconceptions and ideas that students hold.</p> <p>(NSTA 3c) (InTASC 6, 7, 8)</p>	<p>The Teacher Candidate does not provide evidence of using equitable assessment strategies to analyze both students' prior knowledge and their learning as a result of instruction.</p>	<p>The Teacher Candidate provides evidence of using assessment strategies that equitably analyze students' prior knowledge and learning as a result of instruction.</p>	<p>The Teacher Candidate provides evidence of using assessment strategies that equitably analyze students' prior knowledge and learning as a result of instruction. Articulates how assessment strategies were designed to demonstrate understanding of all learners.</p>
<p>7 Professional Responsibility : Professional Learning & Ethical Practice Leadership and Collaboration</p>	<p>Reflection, Professional Responsibilities and Ethics: The Teacher Candidate reflects on his or her demonstrated professional responsibilities to improve teaching practice.</p> <p>(InTASC 9, 10)</p>	<p>The Teacher Candidate provides a limited or incomplete reflection on professional responsibilities such as interacting effectively with colleagues, parents and students, the completion of professional duties or the demonstration of ethics of the profession to improve their daily practice.</p>	<p>The Teacher Candidate provides a clear reflection on their demonstration of professional responsibilities such as interacting effectively with colleagues, parents and students, the completion of professional duties or the application of ethics of the profession to improve their daily practice.</p>	<p>The Teacher Candidate provides a highly accurate and perceptive reflection on their demonstration of professional responsibilities such as interacting effectively with colleagues, parents and students, the completion of professional duties or the application of ethics of the profession to improve their daily practice.</p>

1. Introduction (~1 page max): Provide an overview of the school, community and students you are working with that introduces the context for the unit you are teaching.

- x What are the characteristics of the community, school, and classroom that may affect learning?
- x Identify student and course differences (do not give student names) in your classes and how that may affect learning (i.e. diversity, special Ed IEPs, ESL students, students in athletic programs, 504s, gifted program students, AP class, remedial class, etc.).
- x What are some specific implications for instruction and assessment based on the individual students, community, school, and classroom characteristics you are working with? (i.e. How might you need to adjust instruction if you have a diverse population? How might your instruction be adjusted if your school is in a rural vs. urban setting.

2./3. Pre-Planning: A table outlining your instructional unit. Identify the topic(s) and main activity(ies) for each instructional day of your CWS. Indicate the alignment between the standards, objectives, assessments (Pre/post tests and formative), and instructional activities. This is not to be written at the detailed level of lesson plans; rather it is a brief overview of your instructional unit.

An example table can be found at the end of this document.

NOTE: Pre-Planning Alignment Table-Instruction must be approved by your instructor before you give the pre-assessment of your unit.

4. Instructional Decisions Narrative: Organize your paper with a section corresponding to each of the required items found in items 2 – 6 of the rubric. Each section is written as a narrative description of your instruction in the classroom related to that particular topic. It needs to include 1) how you taught/met that(those) rubric item(s) through your instruction, 2) what students learned, and 3) reference to the corresponding evidence that supports your statement of student learning. (Evidence = student work samples placed in the appendices). Title each of these sections in bold followed by your narrative. Your evaluator will look in your narrative for evidence to evaluate if your instructional decisions are pedagogically sound.

Example (rubric item #2):

The candidate is able to successfully convey to students the major science concepts, principles, theories, laws, and interrelationships of their fields of licensure.

The major science concepts I covered through my instruction were Mitosis and Meiosis (what/how you taught). After assigning a pre-assessment, I began this unit with a microscope lab where students had1 had1 ha4u.5 (c)-2 (onc)-2 3 (el)-6.6 ((el)-6 -3.261 -1.6 (c)-2 (r)-52 (i)13.5 (ab))TJ -34

5. Pre-Post Assessment Comparison and Analysis: Analyze the results of your pre/post tests by learning objective and discuss the students' growth. Calculate the % improvement by objective and provide a pre/post test analysis using graphs that demonstrate quantifiable growth according to objective.

6. Reflection on Instructional Effectiveness: Further analyze and reflect upon the unit you taught. Write a narrative that addresses line 7 on the rubric (reflection). The following questions may be helpful to consider for passing this section.

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c) indicate the conditions

			Formative: x microscope lab x online web quest x handout.	On-line web quest.	effectively utilize technology to enhance teaching and learning.
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