Designing Educational Cases for Intercultural Information Ethics: The Importance of Diversity, Perspectives, Values, and Pluralism

Kenneth R. Fleischmann  
College of Information Studies, University of Maryland, 4105 Hornbake Building, South Wing, College Park, MD 20742. E-mail: kifleisch@umd.edu

Russell W. Robbins  
Joseph M. Katz Graduate School of Business, University of Pittsburgh, 361 Mervis Hall, Pittsburgh, PA 15260. E-mail: rrobbins@katz.pitt.edu

William A. Wallace  
Department of Decision Sciences and Engineering Systems, School of Engineering, Rensselaer Polytechnic Institute, 110 8th St., Center for Industrial Innovation, Room 5015, Troy, NY 12180. E-mail: wallaw@rpi.edu

Information professionals today face a growing number of intercultural information ethics challenges. This paper describes an effort to develop and evaluate educational cases that can help to prepare information professionals to overcome these challenges. A total of ten educational cases were developed and used in two semesters of an Information Ethics course taught at the University of Maryland. The new approach to case design exemplified in these cases includes having students face multiple interdependent decisions while playing culturally diverse roles. Students were asked a series of open-ended questions at the end of each semester of the course, and data were analyzed using grounded theory. The findings of this research reveal preliminary evidence supporting four key themes for preparing students to confront intercultural information ethics dilemmas: diversity, perspectives, values, and pluralism. The conclusion of this paper is that this new approach to educational case design can be successful in preparing future information professionals to confront intercultural information ethics dilemmas.

Keywords: Case-based learning, culture, globalization, information ethics education, intercultural information ethics, user-centered design, values, value-sensitive design, grounded theory methodology.

Introduction

The information revolution enables interactions among individuals from a diverse array of national, local, professional, and organizational cultures. Such interactions often lead to value clashes (Begley & Boyd, 2003) and may lead to an increased number and diversity of ethical dilemmas faced by information professionals in the twenty-first century (Capurro, 2000). Consequently, it is important to prepare information professionals to consider the diversity of values held by different individuals and cultures, so that these information professionals are better prepared to resolve ethical dilemmas within an international environment. This paper describes the development and evaluation of highly-structured educational cases that can be used to help students consider differing values and their interaction. The course, Information Ethics, is a new course de-
signed and taught by Dr. Fleischmann at the University of Maryland in the fall of 2007 and then again in the spring of 2008. Students enrolled in the course included students in the University of Maryland’s Master of Library Science, Master of Information Management, and Ph.D. in Information Studies programs. During the first semester, the authors developed, used, and evaluated ten cases. The authors then significantly refined six of these cases based on student feedback from the first semester and used and evaluated these revised cases in the second semester. Each case includes multiple interacting roles, where each student plays a different role (except for a few experimental formats which the authors used for part of the second semester), and each role faces a different ethical decision. The motivation for this research is to explore how these multiple roles may have helped students to understand the perspectives of others and thus may have helped to prepare them to face intercultural information ethics issues.

Background

This research builds on previous work to date in information ethics education (e.g., Buchanan, 2004; Carbo, 2005; Fallis, 2007; Koehler, 2003; Mason, 1990; Robbins, Fleischmann, & Wallace, 2008; Rogers, 1994; Winston, 2005, 2007), and, in particular, focuses on the relationship between information ethics education and globalization. Specifically, this paper focuses on how developing cases with multiple interacting roles can make information professionals more aware of different personal values and others’ national, local, professional, and organizational cultures.

It is important to consider research on the relationship between culture and ethics. Both nationality and culture are linked to variations in ethical decision-making (Ahmed, Chung, & Eichenseher, 2003; Aupperle, 1984; Ford, Nonis, & Hudson, 2005; Ford & Richardson, 1994; Hisrich, Bucar, & Oztark, 2003; O’Fallon & Butterfield, 2005; Peppas, 2002; Robertson, Crittenden, Brady, & Hoffman, 2002; Sims, 2006; Sims & Gegez, 2004). For example, Peppas (2002) finds significant differences in the ethical perspectives of Asians and Americans. Axinn, Blair, Heorhiadi, and Thatch (2004) demonstrate the interconnectedness of culture and values. Thus, it is important, in the global information age, for information professionals to be prepared to deal with ethical decision-making within an intercultural context and to consider the different values of other cultures.

Recent research shows that there is a connection between personal and cultural values (Fischer, 2006; Fischer et al., 2007; Kemmelmeier, Jambor, & Letner, 2006; Smith, Peterson, & Schwartz, 2002). Further, recent research demonstrates that the effect of personal values across cultures affects ethical decision-making. Research also demonstrates the presence of a relationship between values and ethical decision-making in general (Abdolmohammadi & Baker, 2006; Allen & Davis, 1993; Ashkanasy, Falkus, & Callan, 2000; Connor & Becker, 2004; Feather, 1988; Fritzsche, 1995; Fukukawa, Shafer, & Lee, 2007; Lin & Ding, 2003; Robbins, 2005; Robin, Reidenbach, & Forrest, 1996; Roozen, De Pelsmacker, & Bostyn, 2001; Shafer, Fukukawa, & Lee, 2007; Singhapakdi & Vitell, 1993). For example, Fukukawa, Shafer, and Lee (2007) find differences among Americans and Chinese in their views regarding trade-offs about social responsibility and economic efficiency but also identify positive links between self-transcendence values and attitudes regarding socially responsibly behavior across the two countries. When comparing the values of people living in the U.S. and the Middle East, Ford et al. (2005) discover that these two cultural groups differ significantly in terms of their social, politi-
cal, and religious values. This evidence provides further impetus for the development of information ethics courses with additional emphasis on an increasingly diverse and international society; one way to accomplish this goal is to create highly structured intercultural information ethics cases that can be used in courses.

While these findings point to the need for consideration of multiple cultural perspectives in educational cases, most information ethics cases occur within a specific (usually Western) cultural context. Further, the standard format for ethics cases is not particularly well suited to this goal. Most ethics cases consider a single perspective (Agich, 2001) or center on a single ethical decision. This paper describes an effort to build on the existing literature on case-based approaches to information ethics education (e.g., Ballenger, 2003; Buchanan, 2004; Carbo, 2004; Davis, 2007; Fallis, 2007; Jewels, 2003; Logan & Logan, 2003; Mitri & Cole, 2007; Spinello, 2003; Tavani, 2007; Wedel, Behnezhad, & Gray, 2004; White & Rea, 2003) by developing and evaluating educational cases where a small group of students interact by playing interdependent roles.

Methods

The authors collaboratively developed a new course, Information Ethics, which was taught by Dr. Fleischmann at the University of Maryland in the fall of 2007 and again in the spring of 2008. One of the principal pedagogical tools used in both semesters of the course was a set of highly structured educational cases. The course and the cases were significantly revised and refined between the first and second semester. A total of eleven students participated in the study, including six in the first semester and five in the second semester. All students volunteered, through formal informed consent following the protocol approved by the authors' Institutional Review Boards, to participate in this study. This course was the first step in a collaborative research project, funded by the National Science Foundation, that aims to develop through user-centered design an interactive educational simulation to teach computing and information ethics to students enrolled in library and information science graduate programs as well as graduate programs in computer science and information systems. The cases will provide initial content for the simulation, which will be used and evaluated in future semesters of Information Ethics.

The authors developed ten cases for the first semester of the course. The authors then significantly refined six of these cases and used them in the second semester. These cases were based in part on data collected by Drs. Fleischmann and Wallace in a separate NSF-funded research project, the results of which have been previously published (Fleischmann & Wallace, 2005, 2006, In Press). In addition, many of the cases intentionally explicitly addressed intercultural information ethics issues, by placing the case outside of a purely American or Western context, and by involving roles from multiple cultures within the same case.

The cases included multiple roles and multiple decision points within a rigid and easily reusable structure. Following the procedure used throughout the first semester, at the beginning of each case, the instructor assigned students to groups, and students selected which roles they would play in the case. During one week, the instructor played one of the roles due to an excused absence by a student. Each case had three roles, with two separate groups completing each case. Students were instructed to discuss each decision faced by each student playing each role, but that the final decision would be made by the student playing the role, rather than through consensus or
voting. After they chose their roles, students were presented with a scenario that ended with an open-ended decision that had to be made by the first role. After the students had time to discuss this open-ended decision, another sheet was handed out that contained a closed-ended decision that must be made by the student playing the first role, including two possible decisions. The decision made by the first role then determined the scenario faced by the second role, which proceeded similarly with an open-ended and then a closed-ended decision. Finally, the third role was confronted with a scenario, influenced by both the first and second decisions, that also contained an open-ended and a closed-ended decision. Following completion of the case, students were either provided with a hypothetical result of the case that was based on the decisions made by all three roles (in the first five cases of the first semester) or asked to provide a hypothetical result that would have occurred as a result of all three decisions made by all three roles (in the last five cases of the first semester).

Figure 1 depicts the decision tree embedded within the cases. As indicated by this diagram, each case required the creation of a total of seven binary choices, although each group of students only encounters three of these choices on their way to reaching a result. Thus, creation of each case includes a total of seven choices, fourteen decisions, and eight results, although completion of a single case by a single group of students involves only three choices, three decisions, and one result. This structure allows the cases to be reused while still yielding different results, as different students can repeat cases while playing different roles within the same group or in different groups. In such situations, repetition of the cases can result in new learning opportunities, as the different individuals playing the roles may make different decisions, which would in turn lead to different choices and a different result.

Different procedures were used and evaluated during the second semester of the course. In addition to having each student play a different role within the same case, one new variation that was used in one case was to have each student complete the cases individually, working alone and playing all of the roles in the case. Another new variation that was used in two cases was to have the students collaborate on each decision. In this variation, instead of playing individual roles,
the entire group made the decisions for each role. In this variation, students were instructed to reach decisions through a consensus-building process. Due to the smaller class size during the second semester and the need for the number of participants to evenly divide into three, especially for the three cases which followed the structure used in the first semester and the need to have enough participants for discussion in the entire group variation, the instructor played a role in four of the cases, while a guest who sat in on the class played a role in another case. Finally, based on the feedback from the first semester that the binary choices tended to be limiting, some closed-ended decisions used in the second semester included three choices instead of the standard two choices of the first semester cases.

When completing the cases, students were asked to write down the factors that influenced their decisions for both the open-ended and closed-ended decisions, and the instructor collected these notes at the completion of each case. Students were asked a series of written questions about what they learned following the completion of each case. Students were also given an extensive list of written questions both at the start of the course and at the end of the course. Table 1 provides a subset of the written questions asked at the end of the course (specifically, since a total of 35 open-ended questions were asked, Table 1 lists only the nine questions that triggered answers that are discussed in the findings section below). The qualitative data was analyzed using grounded theory, such that the themes emerged from open coding of the data (Glaser & Strauss, 1967; Strauss & Corbin, 1998). As the volume of data collected goes beyond the scope and length constraints of this paper, the results section focuses on data related to the theme of using educational cases to prepare information professionals for intercultural information ethics dilemmas.

Findings

This research found that this new approach to developing and evaluating educational cases can be beneficial for educating future information professionals about intercultural information ethics. This section presents the results of analysis of feedback provided by students on the last questionnaire relevant to the need to consider a wide variety of ethical perspectives and values, including those of different national cultures as well as individual variation.

Students demonstrated through their answers that they learned to understand other perspectives on information ethics.

Table 1. Partial List of Questions Asked at the End of the Course.

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did this class help you to confront ethical challenges in your academic career?</td>
</tr>
<tr>
<td>What did you learn from the cases used in this class?</td>
</tr>
<tr>
<td>What did you learn from cases where different roles were confronted with different decisions?</td>
</tr>
<tr>
<td>What did you learn from the open-ended discussion before each decision?</td>
</tr>
<tr>
<td>Please explain how the group interaction helped you to learn about ethical theories, if at all?</td>
</tr>
<tr>
<td>Please explain how the group interaction helped you to learn about your own values and other people's values, if at all?</td>
</tr>
<tr>
<td>What did you learn about ethical theories during the semester?</td>
</tr>
<tr>
<td>What did you learn about your values during the semester?</td>
</tr>
<tr>
<td>What did you learn about other people's values during the semester?</td>
</tr>
</tbody>
</table>
issues beyond their own. For example, when asked, "What did you learn from the cases used in this class?" one student responded, "How to fully consider all sides of an argument and determine the best ethical outcome." Another student responded, "It was usually the discussion around the 'edges' of the cases that was the most enlightening. Viewpoints [that] are so far different from my own yet often so right." These quotes illustrate the diversity of perspectives that students can be exposed to through this approach.

Further, students in the class connected their learning about different perspectives directly to international issues. Students were asked "Did this class help you to confront ethical challenges in your academic career?" One student responded, "It helped me [to] understand the different points of view out there and to appreciate the fact that one could be right in one situation but wrong in [another]—based on many factors [such as] geography, etc." This student invokes geography—and thus, national and regional culture—in answering this question. The student also refers to a contextual basis for considering multiple perspectives that is tied to one's geographical location.

Responses to other questions further reinforce the finding that students were able to consider other perspectives through use of multiple roles and multiple decision points in the cases. For example, when asked, "What did you learn from cases where different roles were confronted with different decisions?" one student responded, "You may see [that] different people have different viewpoints based on some [other] reason[ing]." Another student, when asked, "What did you learn from the open-ended discussion before each decision?" replied, "The advice and discussion from peers provides valuable experience and different viewpoints that help inform my decisions." Thus, these students clearly benefited from perspective-taking.

Students' learning was directly related to consideration of the different decision-making processes and perspectives of different individuals from different cultures. For example, when asked, "Please explain how the group interaction helped you to learn about ethical theories, if at all?" one student replied "Group interaction was critical in helping me understand different considerations and sides to ethical arguments." Another student explained, "The group dynamic was great because it gave me a glimpse into other people's thought process[es]." A third student added, "Being in a group raised point[s] that I did not think about." Finally, a fourth student commented, "It was helpful to listen to how information is regulated in [list of geographical locations and professions of students enrolled in the course]." Thus, group interaction facilitated by the cases specifically aided ethical decision-making when faced with intercultural information ethics problems by promoting learning from analyzing differences in other perspectives.

Specifically, the cases helped students to consider others' values, which is closely related to both culture and ethics. For example, students were asked, "Please explain how the group helped you to learn about your values or other people's values, if at all?" One student commented, "Learning [about] other people's values seems to serve as a great way to force me to question my own." A second student answered, "I gained a better understanding of other people's values because of the passion they had when they made their case. Sometimes I was forced to change my decision after looking at things [from] their perspective." A third student stated, "[I] explored perspectives I would not have [otherwise] considered." A fourth student explained, "It helped me to learn about other people's values because it forced me to consider views I wouldn't have thought about very much on my own." Finally, a fifth student replied, "Even though most
Students also learned about cultural variations in defining right and wrong, an important part of intercultural information ethics. When asked, "What did you learn about other people’s values during the semester?" a student stated, "That people’s values might be different but that doesn’t make them wrong." Another student responded, "People want to do the right thing. It’s just [that] nobody can agree [about] what is right." Yet another student commented, "[I] particularly found the non-traditional theories most helpful. Glad we studied those." These quotes bring into clear relief the importance of intercultural information ethics education in the global information age. Another question asked was, "What did you learn about your values during the semester?" One of the students answered, "I’m tolerant of lots of ideas but ultimately I go with how I was raised." Thus, the cases appear to have broadened the perspectives of some students, but may not necessarily have always influenced the final outcome of their decision-making.

Table 2. Four Key Themes.

<table>
<thead>
<tr>
<th>Key Theme</th>
<th>Finding (These cases can help students learn the importance of...)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diversity</td>
<td>Individual diversity in ethical decision-making</td>
</tr>
<tr>
<td></td>
<td>Geographical diversity in ethical decision-making</td>
</tr>
<tr>
<td>Perspectives</td>
<td>Learning by using new perspectives</td>
</tr>
<tr>
<td></td>
<td>Learning by analyzing differences in other perspectives</td>
</tr>
<tr>
<td>Values</td>
<td>Considering the values of others</td>
</tr>
<tr>
<td></td>
<td>Understanding one's own values</td>
</tr>
<tr>
<td>Pluralism</td>
<td>Considering a pluralistic view of right and wrong</td>
</tr>
<tr>
<td></td>
<td>Understanding pluralism for intercultural information ethics</td>
</tr>
</tbody>
</table>
Discussions. However, in the second semester, all of the students were domestic students, and the class demonstrated less cultural sensitivity in cases and discussions related to international issues than the first semester’s class. One sample statement from a student during the second semester highlights the importance of this distinction, as in response to the question, “Please explain how the group interaction helped you to learn about your own values and other people’s values, if at all?” the student stated, “If we had [a] more diverse group, [I] probably would have learned more.” This data thus provides preliminary evidence that the effectiveness of internationally-focused information ethics materials, including interactive cases, is impacted not only by the educational materials but also by the composition of the class, especially in terms of diversity of students’ national origins.

Four key findings can be identified as a result of this analysis. The first theme was diversity, including both individual and geographic diversity of different people’s ethical decision-making. The second theme was perspectives, including the benefits of taking new perspectives and learning from other perspectives. The third theme was values, including considering others’ values and understanding one’s own values. The fourth theme was pluralism, including both the importance of a pluralistic view of right and wrong and understanding the pluralism inherent in intercultural information ethics. These four key themes are depicted in Table 2.

Discussion

Overall, students in the class learned about the range of different values and the influence of culture on ethics and values, as recommended in the literature discussed above. The class and the cases around which it was built can be a valuable experience in preparing future information professionals to deal with ethical dilemmas raised by the global information age, especially when the class includes a diverse range of students in terms of national origin and other factors.

Specifically, the incorporation of multiple interacting roles (played by different students or student teams) confronting different ethical decisions based on the choices of other roles appears to be highly compatible with intercultural information ethics education. While most information ethics cases are built around a single role or a single decision, and thus a single perspective, the cases employed in this course included much more diversity in the number and types of roles and (interdependent) decisions. As a result, while other information ethics cases seem to promote normative and mono-cultural approaches to ethical decision-making, cases with multiple interacting roles may be particularly suited to teaching moral pluralism, which may be more appropriate in the small, highly interconnected world found in the information age.

Future Directions

While the cases developed for this course have provided a strong start for this project and for the goal of encouraging students to consider information ethics issues within a diverse international context, many improvements can also be made in future iterations of the cases and the course. First, the cases tended to be overly formulaic, with a standard reliance on three roles, three decisions, and (at least in the first semester) two choices per decision. While the reasons for these design choices are clear and understandable under the circumstances—for example, the limited number of students in the class, the novelty of all of the cases and of the approach to building and implementing the cases, the time spent designing the
eight different trajectories that the students might pursue based on the three-level binary tree structure, and the goal of developing closed-ended cases that will be possible to implement in software—it will be beneficial in future semesters to diversify the number of roles, their relationships to each other temporally, and the number and realism of choices to better simulate real-life situations when information professionals from/in locations around the world are faced with ethical dilemmas. Significant progress was made during the second semester, as the number of decisions faced by a particular role was often varied and expanded from two to three answers, and also as different formats for playing the roles were used.

Another important future direction for this project will be to develop robust pre- and post-tests that can be administered before and after each case to measure student learning during the case. It is important that these pre- and post-test can demonstrate student learning. Specifically, the pre- and post-test should allow the research team to quantitatively analyze the effectiveness of the cases in terms of the students' development of an awareness of how ethical dilemmas are considered by individuals from/in other cultures as well as understanding the underlying personal values that are associated with the various approaches to resolving ethical dilemmas. For example, it has been shown that a deontological approach, in some situations, is related to one's belief in and application of norms [citation omitted due to double-blind review]. A first attempt was made at implementing such pre- and post-tests during the second semester, and the refinement of these tests and the evaluation of this data will continue to progress as the overall project develops.

Overall, the major future direction for this project will be to develop an interactive educational simulation based on the cases created for and evaluated in this course and to develop best practices for delivery of the cases and the course as a whole. Once the simulation has been completed, the authors will freely disseminate the simulation, as well as other materials used in the course, via the Web. Through the development and dissemination of this simulation, the authors aim to make significant contributions to intercultural information ethics education in graduate programs in library and information science around the world, helping to prepare information professionals for the global information age.

Acknowledgements

This material is based upon work supported by the National Science Foundation under Grants IIS-0724894, IIS-0724899, and IIS-0724879. The authors would also like to thank the students who voluntarily participated in this study and the reviewers of an early version of this article that was presented as a juried paper at the Association for Library and Information Science Education 2008 Annual Conference.

References

Aupperle, K.E. (1984). An empirical measure of cor-


