## **Pre-Practicum Gateway Task: Analyzing and Drawing Conclusions from Data**

*Candidates will use a student data set to identify patterns, draw conclusions, and propose next steps for instruction that will improve learning for all students.*

**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.

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

* **Indicator I-C. Analysis**: Analyzes data from assessments, draws conclusions, and shares them appropriately.
  + **Element I-C-1. Analysis and Conclusions:** Draws appropriate conclusions from a thorough analysis of a wide range of assessment data to inform instructional decisions and improve student learning.

**Instructions for Administering the Task:**

*Note:* This task is designed to be completed during Pre-Practicum Stage 1[[1]](#footnote-1) because it does not require a candidate to directly engage with students in a PK-12 classroom. Suggested modification for use in Stage 2 is described in the Extension Activities below.

1. Select a set of student assessment data from at least one source (such as classroom/common assessments, formative assessments, or MCAS) demonstrating the individual performance and/or progress of at least five students in meeting learning standards. The data set should be anonymized, represent a range of performance levels, and to the extent possible be disaggregated by student subgroup. Include the source of data (e.g. the assessment items and the assessed content standard(s)). All teacher candidates in the program will use the same data set 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 data set, the corresponding assessment item(s) and 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:**

Examine the student assessment data provided and respond to the questions below (up to 2 single-spaced pages, or 1000 words).

1. What are three conclusions that you can reach about student learning based on this data? Be specific, citing evidence from the data related to students’ mastery of the content standard(s), individual or subgroup performance, and/or overall patterns or trends.
2. Considering overall trends as well as individual student/subgroup performance if applicable, propose 2-3 content-specific instructional strategies that you would use as next steps to improve student learning. For each strategy, provide a rationale grounded in data and justified by evidence-based practice in this content area.

**Optional Extension Activities:**

* Draft an email to your teaching team sharing your analysis and proposing next steps (I-C-2 Sharing Conclusions with Colleagues).
* Role-play conferencing with a student who did not perform well on the assessment (I-C-3 Sharing Conclusions with Students).
* [Stage 2] Administer an assessment to students in your pre-practicum placement and use the prompts above to analyze the data and plan additional next steps (I-C-1 Analysis and Conclusions, I-B-1 Variety of Assessment Methods, I-B-2 Adjustments to Practice).
* Analyze and draw conclusions from more than one set of data for a group of students (I-C-1 Analysis and Conclusions)

## **Sample Data Set**

*Administration Instructions:* Use this space to insert a set of student assessment data from at least one source (such as classroom/common assessments, formative assessments, or MCAS) demonstrating the individual performance and/or progress of at least five students in meeting learning standards. The data set should be anonymized, represent a range of performance levels, and to the extent possible be disaggregated by student subgroup. Include the source of data (e.g. the assessment items and the assessed content standard(s)).

## **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.

|  | Not Meeting | Approaching | Meeting |
| --- | --- | --- | --- |
| 1. Candidate draws appropriate conclusions regarding student learning based on an accurate and thorough interpretation of the data. | * Conclusions are not clearly based on the data or are formed based on inaccurate or partially accurate interpretation of the data | * Conclusions are partially supported by the data but some important aspects of the data were not considered. * Conclusions may support improved student learning outcomes but are not directly related to teaching and learning in the content area. | * Conclusions incorporates consideration of all available data * Conclusions are well supported by the data * Conclusions strongly support improved student learning outcomes and are directly related to teaching and learning in the content area. |
| 1. Candidate identifies, and provides a sound rationale for, recommended instructional next steps to improve learning for *all* students. | * Connection between conclusions and proposed next steps is weak or unclear * Proposed next steps do not represent evidence-based practice in the content area. | * Connection between conclusions and the proposed next steps is somewhat clear * Identifies instructional strategies representing elements of evidence-based practice in the content area but are missing important details. * Proposed next steps may meet the needs of the students overall but does not address needs of individual students or subgroups of students. | * Connection between data-driven conclusions and proposed next steps are strong * Identifies instructional strategies representing evidence-based pedagogical practice in the content area that would appropriately meet the needs, based on the data, of the students overall as well as individual students or subgroups of students. |

## **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? |
| --- | --- | --- |
| 1. Candidate draws appropriate conclusions regarding student learning based on an accurate and thorough interpretation of the data. | * Conclusions incorporates consideration of all available data * Conclusions are well supported by the data * Conclusions strongly support improved student learning outcomes and are directly related to teaching and learning in the content area. | * What are the highest-leverage, evidence-based conclusions that the candidate should draw from this data? |
| 1. Candidate identifies, and provides a sound rationale for, recommended instructional next steps to improve learning for *all* students. | * Connection between data-driven conclusions and proposed next steps are strong * Identifies instructional strategies representing evidence-based pedagogical practice in the content area that would appropriately meet the needs, based on the data, of the students overall as well as individual students or subgroups of students. | * What content-specific, evidenced-based practices should the candidate propose based on these conclusions? |

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)