

Learning Assessment of Core Outcomes
Focus 2009-2010: Critical Thinking and Problem Solving
SAC: ESR

Contact: Tom Robertson, SAC Chair

503-614-7033, troberts@pcc.edu

Parts 2-4

2. When your project is completed, please describe the method (s) that you used.

We used a rubric that was personalized to fit our project for ESR 201 (Environmental Law and Policy). The project is a result of applying environmental principles learned throughout the term. The students applied their new knowledge of environmental law and policy to investigate an environmental problem in the Pacific Northwest. The students selected their environmental issue and followed through with an investigation of the problem. A wide range of environmental problems are investigated by students during any given year. The students selected the problem, investigated the history of the problem, the solutions implemented by various state, federal and local agencies and determined whether the solutions fit the societal needs and also resolved The environmental problem.

The students addressed the environmental laws that were that were violated and expressed their own opinions on the resolution of the problem.

Each student was evaluated in two ways: a written report detailing the environmental problem and its history, followed by resolution of the problem and offered their own opinions on the resolution or outcome, secondly the students gave an oral presentation to the class – using PowerPoint. Each student's oral report was evaluated by all other students using a standard evaluation rubric. This is a similar approach that they would use when presenting a paper to their peers after obtaining their first professional position.

3. What did you learn? We learned that this ESR class and the associated investigation and paper project positively reinforced the Critical Thinking and Problem Solving outcome. The average student grades generally average B (3+/4 on the grading rubric).

The scores were very encouraging since for most students this was their first opportunity to investigate an environmental issue from beginning to end.

The majority of these students will finish 3 classes in ESR before transferring to a four year school. Feedback from Portland State University faculty in their Environmental Science program has been very positive as our students seamlessly transfer to finish their B.S. in Environmental Studies/Science at PSU (or other universities) and perform very well during their last 2 years.

The courses at PSU (and other universities) also require the skills associated with this core outcome.

4. What changes, if any, are you making or recommending as a result? No changes are contemplated at this time. But the approach to the student project in ESR 201 is a dynamic approach with slight modifications annually to improve the critical skills thinking and better evaluate the outcome.

Every student will evaluate all other students. We will use a scale of 1- 5 for each of the following categories of their environmental issue investigation. Add a written narrative as to why you gave the score you did.

Your Name _____ Name (Presenter) _____

Title: (plus handout of summary)

A) What is (are) the Environmental Problem(s)?

B) Who is involved with the issue (private and public sector)?

C) Identify laws dealing with the problem (Federal/State/Local)?

D) Resolution of the Problem (are there solutions, or has the problem or issue been resolved):

E) Students interpretation of outcomes or potential outcomes (including student's opinions)?

Emerging**Developing****Mastering****1****2****3****4**

A	Does not identify the environmental problem	Identifies the main env. problem – no clear explanation	Clear identification of the env. problem, limited detail	Identifies the main env. problem clearly and completely
B	Does not identify major “stakeholders” in the env. problem	Gives limited information about the main “stakeholders”	Clear identification of major “stakeholders”	Clear understanding of major “stakeholders” and detailed explanation of their roles
C	Does not identify the laws addressing the env. problem	Some acknowledgement that laws are involved, but leaves out a major legal entity	Covers most of the laws but does not involve a complete explanation of how the laws are associated with the problem	Covers a local, state and federal laws, gives a clear explanation of the role of each law
D	Does not discuss resolution of the env. problem	Mentions the resolution of the problem but no details	Covers the resolution, though explanation incomplete	Covers the resolution/potential resolution of the problem, gives clear details of the resolution
E	Does not express opinion on the outcome	Expresses their opinion on the outcomes, but little detail on why they agree/disagree with outcome	Expresses their opinion and discusses why they have a stated opinion	Clearly discusses why they agree or do not agree with the outcome, very good explanation of their personal opinion

For A, B, C, D, E see previous page