

JAMES GUIGNARD

Heating Up Liberal Education

MY UNIVERSITY invests a lot of time and energy in branding itself as Pennsylvania's public liberal arts institution. Much of the inspiration, it seems, comes from *College Learning for the New Global Century* (AAC&U 2007), the report from the National Leadership Council for Liberal Education and America's Promise (LEAP) that clarifies the definition of and the need for liberal education. The new liberal education, the report argues, should focus on "Essential Learning Outcomes," which teach students "knowledge of human cultures and the physical and natural world"; "intellectual and practical skills"; a sense of "personal and social responsibility"; and the ability to learn collaboratively and interdisciplinarily through "general and specialized studies." I agree because these are crucial skills for dealing with one of the major issues of our time: global warming.

To address global warming requires complex solutions that draw on scientific expertise and a sense of community, local and global. It's not enough to understand the science; we must be willing to make social, cultural, religious, and economic changes as well. Learning to look at the world from the perspective of liberal education should enable students to understand that complex problems require complex solutions, to learn to care for themselves by caring for others, and to share those concerns in the public sphere. At least, that's what the LEAP outcomes suggest. To illustrate, I turn to the example of Rachel Carson and *Silent Spring* (1962). Carson's actions represent what's best about a liberal education put into practice.

Rachel Carson

Trained as a scientist, Carson used her expertise to help the public understand the seriousness of environmental degradation stemming from the indiscriminate use of pesticides. The behavior Carson modeled relied on more than her scientific know-how; it also drew heavily on her sense of complexity and the ubiquity of processes, her attachment to others, including nature, and her ability to turn a phrase while questioning behavior she saw as suspect—all attributes of a liberal education.

This perspective asks that we engage others from different disciplines, learn from them, and then make their knowledge useful in our own lives. It's not just the learning of the different disciplines per se, but the process of learning how to learn from each and assimilating that learning into our daily lives. If students come to understand that

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biology, physics, English, and history can each shed light on the other, they are better prepared to engage in the complex thinking needed to help us deal with the problem of global warming on a day-to-day basis. What Carson told us about pesticides sparked a national reaction that led to the banning of DDT in the United States (though it's still produced in great quantities for use in other countries). Global warming has trumped concerns about pesticides, and it appears that the public is ready to listen.

We usually ask that students specialize, but in order to understand and begin to solve environmental problems, we need to learn how to think ecologically—that is, about systems and individuals and how each relates to the other. We've got to figure out ways to talk to each other across our disciplines, to value each other's knowledge and potential for contributions in understanding our environmental problems. The emphasis on broad

knowledge and collaboration is where liberal education plays a crucial role.

This is not to say that we don't need specialists, because we do. Carson understood that, but saw the dangers. She writes (1962, 13), "this is an era of specialists, each of whom sees his own problem and is unaware of or intolerant of the larger frame into which it fits." Approaching education from a liberal perspective can develop students with specialized knowledge who also understand the larger context of global warming and are willing to talk about it with neighbors, to take action at home and work, and to pressure politicians to create large-scale change.

Carson was also committed absolutely to what she thought was right. According to biographer Linda Lear (1997), Carson had a long history of concern about pesticide use, beginning around 1938 and stemming from her reading as editor in chief at the Fish and Wildlife Service. Over time, she cultivated a

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network of friends from across a variety of disciplines that helped her understand the problems of pesticide use. Lear (1997, 313) describes Carson's method thus: "In the process of her research, [Carson] established a remarkable network of scholars in many fields all over the world and created an alliance of scientists, naturalists, journalists, and activists committed to helping her document a spectrum of environmental abuses." Carson knew that she could not simply rely on her training as a biologist and a zoologist to help her understand the scope of the problem. She needed a wider range of expertise, of specialized knowledges, to help her fully articulate the extent of the problem and to provide alternative solutions.

But before hitting the lab, Carson believed it was necessary for students to get to know science the old-fashioned way—outside, in context. As a result of her own experiences and learning, Carson came to understand the dependence of all things, including humans, on complex processes. Taught well, a liberal education helps students understand their reliance on natural resources and processes.

Interdisciplinarity

Carson realized that it wasn't enough to talk about the problems of pesticide use in the language of science, often inaccessible to the layperson (but necessary for specialists, I believe). In seeking to charge her subject with emotion, Carson used literary devices. *Silent Spring's* first chapter, "A Fable for Tomorrow," is a famous example of apocalyptic rhetoric, designed in part to make Carson's argument hit her readers in the gut. Things go from bad to worse once we discover the agent of destruction: "no enemy action had silenced the rebirth of new life in this stricken world. The people had done it themselves" (Carson 1962, 3).

Such a fable is, to say the least, disconcerting. There's the tension between the title—"A Fable for Tomorrow"—and the fable itself, which is written in the past tense, as if it's a done deal. Carson's word choices and phrases evoke fear and uncertainty. But, in Carson's view, it was necessary that the public tap into their emotions as much as their reason if they were to understand the potential problems of pesticide use and react meaningfully.

Carson herself was aghast at the tendency of people in her own time to view science and literature as somehow separate, as Lear points out (1997, 218), even going so far in her National Book Award acceptance speech for *The Sea Around Us* to "[talk] about the culture of science in America and [attack] the prevailing notion of science and literature as separate and exclusive methods of investigating the world and discovering truth." In other words, Carson saw knowledge viewed only from a disciplinary perspective to be potentially as harmful as pesticides. In her view, that meant there was no integration of knowledge and public life.

Carson was not solely responsible for informing and changing the public's views on pesticide use, but her example is instructive. She understood that, as members of a community, we have an obligation to learn about disciplines

other than our own and to think about the contributions each discipline makes to our collective understanding of environmental and social problems. This is the only way we'll ever come close to what she calls the "full possession of the facts" (Carson 1962, 13).

"All education is environmental education," David Orr claims (1994, 12), and a liberal education enacts Orr's assertion metaphorically and physically, presenting a model of learning that is ecological. If students come to understand learning as rippling out through the academic community and beyond, they begin to understand the ethics of connection and caring. This could lead them to invent what writing-across-the-curriculum scholar Mark Waldo (2004, 163), referring to conversations among specialists, calls a "common language." Waldo contends this language is needed in order to approach complex environmental problems from something other than the partial perspectives provided by insular disciplines. Perhaps the most vital component of this common language will be the concern shared as graduates examine collectively the ecotones created by mingling disciplinary boundaries. In nature, life is most diverse where land meets water or field meets forest; maybe the same will occur where English meets biology, physics, business.

My first-year composition classes often revolve around defining words such as "nature," "culture," "wilderness," "place," and "space." These words are rich with multiple meanings, and my students enjoy (mostly, anyway) wrestling with them. Inevitably the question of whether we humans should take better care of our environment arises. I am always struck by two things when this happens: (1) the overwhelming

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sense, held by my students, that there are serious problems that need to be addressed, and (2) the underwhelming interest most of my students show in doing anything productive about the problems. The common refrain? "Nobody else is doing anything. Why should I?"

The LEAP report is a step in the right direction, but now we need to act. Educators and administrators need to talk to each other, to invent the "common language" that crosses disciplinary boundaries. We need to model the methods of liberal education through collaboration and class projects that reach into our communities, simultaneously teaching our students about social responsibility and sustainability. We owe it to our students. We can't prepare them for a future we can't wholly predict. So we must prepare them to communicate, adapt, and care. □

To respond to this article, e-mail liberaled@aacu.org, with the author's name on the subject line.

REFERENCES

- Carson, R. 1962. *Silent spring*. Boston: Houghton Mifflin.
Association of American Colleges and Universities.
2007. *College learning for the new global century: A report from the National Leadership Council for Liberal Education and America's Promise*. Washington, DC: Association of American Colleges and Universities.
Lear, L. 1997. *Rachel Carson: Witness for nature*. New York: Henry Holt.
Orr, D. W. 1994. *Earth in mind: On education, environment, and the human prospect*. Washington: Island Press.
Waldo, M. 2004. *Demythologizing language difference in the academy: Establishing discipline-based writing programs*. New Jersey: Lawrence Erlbaum.

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