

Curriculum Development Grant Proposal
ASC Environmental Initiative

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This proposal seeks monetary support in order to infuse an environmental component across four education courses: *Language Arts Methods* (EDU 342), *Reading Methods in the Elementary School* (EDU 332); *Special Education and Student Diversity* (EDU 330) and *Fine Arts in the Elementary School* (EDU 224). The fifth course is technically in the English program but is routinely taught by Education Program faculty. It is *Children's and Adolescent Literature* (ENG 205) and a required course for education majors.

This proposal has three main goals. The first and most important goal is to educate prospective teachers **about the importance** of including environmental topics in their k-12 curricula. The second goal concerns **how** prospective teachers can incorporate environmental topics into their k-12 curricula in the context of also having to adhere to state standards and prepare students for standardized assessments. The third goal is to provide prospective k-12 teachers **with quality resources** (i.e., videos, books, curricula documents, websites, etc.) concerned with environmental education.

The overarching justification for this proposal is the concern for the lack of systematic and deliberate inclusion of environmental topics in the traditional k-12 public school curricula. This proposal can't fix that problem per se, but it does address how future teachers can impact the k-12 curricula. If future teachers recognize that a topic is worth including in the curriculum, such as environmental topics and concerns, it will be emphasized. Thus, this proposal is aimed at preservice teachers and educating them on the critical need to incorporate environmental topics into their curricula. In short, education about environmental topics must start early (i.e., in the elementary school years) if the world is going to have environmentally conscious global citizens.

To this end, Centre's Education Program currently addresses environmental topics in a very limited fashion. The only course that briefly addresses this topic is a science methods course. While some attention is better than none, the current situation leaves much to be desired for several reasons. First, the limited attention to environmental topics is simply inadequate. Second, while it traditional for science-oriented classes to address environmental topics, too often K-12 teachers view environmental topics as being the purview of **only** the science content area. This arrangement sends the subtle message only science and scientists are responsible for the environment. It is for this reason I have purposely chosen to infuse environmental topics across five very different courses that prospective teachers will have to take. In this way the message is sent that environmental issues should be viewed from multiple disciplinary perspectives and are the responsibility of everyone regardless of their interests or disciplines.

This proposal calls for modifying existing education courses (which could be considered social science courses) to include an environmental components which address the ASC's environmental specifications of 1) environmental justice, 2) use of environmentally friendly (arts) chemicals, and 3) environmental literature and thus falls within the purview of the ASC's priorities. These courses would not fulfill our

institution's environmental studies minor but do enhance education course requirements.

The project consists of developing five environmental modules or units to fit into the existing afore-mentioned education courses. Each of these five modules will build on the themes, philosophies, and topics that make up the essence of each course. So, for example, since students are already studying children's and adolescent literature in ENG 205, it would make sense to examine children's and adolescent environmental literature and how it could be incorporated into the general curriculum. A short paragraph on each of the courses is provided below.

For the *Children's and Adolescent Literature* course (ENG 205), the environmental unit I plan to develop will provide students with titles of high quality literature that focus on environmental themes, such as those awarded the Green Earth Book Award from the Newton Marasco Foundation. Students will be required to read a selection of these books. Second, students will examine different teaching strategies of how to incorporate such literature across their curriculum, not just in language arts or English. Third, students will be provided with other curricular materials and resources, such as websites, lesson plans, etc. concerning how to use environmental literature. Finally, students will be assessed on the knowledge they gained from this unit on a course exam and/or through a final project of some sort.

For *Language Arts Methods for Secondary and Elementary School Teachers* (EDU 342), the environmental module I will develop will focus on teaching prospective teachers how environmental themes can be worked into the language arts curriculum (i.e., incorporated into assigned readings and writing assignments). Two kinds of assignments in the course require development of develop lesson plans and two-week units. Students will be asked to develop some of their lesson plans and units on an environmental theme/topic that is age appropriate and adheres to state content standards. Students will be assessed on these tasks. Another goal of the environmental module will be to provide students with language arts resources (i.e., websites, books, teacher-tested environmental lesson plans and environmental units) that they can use in this course and beyond.

Reading in the Elementary Schools (EDU 224) – This course focuses on teaching children how to read and write and covers such topics as phonics, reading and writing strategies, and vocabulary development. The environmental module I plan to develop for this course will have two foci. The first goal will be to show students how environmental topics and vocabulary can be easily incorporated into a variety of literacy activities. For example, in teaching word strategies, environmental vocabulary can be used and when teaching reading strategies a text on an environmental topic can be used. Second, literacy is often regarded as only the skills and knowledge needed to read and write. While this is important, I want to expand preservice teachers' view of literacy as being much more than the mechanics and appreciation of literature. I want them to consider different kinds of literacies, such as environmental literacy and what such a concept means.

Special Education and Student Diversity (EDU 330) – This course examines issues of race, gender, and disability (among others) in school systems. In the environmental module for this course, I will build on the course content I already have concerning race and racism in schools by examining the issue of environmental racism.

This issue is of educational significance because in a few documented cases of environmental racism, hazardous waste sites have been located near school sites. Such variables will also be examined in the context of specific disabilities that are known to have teratogenic causes. Students will be assessed on their knowledge on these topics via traditional means, such as an exam or course paper.

Fine Arts in the Elementary School (EDU 224) – This course requires prospective teachers to be able to integrate the fine arts across their entire curriculum. The environmental module for this course will consist of students examining the topics of the use of environmentally-friendly art supplies, use of recycled materials to create art, and the portrayal of the environment in the arts. Students will be assessed on their knowledge of these topics via an exam, the creation of lesson plans focusing on environmental themes, and creation of art projects using recycled materials.

This project has two timetables. I plan to devote early-mid July and all of August about six weeks to developing the modules for three courses, ENG 205, EDU 330, and EDU 342, which are offered Fall of 2007. The other two courses EDU 332 and EDU 224 will be offered in spring 2008, so I will devote two weeks in December and one week in January 2008 to the development of the modules for these courses. Other grant support which will occur during the summer but from mid-May to mid-July entails a Centre College Faculty Development Grant. I do not foresee any problems in completing the above-mentioned work since the dates for the grants do **not** overlap.

The table below details an itemized budget for expenses of this project.

Item	Amount
EDU 224	\$500 – Books, videos, curricular documents, environmentally-friendly art supplies
ENG 205	\$400 - Children’s/adolescent environmental literature (i.e., books)
EDU 342	\$200 – Curricular and instructional resources (e.g., books, etc.)
EDU 332	\$200 – Curricular and instructional resources
EDU 330	\$200 – Curricular and instructional resources
Professional Resources	\$300 – Resources necessary to develop modules
Stipend	\$1200 – Compensation to develop the modules

It should be noted that the curricular and instructional resources purchased for each of the course will become the property of the Centre College Library (i.e., the books for ENG 205) or the Centre Education Program for other instructors and students to use. I have not included the current syllabi for all these courses because they would not reflect the inclusion of the work in this proposal.

In terms of evaluation, the success of the environmental modules for each course will be measured in part by course evaluations and in which I can solicit specific feedback on these modules. In terms of publicizing the project, I will be happy to make my course syllabi available to any interested party and if possible, some samples of student projects. I do not foresee any problems with institutional approval since Centre College is launching an Environmental Studies minor and these curricular changes will address a critical need in the Education Program.