Teaching IT Ethics from a Jesuit Higher Education Perspective

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Abstract

This paper addresses the unique aspects of teaching ethics in a Computer Information Systems (CIS) program in a Jesuit higher education setting. Jesuit higher education promotes the theme of social responsibility in their teaching. The mission and themes developed through the Jesuit charters are prevalent in Jesuit higher education. The interesting issues that lie ahead for students pursuing careers involving technology are ethical practices in the uses and implementation of technology in business and society. Students majoring in computer information systems have shown interest in enhancing their education with an ethics component. The popular interests in these courses have increased the curiosities of our students and lay faculty alike that promote and understand the theme of the mission and social responsibility. This paper discusses the link to Jesuit education and student interest in Information Technology (IT) ethics and its goals for teaching computer and information ethics.

Keywords: IT ethics, information and society, social responsibility, Jesuit higher education

1. HISTORICAL BEGINNINGS

Jesuit higher education has changed over the centuries since the first Jesuit school was founded in 1548 in Sicily. The purpose of Jesuit education as part of the society's constitution is to aid our fellow men to the knowledge (Rhodes, 1989). Second was the belief that scholarly excellence was important because of the role it played in achieving moral excellence. The third characteristic of early Jesuit institutions was the priority given to the role of the teacher. The teacher's responsibility was to keep instruction lively and students engaged but to set an example in personal conduct through his membership to the Jesuit community, to inspire student moral and intellectual excellence and spiritual commitment (Rhodes, 1989).

2. SURVIVAL IN THE MODERN TIMES

In the late 1960's, Jesuit's were concerned about their intellectual isolation and church domination, but in the 1980's with appointments of non Jesuits to their faculties and boards of trustees they had concerns of whether they remained anything distinctly Catholic or Jesuit (Rhodes, 1989).

The declining number of Jesuits will only increase the problem of distinction of the Jesuit influence in higher education. It was complicated by the rising enrollment at Catholic colleges and universities by 25 percent in the 1980's despite the decrease in the number of Catholic colleges. It was further complicated by other issues beyond teaching, the Jesuit's society to "serve faith and promote justice" (Rhodes, 1989).

The foundation of Jesuit Education is the principle of committed professors who acknowledge and profess their commitment, which can provide students with a distinct moral dimension in their education as well as an academic one. The second foundation of Jesuit education is student-centered learning community contrasting with disciplined centered found in most universities. The learning community is designed to have the students feel that the professors were on their side (Donohue1989). The mission of the society today is defined as the service of faith, where justice is an absolute requirement.

3. THE JESUIT PRESENCE

The overriding problem facing Jesuit institutions is the decline of Jesuits themselves. Are lay people trained in the foundations of Jesuit education and beliefs? The third foundation of Jesuit education is excellence in scholarship. If Jesuit educators are to have any influence with the young or with their colleagues, they must present themselves as engaged scholars (Rhodes, 1989). In United States, there are more Jesuits than any country in the world; it is the largest Jesuit ministry. In 1984-95 there were 5,218 American Jesuits who were organized into 10 provinces sponsored by 28 colleges and universities with a total enrollment of 169,806. However, there were only 950 Jesuits among the 15,408 teachers and administrators in the 28 Jesuit universities and colleges (Donohue, 1989). The issue of "running out of Jesuits" is a concern and losing its identity can become reality in the end.

The mission and goals of Jesuit education is often delivered through lay professors. Lay professors are often given the responsibility to carry the torch of social justice and responsibility and must integrate this foundation into education. This paper presents an example of lay professors that have met the challenge provided by the Jesuits and provides an in-depth look at how content is delivered on ethics in the field of information systems in a Jesuit higher education setting at the University of Detroit Mercy. The goal was to determine the influence of a Jesuit mission within the curriculum, in particular the topic of computer ethics.

4. UNIVERSITY OF DETROIT MERCY MISSION

The University of Detroit Mercy (UDM) was created in 1990 through the consolidation of Mercy College (Sisters of Mercy) founded in 1941 and the University of Detroit (Jesuits) founded in 1871. Many view the University of Detroit Mercy as having a strong social mission because of its commitment to the city of Detroit and its diverse student population.

The mission of the University of Detroit Mercy is a reflection of both religious orders

The University Mission (2000-present)

The University of Detroit Mercy, a Catholic university in the Jesuit and Mercy traditions, exists to provide excellent student-centered undergraduate and graduate education in an urban context. A UDM education seeks to integrate the intellectual, spiritual, ethical and social development of students.

5. TECHNOLOGY AND ETHICS

The topic of specific importance in this paper is to emphasize that lay faculty at Jesuit institutions are inclined to incorporate their college and university mission statement into their syllabus. The theme of social responsibility is ingrained in the mission in Jesuit higher education, readily embraced by faculty and permeates throughout the Jesuit campus. Therefore, teaching IT ethics should be automatic for an information systems curriculum at a Jesuit institution. In particular, this paper reviews the role of IT and ethics at the University of Detroit Mercy's computer information systems program in the College of Business Administration. Faculties in this program intentionally designed a course for the undergraduate and graduate programs that focus on IT ethics. The content reflects the growing need to understand the use and implementation of technology and its effects in the workplace and on society. Some of the topics stress the legal issues and practices in the use of technology and the Internet in North America and internationally. The faculty wants to ensure those students leaving the program develop a social awareness and a sense of responsibility when entering the field of IT. With the growing concerns for information security and integrity, IT professionals need to have a social conscious as well as an ethical one. The topics are timely and interesting to capture the attention of students entering the field of Information Technology. Recent students reflecting on the course stated that it was a valuable experience for their career development.

6. COMPUTER ETHICS

When teaching CIS courses it is important that we as educators address social responsibility, which includes computer technology's impact on society. James Moor (2002) states that, "Computer provide us with new capabilities and these in turn give us new choices for action" (p.26). Due to the newness of some of these capabilities, computer users may be placed into situations in which no written policies exist. While the solution to these situations may vary according to the particular circumstances, computer ethics help us identify social and moral solutions to these situations.

Computer ethics is concerned with the user and the implications of the user actions on society. Due to the vast amount of flexibility and information available that the computer age allows, it is necessary to make a conscious effort to arm students with the knowledge that

while many activities can be performed using computers, it is not always ethical to carry out these activities. There are many activities such as the creation and spreading of viruses, computer hacking, computer fraud, illegally copying software, and fraudulent use of computer information that all fall into the category of non-ethical use of information technology. These activities are a deliberate misuse of information technology, which further supports that students must be made aware of how to act ethically when facing these or similar situations.

"Practitioners in most major professions subscribe to codes of ethics that govern their behavior" (Strassman, 2000). With the realization that the information technology is here to stay, many organizations are looking to employ a set of ethics that will govern their employees. These codes of ethics are usually policies that govern the conduct of an organization's employees. A study conducted by the Conference Board survey provided information that 83-93% of U.S. firms currently have a code of ethics (Center for Business Ethics, 1992). "Yet, despite the prevalence of codes of ethics, their effectiveness is controversial" (Stevens, 1994).

It appears to be the consensus that code of ethics should be written and implemented to resolve ethical issues facing today's employees. But if we question the effectiveness of these codes, what is the solution? Would it be more effective to help the individual identify and internalize their own code of ethics and their responsibility to society? We at the University of Detroit Mercy firmly believe we provide this valuable service to our CIS students.

At UDM, we offer our undergraduate and graduate CIS students a course called, Information and Society (CIS 390 and CIS 565). These courses assist students in exploring their role as an information technology professional. The courses' scope includes information use, information privacy/security, legal and ethical issues, as well as values. By offering these courses, students are made aware of the many issues facing today's technology professional and how many decisions must take into account their impact on society.

At both the undergraduate and graduate level, the Information and Society course is an elective and is taught as a participatory course. The course is divided into three main components – Governing and Regulation of Computer Information, Security and Privacy of Information, and Social Responsibility and Moral Issues in the Computer Technology.

Governing and Regulation of Electronic Information consists of a brief overview of the uses of computer technology in today's society and the governing and regulation that exist. Security and Privacy of Information covers the current privacy laws and the

security that is employed by various organizations. The third component and most critical of the course, are the Social Responsibility and Moral Issues in Computer Technology. This section provides students with situations in which they will identify the resolution. The correct or "best" solution will be discussed and students will be given the opportunity to discuss alternate solutions and their impact on society. Discussing the solution's impact on society is crucial. Students must be made aware that their actions cannot be viewed in a vacuum. They are made to understand that actions they perform personally or working, as an information technology professional will undoubtedly affect others in our society.

7. COURSE SPECIFICS

In order to provide specifics on how UDM promotes the theme of social responsibility in the classroom, a detailed look will be given to the CIS 390 Information and Society course. This course is an undergraduate course and usually consists of approximately 20 students. In order to ensure that the course has a foundation, two cyber ethics books are used to provide background information to the students as well as providing useful information on the three main components taught in the class.

The first part of the semester was dedicated to ensuring that students understood the terminology and providing them will scenarios that could possibly happen in today's workplace. Providing multiple resolutions to each scenario allowed for much opinionated discussion on whether the solutions would be considered ethical.

In the remaining portion of the semester, each student was required to participate in debates that pertained to topics that were previously touched on in class. Students were required to select two topics to debate, choosing either the pro or con position. Some of the topics for student selection were:

- Consumer Privacy on the Internet
- Privacy in the Workplace
- Personal Web Sites as Private Property
- Intellectual Property as Free Speech
- Internet Governance

The sign-up sheets allowed for two students to sign up for pro and con positions of each topic, incorporating teamwork within the classroom. Students were given detailed debate directions, which included the time limits for the opening statements, the rebuttal, and the conclusion. A debate team evaluation form was also provided, which identified how the debates would be evaluated. (Figure 1)

To ensure that students gave the topics thought prior to the classroom debates, each team provided the instructor with a written copy of their opening statement as well as possible questions that they might ask of their opponent. To assist the students in displaying professional conduct, the conduct was an evaluated component of the debate. In addition to participating in two debates, which comprised 50% of the student's course grade, grades were given for class participation/exercises, and exams.

| Type | Score | Comments |
|-------------|-------|----------|
| Opening | | |
| (25) | | |
| Rebuttal | | |
| (20) | | |
| Q&A | | |
| (15) | | |
| Conclusion/ | | |
| Closing | | |
| Statement | | |
| (20) | | |
| Teamwork | | |
| (15) | | |
| Conduct | | |
| (5) | | |
| TOTAL | | |
| | | |

Figure 1

This class was recently overhauled. By the comments from the students, it appears to not only meet with their approval, but the approval of local organizations that employ our students.

We are currently looking at revamping the CIS 565 Information and Society course, but realize with the graduate course, a different set of challenges must be met. At the graduate level, UDM is faced with students from other cultures where things are not always black and white. In some cultures as long as the end or goal is achieved how it is achieved is not questioned. In addition, there are some graduate students who have been in the workplace for years and have not worked in an environment that promotes or encourage ethical behavior and social responsibility. These are challenges that we address daily.

8. SUMMARY

The focus of UDM's information technology ethic courses is to teach social responsibility and ethical behavior. Both the graduate and undergraduate IT ethic courses are electives that provide our students value-added knowledge and awareness of issues that effect business and society. The enrollments in these courses are high and are comparable to popular courses such as e-commerce and database design. One would think a course on ethics would not be popular. However, recent focus groups of undergraduate seniors and graduate students conducted in the college in May of 2002 revealed that faculty of the college present the mission very well in their courses. The students demonstrated a

clear understanding of the university mission and the theme of "social responsibility". As a result, it is clear that our students seem inclined to register for such courses even though it is not required. Several students were asked at the end of the course why they took "information and society" and the responses and reasons varied. Majority of students felt it was important to be a good citizen and to understand ethical issues for IT and the workplace. Several students, interested in pursuing a law degree to become a cyber lawyer or law enforcement professional, felt a course that focused on ethical and regulation of computer information, security, and privacy would be valuable to their law and criminal justice degrees.

We at UDM are proud that such a course promotes the interest of our students in the area of ethics in technology. Without the influence of the remaining Jesuits in our college, lay faculty has taken the role and responsibility to continue the tradition of integrating the underlying mission of the university. We hope to continue the research and extend the challenge to other Jesuit universities in the United States to review their ties to their mission in regards to teaching ethics in the field of information technology programs.

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