## **Pre-Practicum Gateway Task Template: Addressing Student Misconceptions**

*Candidates will use content and pedagogical knowledge to analyze student work, identify a misconception, and describe an instructional strategy to address the misconception.*

**Alignment to** [**Professional Standards for Teachers**](http://www.doe.mass.edu/lawsregs/603cmr7.html?section=08)**:**

* **Indicator I-A. Curriculum and Planning:** Knows the subject matter well, has a good grasp of child development and how students learn, and designs effective and rigorous standards-based units of instruction consisting of well-structured lessons with measurable outcomes
	+ **Element I-A-1. Subject Matter Knowledge**: Demonstrates sound knowledge and understanding of the subject matter and the pedagogy it requires by consistently engaging students in learning experiences that enable them to acquire complex knowledge and subject-specific skills and vocabulary, such that they are able to make and assess evidence-based claims and arguments.

**Licensure Field/Grade-Level:**

This task can be adapted for use in any licensure program. See below for suggested instructions for developing, administering, and completing this task.

**Instructions for Administering the Task:**

*Note:* This task is designed to be completed during or prior to Pre-Practicum Stage 1[[1]](#footnote-1) because it does not require a candidate to directly engage with students in a PK-12 classroom.

Selecting a good student work artifact as a sample will be important to making sure this task is appropriately rigorous. What kind of error(s) would be most meaningful for candidates to grapple with?

1. As a department, identify a student work artifact demonstrating a critical misunderstanding. All teacher candidates in the program will use the same student work artifact to complete this task.
2. Calibrate around expectations for candidates’ responses by responding to the scorer calibration questions on [page 5](#_Scoring_Guide:_Scorer). Be clear about the specific information that you *must see* in the candidates’ responses in order to receive a score of “Meets Expectations.”
3. Provide the candidate(s) with the instructions ([page 2](#instructsionsforcand)), the student work artifact, the corresponding assignment or prompt from the teacher and the content standard(s) addressed.
4. Use the rubric to score the candidate’s submission.
5. Reconvene as a department or with the other scorers of this task to review candidate responses, identify trends, and discuss implications or adjustments necessary to continue to support candidate readiness and programmatic continuous improvement.

**Instructions for the Teacher Candidate:**

Analyze the student work artifact and respond to the following questions (up to 2 single-spaced pages or 1000 words).

1. What skills and knowledge does the student need to be able to solve this problem or complete this task? Cite the relevant standard(s) from the Curriculum Frameworks.
2. Identify at least one area of strength that the student has demonstrated in this work sample.
3. Identify one major misconception in the student’s work. Provide evidence of the misconception from the work and describe the underlying thinking that may have led the student to this misconception.
4. Identify and describe two instructional activities that could be used to correct the misconception and provide a rationale for your selection.

**Optional Extension Activities:**

* Prepare the feedback you would provide to this student, highlighting their areas of strength as well as addressing their misconception (I-C-3. Sharing Conclusions With Students)
* [Stage 2] Using the instructional materials used in your pre-practicum placement, proactively anticipate and plan for likely student misconceptions by identifying the supports and guided practice opportunities that will help all of your learners access the material. Enact the materials with a small group of students and evaluate the effectiveness of your approach and identify the adjustments you will make in subsequent lessons (II-E-2 Access to Knowledge, I-B-2 Adjustments to Practice).

## **Student Work Sample**

*Administration Instructions:* Use this space to insert a student work artifact for the candidate’s analysis in this task. Student work should be anonymized. Accompanying the student work should be the corresponding prompt or assignment from the teacher and the content standard(s) being addressed.

## **Scoring Guide**

The candidate’s submission will be scored according to the following criteria. In order to achieve a passing score on this gateway task, the candidate will demonstrate “Meeting” for all criteria.

| Criteria | Not Meeting | Approaching | Meeting |
| --- | --- | --- | --- |
| Candidate demonstrates understanding of the skills and knowledge that students need to solve the problem/complete the assignment. | * Demonstrates limited or incorrect understanding of the subject matter.
 | * Demonstrates factual understanding of the skills and knowledge embedded in the associated learning standard(s).
 | * Demonstrates sound understanding of the skills and knowledge embedded in the associated learning standard(s) and makes vertical connections to build students’ understanding.
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| Candidate identifies and provides evidence of a misconception in a student work artifact. | * Does not accurately or clearly identify a misconception or provides limited evidence from the student work.
 | * Identifies a misconception and provides some evidence from the student work.
 | * Identifies a major misconception, clearly articulates student’s underlying thinking, and provides detailed evidence from the student work.
 |
| Candidate articulates evidence-based instructional activities to correct the misconception.  | * Does not clearly connect instructional strategies to the misconception.
 | * Identifies 1-2 instructional activities but is lacking specificity.
* Provides limited justification of the selection of the instructional activities based on their connection to the student’s underlying thinking.
 | * Identifies two specific, evidence-based instructional activities representing evidence-based practice in the subject area
* Clearly articulates connection between proposed activities and the student’s underlying thinking.
* Provides strong rationale for each of the selected activities.
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## **Scoring Guide: Scorer Calibration**

Prior to administering this task, scorers should calibrate around what it means to “Meet” expectations on this task. Use the form below to build an “answer key” based on the student work artifact you have selected. Do not list all potential responses but rather identify the *“Must See’s”* that must be present in a candidate’s response in order for them to receive a score of Meets Expectations.

|  | Meeting Expectations Criteria | What Must You See in a Candidate’s Response in order to Meet Expectations? |
| --- | --- | --- |
| Candidate demonstrates understanding of the skills and knowledge that students need to solve the problem/complete the assignment. | * Demonstrates sound understanding of the skills and knowledge embedded in the associated learning standard(s) and makes vertical connections to build students’ understanding.
 | * What are the skills and knowledge embedded in the learning standard(s)?
* What vertical connections should the candidate make?
 |
| Candidate identifies and provides evidence of a misconception in a student work artifact. | * Identifies a major misconception, clearly articulates student’s underlying thinking, and provides detailed evidence from the student work.
 | * What is or are the major misconceptions in this artifact?
* What evidence should be cited regarding the student’s underlying thinking?
 |
| Candidate articulates evidence-based instructional activities to correct the misconception.  | * Identifies two specific instructional activities representing evidence-based practice in the subject area
* Clearly articulates connection between proposed activities and the student’s underlying thinking.
* Provides strong rationale for each of the selected activities.
 | * What content-specific, evidence-based practices should the candidate identify to address these misconceptions and how do they connect to the student’s underlying thinking?
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1. According to the [Guidelines](http://www.doe.mass.edu/edprep/resources/pre-practicum.pdf), given the necessity to scaffold early field-based experiences in order to meet the developmental needs of individual candidates and build towards full readiness for the licensure role, the pre-practicum may be considered to include two, potentially overlapping, stages. Stage 1 supports a candidate’s initial introduction to the PSTs and SMKs through activities such as guided observations, mixed-reality simulations, and mock teaching embedded into coursework. [↑](#footnote-ref-1)