Evaluation of Evidence Guide

Adolescence and Young Adulthood/Science
Portfolio Entry 1

1. **Aspects of teaching. As you read the response, note evidence pertaining to EACH of the aspects of teaching listed below. Evidence may come from one or more data sources for any one aspect.**

   a) KNOWLEDGE OF STUDENTS (KOS): Knowledge of students as science learners and teaching context.

   b) MAJOR IDEA/GOALS/CONNECTIONS (MI/G/C): The major idea in science and connections between the major idea, the instructional goals, "broader contexts" of science, and assessment.

   c) INSTRUCTION (INS): The instructional sequence, including the featured activities, work together to further the student's understanding of the major idea in science.

   d) ASSESSMENT (ASMT): Assessments (rationale, furthers learning goals, integrated and enhances instruction).

   e) ANALYSIS (ANA): Analysis of student responses to activities.

   f) FEEDBACK (F): Feedback to students (verbal, as documented in the written commentary, and/or written).

   g) CONTENT KNOWLEDGE (CK): Teacher's science content and pedagogical knowledge.

   h) INSTRUCTIONAL RESOURCES (IR): Use, adaptation and/or creation of instructional resources including appropriate technologies.

   i) REFLECTION (R): Next steps, alternative approaches, ability to analyze and modify his or her own practice.

2. **Does instruction promote this student's growth in scientific understanding? (ANSWER FOR EACH STUDENT.) As you answer this question, think about the quality of and the links between the different parts of the evidence—are the parts and links logical, accurate, and complete? Here are the links to think about:**

   - information about the student ← → the goals ← → the instruction ← → the assessment
   - the instruction ← → the teacher's analysis of the student work
   - the teacher's analysis ← → the student work (i.e., quality of "fit": do the two sources support and enhance each other or do they conflict and undermine each other?)

3. **Does the instructional sequence deepen students' understanding of a major idea in science? Consider:**
   - the flow and logic of the instructional sequence
   - whether the learning activities are appropriate for these students and reflect a range of instructional practices, including assessment, that provide evidence about student learning from a variety of sources
   - the use of instructional resources
   - whether the instruction addresses a major idea that is central to science and relates that idea to other contexts in science and students' prior knowledge to make science more meaningful
   - whether the teacher can accurately describe, analyze, and evaluate students' work, showing knowledge of students and insight into their learning and provide appropriate feedback
   - whether the teacher uses an integrated approach to assessment that furthers high and appropriate learning goals and enhances instruction
   - whether the teacher provides appropriate feedback to the students

4. **Think about the performance as a whole. Overall, what is the nature of the evidence that the teacher is able to use appropriate activities combined with proper instruction to teach a major idea over time furthering worthwhile and appropriate learning goals and facilitate students' growth as science learners? Think about:**
   - the instructional sequence, including the featured activities and the culminating assessment
   - the evidence in both analyses and the responses of both students
   - your judgment of the effectiveness of the instruction for each of the two students
   - the links between the different parts of the performance

Evaluation of Evidence Guide

Adolescence and Young Adulthood/Science
Portfolio Entry 2

1. **Aspects of teaching. As you review the response, note evidence pertaining to EACH of the aspects of teaching listed below. Evidence may come from one or more data sources for any one aspect.**

   a) KNOWLEDGE OF STUDENTS (KOS): Knowledge of students as science learners and teaching context.

   b) GOALS/CONNECTIONS (G/C): The learning goals and connections between goals, the investigation, and student needs.

   c) INSTRUCTION (INS): The investigation; what happens at the selected points during the investigation.

   d) SCIENCE INQUIRY (INQ): How students develop skills and engage in scientific inquiry processes during the conceptualization, data collection, and analysis/evaluation stages of the investigation.

   e) INSTRUCTIONAL RESOURCES (IR): Use, adaptation and/or creation of instructional resources to support the inquiry process.

   f) LEARNING ENVIRONMENT (LE): Nature of the learning environment. Is it an equitable, accessible, and fair learning environment that encourages all students to participate in science inquiry?

   g) ANALYSIS (ANA): Teacher's analysis of the video recording. Is it accurate and insightful?

   h) CONTENT KNOWLEDGE (CK): Teacher's content knowledge and pedagogical knowledge.

   i) REFLECTION (R): Teacher's ability to analyze and modify his or her own practice.

2. **Does the investigation on the video recording come together with the rest of the instruction to facilitate students' growth in scientific inquiry and science understanding? As you answer this question, think about the quality of and the links between the different parts of the evidence—are the parts and links logical, accurate, and complete? Here are the links to think about:**

   - information about the students ← → the goals ← → the sequence of instruction
   - the sequence of instruction ← → the teacher's analysis ← → the reflection
   - the written commentary ← → what you saw on the video recording (i.e., quality of "fit": do the two sources support and enhance each other or do they conflict and undermine each other?)

3. **Think about the performance as a whole. <u>Overall, what is the nature of the evidence that the teacher is able to facilitate and support student learning through scientific inquiry as students actively engage in a science investigation</u>? Think about this in terms of:**

   - the sequence of instruction
   - the written commentary, including the analysis of the lesson featured on the video recording
   - the evidence from the video recording itself
   - the links between the different aspects of the performance

Evaluation of Evidence Guide

Adolescence and Young Adulthood/Science
Portfolio Entry 3

1. **Aspects of teaching. As you review the response, note evidence pertaining to EACH of the aspects of teaching listed below. Evidence may come from one or more data sources for any one aspect.**

   a) KNOWLEDGE OF STUDENTS (KOS): Knowledge of students as science learners and teaching context.

   b) GOALS/CONNECTIONS (G/C): Are learning goals and instruction, including the discussion, aligned and central to science, appropriate for students, and placed in larger scientific context?

   c) ANALYSIS (ANA): Analysis of the video recording—is it accurate and insightful?

   d) LEARNING ENVIRONMENT (LE): Is the learning environment a productive one in which questioning, prompting and other instructional strategies that elicit scientific reasoning and understanding? Is it an equitable, accessible, and fair learning environment that encourages all students?

   e) ENGAGEMENT (ENG): Engagement in discourse on the video recording, including verbal and nonverbal signs of interest in, relevance of discourse to what is being taught.

   f) FEEDBACK (F): Is feedback to students frequent, responsive to their ideas, and encouraging for all students to participate?

   g) CONTENT KNOWLEDGE (CK): Teacher's content knowledge and pedagogical knowledge.

   h) REFLECTION (R): Next steps, alternative approaches, ability to analyze and modify his or her own practice.

2. **Does the discussion on the video recording come together with the rest of the instruction to facilitate students' growth in scientific understanding? As you answer this question, think about the quality of and the links between the different parts of the evidence—are the parts and links logical, accurate, and complete? Here are the links to think about:**

   - information about the students ← → the goals ← → the instructional sequence
   - the instruction ← → the teacher's analysis ← → the reflection

- the written commentary ← → what you saw on the video recording (i.e., quality of "fit": do the two sources support and enhance each other or do they conflict and undermine each other?)

3. **Think about the performance as a whole. <u>Overall, what is the nature of the evidence that the teacher is able to facilitate and support student understanding of important scientific ideas through classroom discourse</u>? Think about this in terms of:**
   - the sequence of instruction and whether it is conducive to discourse and scientific reasoning
   - the written commentary, including the analysis of the lesson featured on the video recording
   - the evidence from the video recording itself
   - the links between the different aspects of the performance

Evaluation of Evidence Guide

Adolescence and Young Adulthood/Science
Portfolio Entry 4

1. **Accomplishments:**
   - Briefly describe each accomplishment and note the documentation provided by candidates
   - Note the aspect(s) addressed in the evidence for each accomplishment as described below:
     a) TEACHER AS PARTNER WITH FAMILIES AND COMMUNITY (P-F/C): Evidence that the teacher treats parents and other interested adults as valued partners in the child's development and education. Also, evidence that school–community connections facilitate ongoing, mutually beneficial interactions between the students and the wider community and enhance teaching and learning. Evidence that the teacher fosters two-way dialogue with parents and other interested adults.
     b) TEACHER AS LEARNER (TL): Evidence that the teacher has engaged in ongoing professional development whereby he or she has strengthened his or her knowledge, skills, and abilities relevant to his or her teaching context. Does the teacher seek information on current theories and research—and their applications—through familiarity with professional literature, participate in and support professional organizations, or take advanced course work relevant to his or her teaching and learning context?
     c) TEACHER AS LEADER/COLLABORATOR (L/C): Evidence that the teacher has worked collaboratively with colleagues to improve teaching and learning (within school or in wider professional community). Also, evidence that the teacher has shared his or her expertise in a leadership role with other educators so that teaching and learning can be improved.
   - Evaluate each accomplishment and its impact on student learning
2. **Reflective Summary: Does the teacher explain what was most effective in impacting student learning and why it was effective? Does the teacher plan for impacting student learning in the future? Describe and evaluate the teacher's summary.**

3. **Look at the descriptions and the documentation together with the Reflective Summary. What is the nature of the "fit" between them? Consider the following:**
   - Descriptions ← → supporting documentation ← → Reflective Summary (Each and every accomplishment listed by the teacher need not be verified by supporting documentation, and the documentation may not necessarily address every detail of the teacher's description.)
   - Supporting documentation ← → development as a learner; leading/collaborating with the professional community; and outreach to families and community ← → Reflective Summary
4. **Professional development, work with colleagues, and appropriateness and extent of outreach to families and the community. Consider the following evidence:**
   - Professional development activities and work with colleagues is ongoing, showing the application of improved content knowledge and/or pedagogical approaches that impact student learning.
   - Strategies used by the teacher to reach out to families and the community are appropriate for his or her students and extensive enough to engage families and the community in two-way communication for the purpose of impacting student learning.
   - Communications with families and community address substantive teaching and learning issues and student progress. (As opposed to communications that are strictly procedural, such as organizing field trips, or focused on behavior or discipline issues.)
5. **Think about the performance as a whole. Overall, what is the nature of the evidence that the teacher is able to impact student learning through work with colleagues, professionals, families, and the community, and as a learner? Think about this in terms of the following areas:**
   - Teacher as Partner with Families and Communities
   - Teacher as Learner
   - Teacher as Leader/Collaborator