University of Rhode Island

SPRING, 2008-09

EDC 457: Video Lesson

The candidate must earn a 3 or higher on each rubric element in order to successfully complete this critical performance
Discovery\Inquiry Science Video Lesson EDC 457 Task

Purpose:
Effective teaching calls for reflection on one's teaching and student learning.

Process:

1. Be sure to request parental permission to conduct the videotaping, using the "Parent\Guardian Video Release Form." Any students who do not have permission must be placed off camera during the lesson.
2. Select an inquiry or discovery lesson that involves problem sollving. Try to base the lesson in the science unit/curriculum that the students are studying. You will work to develop the lesson with the highest level of openness possible. You can check with your course instructors as you develop your ideas so that you do not end up with a lesson that does not lend itself to the type of lesson (i.e., discovery or inquiry) that we want you to practice. Plan the topic to be taught roughly between February 26th and March 26th.
3. Using the BTS lesson plan format, design your lesson in as detailed a manner as possible. Look over the rubric and commentary questions so you can include all important aspects in your lesson. Be sure to be explicit about the science concept and /or process at the heart of your lesson. Connect your lesson objectives to the National Science Education Standards. Do your planning in advance so that your course instructor can review the plan and help you develop the level of discovery and openness in advance of teaching the lesson. Be sure to include all relevant handouts and displays that you will use in the lesson. If your lesson is based in a science kit or other prepared materials, be sure to reference the publisher and particular lesson. It is all right to develop the lesson from one in a teacher's manual as long as you redesign it to build up the level of student activity and level of openness, that is, your lesson is not expected to be totally original.
4. Your videotape should include the whole lesson. The value of the videotape is dependent on your ability to capture (visually and audibly) the following:
    1. A view of the classroom physical set-up (e.g., how the desks are arranged. You can start by panning the room with the camera
    2. Your development of the idea and concept through student discovery.
    3. Small groups working independently or with your facilitation
    4. Students engaged in critical thinking and problem-solving
    5. Your role in facilitating discussion with the whole group and/or with small groups
    6. The questioning you use with students and questions they ask.
    7. The ways you make meaning and summarize the lesson concepts at the end
5. Upload your lesson plan and commentary on the True Outcomes electronic portfolio. Give a copy of the videotape to your methods instructors.
6. Review instructors' feedback and revise and resubmit as needed to achieve at least the "Meets the Standard" criteria.

Product:

A. Content

- What were the major objectives of the lesson (what fundamental concepts, science standards)?
- How did your lesson connect the lesson's science understanding with the students? prior knowledge?
- How did you develop the connection between the content and other subject areas?
- How comfortable were you with the science content you were teaching

B. Environment

- Discuss the rules and standards of behavior you established for the lesson.
- How did you set up the groups for the lesson?

C. Instruction:

- Describe the inquiry/discovery opportunities you provided for students.
- Discuss your use of student exploration and formal presentation.
- Discuss how you developed student understanding.
- Discuss how you dealt with student questions and misconceptions.
- Discuss the level of questions (e.g. detail vs. higher order) you asked in different parts of the lesson. Include specific examples of types of questions.
- Discuss type of discussion that happened during the lesson.

- What was the amount of time that you talked as a teacher compared to the students' responses and interactions?
- Discuss ways you summarized and made meaning WITH students at the end of the lesson.
- Discuss the variety of ways you used to represent or explain concepts (e.g., experimental results, metaphors, diagrams, models).
- Discuss changes (from your original plan) you made during instruction during the lesson and why you made them.

D. Learners

- Discuss how students responded to instruction with ideas relevant to the lesson objectives.
- Discuss how the student engaged with the lesson content.
- What means did students use to represent their ideas during the lesson (e.g., discussion, demonstrations, graphs, diagrams, written explanations, answering worksheet questions)?
- How did your lesson provide for different learning styles and/or students with special needs?
- How successful do you think the lesson was in terms of student learning? (Use specific examples to illustrate your statement.)
- If you could do the lesson again, what, if anything, would you change to improve the lesson?

Element	Levels of Performance					
CONTENT	**Little Evidence (0-1)**: Course objective not met in lesson Little inquiry/discovery-based activities all activities designed by student teacher Students not engaged with the materials or not in groups for the lesson Student teacher cannot guide group inquiry activities Science content may be inaccurate and/or inappropriate to the grade level Student teacher demonstrates many misconceptions Lesson does not connect to students' prior knowledge Little evidence that students further their knowledge and process skills Lesson does not follow the BTS format	**Approaches theStandard(2)**: Course objective evident in lesson Partially inquiry/discovery-based with most activities designed by student teacher Students engaged with materials and in groups for some of the lesson Student teacher struggles with guiding group inquiry Lesson provides little opportunity for students to engage in discussion, investigations etc. Science content is mostly accurate but some content is inappropriate to the grade level Student teacher demonstrates several misconceptions Lesson does not connect to prior knowledge and some students furthered their content and process skills Lesson does not follow the BTS format	**Meets the Standard(3)**: Good application of course objective Primarily inquiry/discovery based with some degree of openness (some of the activities designed by the student-teacher) Students are actively engaged with materials and in groups for much of the lesson Student teacher shows ability to guide group inquiry Lesson is mostly effective in eliciting active student participation, student questioning, and discussion with peers. Science content is mostly accurate and appropriate to the grade level. Student teacher demonstrates few or minor misconceptions in science content. Lesson connects to student prior	**Above the Standard(4)**: Some inventive aspects to application of course objectives Inquiry/discovery-based lesson Openness allows some time for student exploration of materials, student questions, predictions, and design of investigations Students guided in group inquiry and active engagement with materials for entire lesson Science content is accurate and appropriate to the grade level Student teacher demonstrates solid understanding of science content Lesson connects with students' prior knowledge and furthers students' knowledge and building of process skills Clearly follows BTS format	**Exceeds the Standard (5)**: Unusually inventive application of course objectives. Original and highly effective inquiry or discovery-based lesson. Degree of openness allows ample time for student exploration of materials, student questions, predictions, design of investigations Group inquiry is effectively guided Lesson elicits and connects with students' prior knowledge Science content is appropriately challenging, substantive, and accurate Student teacher demonstrates mastery of science content	

			knowledge and most students furthered their content and process skills. Lesson follows the BTS format		Lesson elicits and connects with students' prior knowledge and student teacher effectively guides furthering of student knowledge and process skills Clearly follows BTS format.	
COMMENTARY-Critical Thinking	○ **Little Evidence (0-1)**: Reflection of lesson is incomplete. Reflection is not supported by evidence from the video There are very few suggestions for improvement of inquiry-based approach and response to student questions. Contains little if any evaluation of student response to and behavior during the lesson Suggestions for improvement show no understanding or misunderstanding of effective means of eliciting student active participation and critical thinking.	○ **Approaches theStandard(2)**: Reflection of lesson is mostly complete. Reflection is somewhat supported by evidence from the video There are a few suggestions for improvement of inquiry-based approach and response to student questions. Contains few evaluations of student response to and behavior during the lesson Suggestions for improvement show limited understanding of effective means of eliciting student active participation and critical thinking.	○ **Meets the Standard(3)**: Reflection on all aspects of the lesson is thoughtful and complete. Includes some evidence from the video. There are some suggestions for improvement of inquiry-based approach and response to student questions. Contains some evaluation of student response to and behavior during the lesson Suggestions for improvement show some understanding of effective means of eliciting student active participation and critical thinking.	○ **Above the Standard(4)**: Reflection on all aspects of lesson is insightful and in-depth. Reflection is supported by evidence from the video Suggestions for improvements show evidence of understanding inquiry-based approaches Contains evaluations of student response to and behavior during the lesson Suggestions for improvement show an understanding of effective means of eliciting student active participation and critical thinking.	○ **Exceeds the Standard (5)**: Reflection on all aspects of lesson is rich, insightful and in-depth. Reflection is fully supported by evidence from the video Suggestions for improvements are clear evidence of understanding inquiry-based approaches Contains insightful evaluations of student response to and behavior during the lesson Suggestions for improvement show exceptional understanding of effective means of eliciting student active participation and critical thinking.	
MECHANICS OF WRITING	○ **Little Evidence (0-1)**: Poor analysis Does not use supporting evidence from lesson Mechanics of writing are ineffective with many errors (eg spelling, grammar).	○ **Approaches theStandard(2)**: Incomplete analysis. Uses and describes some supporting evidence Mechanics of writing are somewhat effective but contain several	○ **Meets the Standard(3)**: A mostly complete analysis. Uses and describes supporting evidence. Mechanics of writing are effective and with few errors (eg spelling,	○ **Above the Standard(4)**: Well-organized and complete analysis. Uses and describes supporting evidence Mechanics of writing are effective and without error (eg	○ **Exceeds the Standard (5)**: Above average ability to write a well-organized and complete analysis. Uses and describes supporting evidence very	

	Video is incomplete record of lesson.	errors(eg spelling, grammar). Video provides a somewhat complete record of lesson.	grammar). Video is an effective and complete record of lesson.	spelling, grammar). Video is an effective and complete record of lesson.	clearly Mechanics of writing are very effective and without error (eg spelling, grammar). Video is an effective and complete record of lesson.	
				Rubric Total	_____	
				Numeric Grade (for Export Only)		