Why teach pollution prevention (P2) in environmental studies courses? The following hypothetical scenarios help answer this question:

- In Cheryl’s “Environmental Policy” class, she turned her focus to recent initiatives. She first gave a lecture introducing students to the concept of preventing rather than treating or cleaning up pollution, and explained why pollution prevention is becoming the dominant environmental policy theme for the 1990s. She used slides from EPA’s Comprehensive Pollution Prevention Orientation slide show (available through the NPPC) to illustrate the many P2 initiatives at EPA, in businesses, and elsewhere. She also had students read the Pollution Prevention Act of 1990 as well as EPA’s subsequent P2 policy announcement in the Federal Register. Her students came away with not only an understanding of P2, but also a better grasp of the policy implementation process.

- It was time for class projects in “Introduction to Environmental Issues.” Several students wanted to examine waste reduction opportunities in a local fast food establishment. Although their initial focus was on eliminating plastic foam “clamshells,” they took a more informed look after learning about life-cycle impacts and pollution prevention. They realized that many of the significant waste reduction opportunities are not readily visible to customers. So the students focused instead on waste minimization behind-the-counter. The manager of the local establishment found their suggestions very helpful, and promised to make changes to reduce waste.

- Todd emphasized the connection between the ecology of natural systems and sustainable use of natural resources in his “Natural Resources 101” course. He used the life cycle of a paper bag to illustrate the environmental impacts of forest resource use. By taking a life-cycle approach, he could show that not only sustainable forestry practices, but also low-impact manufacturing processes, reuse, and recycling can help reduce these environmental impacts.

These hypothetical examples illustrate how P2 is an integral component of environmental studies themes. While much of the pollution prevention education is now taking place in the business and engineering fields, there are many opportunities for integrating the P2 concept in liberal arts and natural resources. Indeed, understanding the preventive approach to environmental problems is a basic tenet of ecological literacy.

With this compendium, teachers and students can make the connection between overall concerns, such as ecological balance and sustainability, and prevention-based approaches for effective action. The resources in this compendium highlight pollution prevention as the emerging tool for businesses, government policymakers, as well as individuals. While it is easy to recognize that “an ounce of prevention is worth a pound of cure,” it can be difficult to grasp effective opportunities for pollution prevention. Therefore, the compendium stresses how environmental impacts, and opportunities for pollution prevention, occur over the entire life cycle of a product. Such life-cycle thinking helps students (and teachers) to break out of the common mentality that recycling is the be-all and end-all of proactive environmental management.

Teachers approach environmental studies from many different perspectives, therefore this module is meant to be as useful for a teacher with a history background as it is for someone with training in chemistry. There are many suggestions how P2 concepts can be used to examine familiar topics. Whether it be cleaning products or transportation, the compendium provides resources and suggestions indicating the many ways P2 and life cycle impact concepts are applicable in our everyday lives.
In addition to developing educational materials and conducting research, the NPPC also offers an internship program, professional education and training, and conferences.

The NPPC provides educational materials through the World Wide Web at this URL: http://www.umich.edu/~nppcpub/

Please contact us if you have comments about our online resources or suggestions for publicizing our educational materials through the Internet.

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The mission of the NPPC is to promote sustainable development by educating students, faculty, and professionals about pollution prevention; create educational materials; provide tools and strategies for addressing relevant environmental problems; and establish a national network of pollution prevention educators.