

## Abbatinozzi re LATE Unit 1 Lesson 6

### VISIT Rubric For Evaluating Lessons

#### *Who uses this rubric?*

- The following is a rubric for you to use when you are writing your evaluation of a lesson that might be used by teachers for their own professional development in VISIT, or that might be used by VISIT teachers in their classrooms with their students.

#### *What is a “lesson”?*

- A lesson typically will be something you can do in one to three hours’ work at the computer (or with your students in one or two class periods). If there are several lessons within a larger Investigation or curriculum, please fill out this form for each lesson you review.
- These lessons might be ones that the VISIT project is developing,
- These lessons may be ones that are already offered in VISIT webct courses,
- The lessons may have been developed elsewhere (e.g. Northwestern LATE Environment curriculum; MFTeach; ESRI lessons).

#### *Who will read the evaluation you are writing?*

- Other teachers in VISIT. Teachers will use your evaluations to learn how another teacher thinks about the lesson. Teachers might decide whether to take a certain lesson based on your critique.
- The authors of the lessons you are reviewing. Authors of lessons will use your evaluation to revise and improve the lesson.
- VISIT staff will use your evaluation to help decide whether to include the lesson in the VISIT professional development program for teachers.

I hope you will enjoy reviewing and evaluating lessons through using this rubric. Please suggest improvements to this rubric to [bev@piedmontresearch.org](mailto:bev@piedmontresearch.org).

#### **Instructions:**

- Please use this form to describe and evaluate an individual lesson. A lesson typically will be something you can do in one to three hours’ work at the computer (or with your students in one, two or three class periods). If there are several lessons within a larger Investigation or curriculum, please fill out this form for each lesson you review.
- Use the drop down menu in column 2 to rate each criterion. This should be on a continuum from 0 (Strongly Disagree) to 10 (Strongly Agree)

←	Strongly Disagree				Neutral					Strongly Agree	→
	0	1	2	3	4	5	6	7	8	9	10

- Use the right-most column of the table to explain your rating for each item. Just click in the box and begin typing your comments.
- Add any additional comments or items that you think should be included in the rubric at the end of this document.
- Please save this file under a new name when you fill it in. Include your last name in the file name. E.g. “hunterLATElsn2.doc”
- Unless you have received other instructions, please attach your completed evaluation document to an email and send it to both [bev@piedmontresearch.org](mailto:bev@piedmontresearch.org) and to [anneeschtruth@netscape.net](mailto:anneeschtruth@netscape.net).

You may want to suggest additional reviewers for this lesson. Include that information in your email.

1. Reviewer Name:	Marie Abbatinuzzi	
2. Date Reviewed:	6/10/01	
3. Please identify the resource you are evaluating (name of overall package or project, specific lesson title, author, source, how obtained, URL, etc).	Unit 1 Lesson 6, Mapping Your School Grounds	
4. Did you try out this lesson with students? If yes, please tell something here about the class and students with whom you tried this.	No	
Quality of Lessons		
➤ Pedagogically sound and appropriate to inquiry processes	10 Strongly Agree	
➤ Provides scientific value and accuracy	10 Strongly Agree	
➤ Appropriate grammar, spelling, quality of language used	10 Strongly Agree	
➤ Instructions are understandable	10 Strongly Agree	
➤ High quality of visual representations (e.g. layout sensible; screen shots readable; appropriate graph)	8	<b>Text based</b>
➤ Appropriate to curriculum, age level	10 Strongly Agree	<b>Appropriate for middle school curriculum</b>
➤ Technical soundness (i.e., the technology works as intended).	5	<b>Technology not part of lesson</b>

The <b>Investigation or lesson(s)</b> is effective for a <b>teacher's</b> professional development.		
➤ Uses and expands her/his scientific knowledge	1 Strongly Disagree	
➤ Expands his/her use of technology professionally and in the classroom	5	N/A
➤ Expands his/her understanding and skills in spatial reasoning	10 Strongly Agree	
➤ Encourages collaboration with other teachers, scientists and technologists	1 Strongly Disagree	Collaboration not necessary.
➤ Identifies new ways for meeting standards	8	
➤ Provides guided science inquiry lesson plans	10 Strongly Agree	Addresses middle school frameworks, both inquiry and content strands
➤ Appropriate for teacher use (convenience, efficient use of time, technically accessible, etc)	10 Strongly Agree	Well organized, materials and support needed are minimal.

The <b>Investigation or lesson(s)</b> is effective at the level of the <b>students</b> who use or might use the developed lesson		
<p>➤ Learning meets standards</p> <p>Identify standards: Massachusetts Curriculum Frameworks, Science and Technology, Strand One Inquiry Standards</p>	10 Strongly Agree	Appears to meet all aspects of Strand One
<p>➤ Participates in and learns about scientific inquiry processes</p>	10 Strongly Agree	
<p>➤ Develops or applies spatial reasoning in analysis of data</p>	10 Strongly Agree	Strong spatial component
<p>➤ Learns about science applications relevant to community issues</p>	10 Strongly Agree	Specific purpose of lesson
<p>➤ Becomes familiar with appropriate technology applications</p>	1 Strongly Disagree	No technology included in lesson.

**The Investigation Themes.** Describe the **theme** or topic on which the investigation will be developed.

(Example of **themes**: water quality in rivers or lakes; hazardous materials in living environments; ozone or radon in urban areas; distribution of flora or fauna; ecological modeling)

Theme:

Refining observational skills.

Observing and describing local environment.

➤ Is environmentally-related or socially important.	10 Strongly Agree	Attempts to make students more aware of their immediate environment
➤ Uses empirical databases.	1 Strongly Disagree	None used or needed for this activity
➤ Uses technology for visualization, manipulation of data; preparation of products; communication	1 Strongly Disagree	It could but none is identified
➤ Inquiry-driven.	10 Strongly Agree	
➤ Interesting to the teacher who develops and implements the lessons.	10 Strongly Agree	
➤ Interesting to the student who uses the lessons and becomes actively involved.	8	Unknown without testing
➤ Interesting and relevant to the local community	10 Strongly Agree	

**The Investigation Scenario.** The investigation **scenario** is the particular real world environment under study. It defines the geographical footprint for the **Investigation**. Local **scenarios** are usually more desirable because they are more relevant to the teachers, students and people in the surrounding community.

Example of **scenarios**:

water quality in the local watershed; power shortage across a state; a city wide environmental problem; water resources across a state or region – location, adequacy, preservation

Scenario:

Land use around local school; locations of buildings, roads, etc; plants and animals present

➤ Illustrates the relevance of science for the teacher, the students and the community	8	Would be valuable in helping students become more aware of their immediate environment.
➤ Provides a context where the grade appropriate science standard can be met	10 Strongly Agree	Addresses several 8 <sup>th</sup> grade biology and earth science standards.
➤ Provides a framework where a guided science inquiry can be presented, discussed and developed	10 Strongly Agree	

**Types Of Data And Availability**

➤ Defines the data for an investigation.	10 Strongly Agree	
➤ Provides the data	5	All data to be analyzed is collected by students
➤ Teaches how to get the data.	7	Defines data and clearly describes observational skills, but specific instruction must be done prior by teacher
➤ Supports and teaches Geo-spatial Data Sets	1 Strongly Disagree	No data sets needed

Identify the types of data provided:

None

<b>The Scientific and Technological Knowledge</b>		
➤ Identifies the specific scientific knowledge base needed.	1 Strongly Disagree	Addresses development of students skills rather than knowledge base.
➤ Identifies resource scientists and specialists.	9	vague - environmental scientists
➤ Correlates the knowledge base with curricular standards.	10 Strongly Agree	
➤ Provides links to needed resources and a URL is provided for a glossary	1 Strongly Disagree	None provided
➤ The lesson or investigation resources help to formulate, understand, and/or use a Driving Question for inquiry.	1 Strongly Disagree	
➤ It is clear what the driving question(s) are.	10 Strongly Agree	
<p>Driving Question:</p> <p>Students will formally observe their local surroundings and map the layout of your school grounds.</p>		

Data Integration, Analysis and Interpretation		
➤ Defining Data Processing: The data are given, already processed, or procedure is given.	10 Strongly Agree	Procedure is clear, method of data collection is clearly identified. Recording methods for map could be more specific.
➤ The analysis methods are appropriate to the purpose of the investigation and worth learning and doing	10 Strongly Agree	.
➤ Suggested tools are highly appropriate and useful for the analysis and interpretation tasks	10 Strongly Agree	
Please identify tools used:  No specific equipment, except for optional camera, is suggested or needed.		
Tools for analysis: Teachers are provided with instruction in their use.	5	N/A
Tools for analysis are accessible to teacher	5	N/A
Tools for analysis are accessible to the students	5	N/A
Expected analysis outcomes are defined clearly and completely.	10 Strongly Agree	Analysis is clearly guided for student.

**Lesson Plans and Rubrics**

➤ Meet National And Local Curricular Objectives.	10 Strongly Agree	
➤ Provide identifying templates for lesson plans.	1 Strongly Disagree	Specific teacher information is lacking.
➤ Provide identifying guidelines for creating assessment rubrics.	1 Strongly Disagree	Specific teacher information is lacking.

**Classroom and curriculum feasibility:**

**Time** 2 to 3 class periods; one for prelab, one for data collection, and one for analysis

**Materials** Map of school, camera and film, hand lenses, collection bags (?), field guides, colored pencils or crayons, notebooks for sketches (they will want to draw).

**Logistics**

**Management** Safety issues, issues of supervision for large classes

**Demands on teacher** Prelab guided practice in observation and data collection

**Student skill prerequisites**

**What are some other feasibility issues for this resource or lesson(s)?**

Completing, Testing, Reporting and Continuing		
The lesson or investigation results in a product	10 Strongly Agree	
The outcome of the lesson or investigation is useful to a real audience.	10 Strongly Agree	
Results can be disseminated through science fairs, poster presentations, and publications.	10 Strongly Agree	
Project can be sustained through Grant Sources and Partnership opportunities at the Local, Regional and National Level	5	N/A

Additional Comments Not Covered:

Lesson as presented on CD lacks specific teacher standards/guidelines for implementation including rubric for evaluation.