

The purpose of the Society for Ethics Across the Curriculum is to stimulate scholarship on ethics and the teaching of ethics in all academic disciplines and to afford an opportunity for the exchange of research.

Later, our attention was captured by ethics and responsibility in agricultural biotechnology, even though this field does not clearly count as an engineering specialty. Today, emerging uses of information technologies generate ethical issues, for example, protecting human subjects in online research. Ethical issues generated by burgeoning developments in nanoscience and nanotechnology are just coming into view. But my direct concern here is not with emerging technologies. My focus is on preparing engineering and science faculty to introduce ethics into their teaching. An important aim of teaching ethics is to prepare engineering students to identify and cope responsibly with ethical issues in emerging technologies. My plan is to describe the Ethics across the Curriculum Workshops, which are designed to prepare faculty to introduce ethics teaching into their regular courses. Made possible by funding from the National Science Foundation NSF, the workshops were offered at first only to IIT faculty, but later they were also offered to faculty from other universities. In the and workshops, several faculty members from overseas were among the participants. Page Share Cite Suggested Citation: Emerging Technologies and Ethical Issues in Engineering: Papers from a Workshop. The National Academies Press. They felt they should include more of the context and complexities of actual engineering problems and in so doing bring out their ethical aspects. They identified ethical issues associated with some of the topics in their courses they thought should be raised, but they did not know how to address these issues in their teaching. In response to this call for help, I organized sack-lunch meetings of interested faculty to discuss options for addressing these concerns. After coming together regularly over a considerable period of time, faculty members agreed on the importance of teaching ethics in engineering. They also agreed that what kept them from teaching ethics was a lack of necessary skills and experience. In addition, they felt that teaching ethics would not be legitimate because it was not part of their graduate training. Yes, they knew something about ethics as members of society, but they knew about many things they did not feel prepared to teach. With this insight, we set out to develop a program, and, working together, we devised a workshop plan. During our discussions, we had noted that in times past engineering educators had favored a diffusion method of teaching ethics. However, we had never seen a plan for a diffusion method that specified what faculty should do in their classrooms, how their teaching of ethics would be evaluated, or how student evaluations would feed back into the program, let alone how a program would be monitored to make sure that diffusion teaching was taking place. We knew of some precedents, including workshops that had been tried at several other universities and one workshop on ethics for business educators at the old Arthur Anderson Company campus in St. Reports by participants in those exercises indicated that they felt that they had learned a good deal—or at least had found the programs interesting. But they did not see how to connect what they had learned in the workshops with their teaching. Therefore, we thought it essential to adopt a nuts-and-bolts approach, that is, an approach likely to help faculty actually begin teaching ethics. Our sack-lunch discussions eventually led to a proposal to NSF. It was gratifying to note that the first paragraphs of the proposal were written by one of the two colleagues who had approached us originally and prompted us to undertake our discussions. NSF funded the first proposal for four years, the first three years limited to IIT faculty and the last year for faculty from other institutions. Subsequent funding from NSF made it possible for us to conduct workshops for faculty from other institutions almost every year until the last workshop in the summer of The funding covered not only the operation of the workshops and stipends Page Share Cite Suggested Citation: The rationale for providing stipends for the 15 to 20 participants each year was to attract very able, busy people who had other interests competing for their time. The stipends underlined the importance of ethics and the honor of being accepted in the program. First, ethics is not peripheral to, or an add-on to, engineering. It is integral to the practice of engineering, part of engineering problem solving. Safety and guarding against avoidable harm are built into engineering; they are the principles that underlie engineering codes and standards. Second, engineering faculty should be engaged in the teaching of ethics. They not only have more exposure to students than ethics

specialists and others in the humanities, but they also have the credibility to convey the importance of ethical considerations in problem solving. For many faculty members, learning to teach ethics is a feasible undertaking, provided they start with modest changes after suitable preparation. For example, they might start with a problem in the back of the book that can be fleshed out, such as a problem concerning the flow of fluids. To make the problem less abstract, the fluids can be described as flowing into a reservoir. Providing information about the destination of the fluids and the nature of the fluids supplies context that is often absent from the problems students work on. Concrete details help bring ethical questions to the surface. This problem, for example, raises questions about whether the fluids are acceptable in a reservoir for drinking water. I want to emphasize that we are talking about small changes. We believe that people can begin very modestly, and as they gain more confidence, more familiarity with the materials they can use, and more skills, they can do more. Third, ethics material is a normal component of the course. This means that students should be held responsible for mastering this material, as they are for mastering other components of the course—through grading. The instructors played a prominent role in the first few days, but as the workshops proceeded, participants gradually moved to the fore. Participants some years back introduced an innovation, a role-play of a faculty senate meeting, that Page Share Cite Suggested Citation: The lectures throughout the workshop were relatively short, and considerable time was allowed for discussion. The sixth and seventh days were usually held after a two-day interval over a weekend. On the sixth day, faculty participants did most of the work, presenting material they planned to use in their teaching, often a problem for homework or a class problem. After each presentation—an explanation of how the speaker planned to use the problem or assignment—the audience, including the instructor, raised questions and offered criticisms. Then the speaker responded. The atmosphere was much like that of a graduate seminar. Again other participants and an instructor offered questions and comments, and the speaker responded. In advance of the workshops, participants received assigned readings of selected articles and one book. This slim volume is philosophically sound and covers the leading theories. Faculty participants seemed to find it interesting and readable. Each workshop had two instructors. Michael Davis, the principal investigator and author of *Thinking Like an Engineer* Oxford University Press, , planned the program and served as lead instructor. In the first lecture, Davis offered definitions of key concepts—prudence, morality, law, and ethics—to clarify major concepts in practical and professional ethics. For example, he defined morality as the standards everybody wants everybody else to conform to, so much so, that each of us is willing to follow those standards ourselves. In the discussion that followed the lecture, participants were invited to raise questions and offer counterexamples. The aim was to encourage careful use of familiar concepts and to convey to participants how much they already knew about ethics. The discussion went forward without direction or guidelines. Participants simply read the case and began to talk about it in an unstructured discussion resembling a rap session. The unguided discussion was followed by a presentation on method—what to look for, how to argue, and guidelines for discussion—a canonical set of seven steps some variations include only five steps. The presentation was followed by a second discussion of the case, this time against the background of the guidelines and some acquaintance with ways to argue. The second discussion was more controlled and orderly and led to a conclusion. The aim was to acquaint the participants with various philosophical ethical theories. Participants could recognize the features of morality, such as consequences or duties, emphasized in a particular theory. We began with consequentialist theories, specifically utilitarianism. Another discussion of the same case brought out examples of reasoning according to each theory. Engineers have been especially active in producing both technical standards and ethical standards that make explicit the values and principles that underlie the technical standards. A brief lecture on context of professional work and strategies for identifying issues provided a bridge to a presentation on teaching ethics in the classroom. This session ended with a general discussion of various techniques to use in teaching:

Chapter 2 : "Nursing Ethics" by Janie B. Butts D.S.N., RN and Karen L. Rich Ph.D. (c), RN

We welcome submissions addressing any aspect of teaching ethics across the curriculum, but have a special interest in those that focus on ethical issues addressing race and justice in America.

Ethics Across the Curriculum: It is absolutely critical that students are educated in how to make ethical decisions. Moreover, faculty embraced the idea that if ethics were truly integrated across the curriculum, the impact would be dramatic. Students would see faculty in all disciplines modeling a systematic, reflective, and responsible approach to serious and often controversial ethical problems. And this, in turn, would make it easier for them to see that there is an ethical dimension to every aspect of their lives and to develop the critical skills necessary to make informed ethical decisions. Rutland Institute for Ethics. EAC Faculty Seminars Have Practical Goals At most colleges and universities faculty in a department of philosophy have the primary responsibility for teaching ethics. At Clemson, for the reasons noted above, this responsibility, like the general education competency to which it is linked, is distributed. While non-philosophy faculty regularly encounter ethical issues in their teaching and professional work, they are often unsure about how to introduce ethical discussions into their classes systematically and with real content. They are, as it were, afraid of the water. This is not unreasonable; presenting ethical problems in a way that forces students to think carefully about the positions they hold and why they hold them, as opposed to merely defending prior opinions without much thought, is a significant challenge. However, this fear of the water can be overcome. Indeed, that is what the EAC seminar is designed to do. The impact of such a showing can be quite substantial. We avoid abstract theory in favor of equipping participants with a few basic tools. We use hypothetical cases to elicit some basic ethical ideas and develop them in a user-friendly way; we do this with an eye to application. Rather, our aim is to prepare faculty to integrate ethics into their regular classes by engaging their students in discussion while modeling for them a systematic, reflective and responsible approach to ethical issues. With that in mind we also identify some wrong moves their students will almost certainly make and discuss techniques for handling them. Then we turn to case studies. The cases are discussed in small group sessions and subsequently in a plenary session. Both sorts of sessions provide opportunities for the refinement of techniques learned as well as the introduction, in the context of ethical discussion as opposed to lecture, of the discipline-specific expertise participants have respecting particular issues. The idea is to model as closely as possible the kinds of teaching situations seminar participants will actually encounter. One important point emerges in these settings: This is precisely the position they will be in when ethical issues come up in their classes.

Chapter 3 : Ethics Across the Curriculum | Center For The Study Of Ethics In The Professions

Ethics Across the Curriculum From , Illinois Tech hosted colleagues from institutions internationally and across the country for the Ethics Across the Curriculum summer workshops. Running seven days, these workshops allowed twenty participants from a variety of disciplines to discuss ways in meaningfully integrate ethics into.

Chapter 4 : Clemson University

Ethics Across the Curriculum Our faculty adopted as part of our curriculum that an ethics component would be included in every substantive course. This policy underscores and supports the "skills and values" that the MacCrate Report listed for a sound law school curriculum.

Chapter 5 : Nursing Ethics - Butts, Karen L. Rich - Google Books

Ethics across the Curriculum is a well constructed and insightful work. Intended for faculty and administrators, this text will also appeal to business ethicists, legal ethicists, and others seeking to better understand and apply ethics.

Chapter 6 : The Society for Ethics Across the Curriculum

Ethics Across the Curriculum Seminar An opportunity for students to visit and interact with GISME! The Georgetown Institute for the Study of Markets and Ethics invites applications from undergraduate and graduate students to participate in a seminar, "Ethics Across the Curriculum," at Georgetown University on March 9 and 10,

Chapter 7 : Ethics Across the Curriculum - Union College - Acalog ACMSâ„¢

Ethics Across the Curriculum. The term "Ethics Across the Curriculum" describes a trend in higher education that calls for the infusion of the study of ethics into all aspects of the college academic program in ways that promote ethical inquiry and encourage students to take ethics seriously as a developed personal motivation.

Chapter 8 : Ethics Across the Curriculum | University of Detroit Mercy

Ethics Across the Curriculum Young Harris College instituted the Ethics Across the Curriculum (EAC) program during the Fall semester. The program has included workshops and luncheons on ethics in practice, ethical theories, intellectual virtues and teaching ethics.

Chapter 9 : Ethics Across the Curriculum - Character Education - Georgia Military College

The fifth edition of Nursing Ethics: Across the Curriculum and Into Practice has been revised to reflect the most current issues in healthcare ethics including new cases, laws, and policies.