Successes and Failures Teaching Visual Ethics:
A Class Study

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Abstract

This article discusses and evaluates the inclusion of ethics learning modules in a graduate-level visual design theory course. Modules were designed as a part of an NEH grant. Students grappled with case studies that probed the ethics of visuals at the crux of the BP oil refinery accident, NASA space shuttle disasters, the Enron collapse, and biomedical research in the Texas Medical Center. The article assesses evidences of learning and ethical absorption, including student surveys, self-reflections and final project rationales. Ultimately, in terms of Rest's Four-Component Model of ethical behavior, integrating the readings and activities helped heighten moral sensitivity and judgment, but failed to yield measurable evidence of moral motivation or character and behavior. The article describes course adjustments to help facilitate student development in the latter two aspects.

Keywords: Teaching visual ethics, case study.

As the saying goes, it's one thing to know what's right, and another thing to do it—so was the case when I taught ethical implications of visual design to graduate students. I incorporated readings and activities that I learned during several workshops organized by the professional writing program at University of Houston-Downtown and funded by the National Endowment for the Humanities. We used the NEH grant to design and add ethics components to the core courses of the graduate curriculum, among which ENG 5330 Visual Design Theory is one. The workshops equipped participants with readings and case studies specific to Houston's primary industries: business (the collapse of Enron), energy (the 2005 explosion at the British Petroleum plant in Texas City), space (the destruction of the Columbia and the Challenger space shuttles), and medicine (slides from stem-cell research and bioengineering from the Texas Medical Center). In Spring 2007—the first semester I attempted to implement the case studies—I found that, while it was clear that students increased their knowledge and awareness of the ethical implications of visual design, it was not as apparent that they had matured as ethical actors.

I scheduled the ethics modules so as to highlight the underlying visual principles and theories that caused the dilemma. In visual design, it is important to consider the ethics of manipulating visual elements (in such a way that they represent data accurately and humanely). Therefore, coverage of the design theories and principles that conspired to create ethical dilemmas complemented each ethics unit I added. I broached ethical perspec-
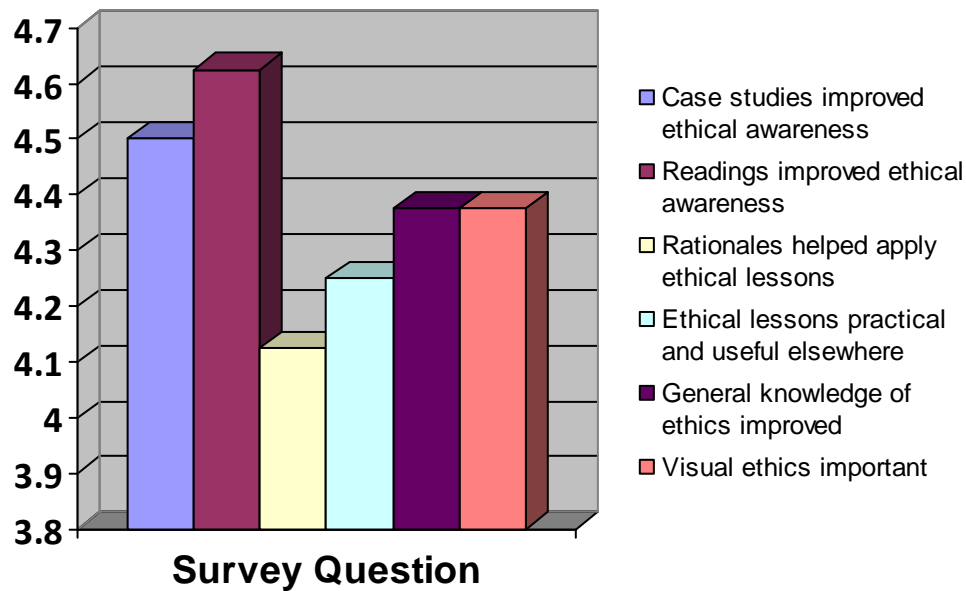
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tives implicit in different visual media and from different vantages of visual theory. And we replicated many of the discussions and case studies from the NEH workshops. We started with a reading that gave an overview of the different schools of ethics and how they are typically applied to visual design, complemented by a discussion of color, a visual element the manipulation of which students could intuitively understand could potentially be unethical. Next, we covered two notions—Plato's Ring of Gyges (e.g., humans act out of selfishness) and Rawls' Veil of Ignorance (e.g., humans should make ethical rules without prejudice or self-interest)—that conceptualize ethical motivation for doing what's right, coupled with a discussion of the visuals meant to report (or misreport) earnings in Enron's annual report. Here, we discussed proportion and manipulation of axes in information graphics. We used a reenactment of the BP explosion to discuss Dragga's idea of humane graphics (that clearly depict human loss and casualty), coupled with a discussion of icons and pictures.

When I taught the course the following spring, I gathered many evidences of students' absorption of the ethical lessons during the semester. The seven students enrolled in the course kept a learning record where they were asked to track their progress in the course's learning goals in design, professionalism, collaboration and research in weekly observations and in midterm and final self-evaluations; they often commented about their ethical awareness in these observations. I asked students to consider the ethics of their final projects—a poster rendering of research they completed the semester before—in rationales about the poster projects. I also surveyed students about their ethical competency at the end of the semester. The five-item survey was designed to measure students' grasp of ethics from the readings, the activities, the cases, in application, and in general ethical awareness / knowledge. Students gave their opinions as to the usefulness or helpfulness of different components of the ethics lessons on a five-point Likert scale (1=strongly disagree to 5=strongly agree).

My findings revealed slight trends indicative of the observations, self-assessments, and rationales—namely, it was clearer that students had learned terms and concepts more so than it was clear that students were ready to apply the ethical lessons learned to their lives or their careers. The survey revealed that students usually strongly agreed that the cases (4.5) and readings (4.625) were helpful. They also usually agreed that they improved their general knowledge (4.375) of ethical implications of visual design and that visual ethics is important (4.375). They were not as convinced that having to write a rationale helped them acquire and use the ethical lessons they learned (4.125). They were also not as sure that they would use what they learned on the job or in other courses (4.25)-. Overall, students were not as likely to agree that they would apply the lessons they learned, nor were they likely to agree that it helped having to justify their own ethical decisions in rationales.

Student narratives affirmed the numerical data from the survey. Their weekly discussion postings and their mid-term and final self-reflections showed that students clearly understood the ethical readings and concepts therein. Most students demonstrated at least a basic understanding of how to identify ethical dilemmas in design. Take, for example, this

Figure 1. Student Evaluations of Components of Ethics Lessons

Legend:
- Case studies improved ethical awareness
- Readings improved ethical awareness
- Rationales helped apply ethical lessons
- Ethical lessons practical and useful elsewhere
- General knowledge of ethics improved
- Visual ethics important

Survey Question

student who identified correctly that, since a map of a disaster area didn't somehow represent the human loss or casualty, it was not ethical, per the Dragga reading: "Because the map does not bear any sign of the human toll, its silence misleads viewers. The physical aspects of the storm are only a part of the story, and the map does not reveal the monumental nature of the human story. It is therefore a false representation of the storm because it tells only a portion of the story, completely ignoring the human aspects."

However, in rationales, only two students actually made ethical judgments of their own work. One student whose research covered sensationalism in the news media questioned their selection of visuals to represent the sensationalism: "The biggest ethical dilemma I had when creating the poster was trying not to pick the most 'over the top' visuals for inclusion in the poster. I tried to be 'fair' in my representation and not throw out any image because it was not 'sensational enough.'" Another student whose research project discussed dishonest medical visuals questioned the integrity of their poster's own display of those dishonest visuals:

> I…realized that my poster, while visually entertaining, was in fact unethical…I chose to display an array of images (of cells) in a circle around an oval with the word 'truth?' The images I chose were for aesthetic reasons only…I did not provide an explanation for the images nor did I provide any images that were digitally altered. My…design let the viewer, who is not a visual design[er] or science expert, decide if the presented images are truthful…[My] design was unethical because it violated Kant's master rule of categorical imperative. This poster would have potentially transmitted incorrect knowledge and the viewer would have walked away with a false impression of the information. In a learning situa-

tion, it would be unfair [to] let all students draw their own conclusions about the given material.

In both cases, students turned the ethical lessons learned in class on themselves and used the information to assess their own behavior. However, the majority of students merely applied ethical terms, rather than evaluated their design and methodology for its ethical value. In the following exemplary case, for instance, the student applies Dragga's ideas for making numerical data displays more "humane" by adding human figures to his/her poster: "After reading Dragga's articles, I thought about ways to incorporate humanity into my poster…I wanted to ensure that when my audience read my poster, they kept the human element of the problem in mind. In order to accomplish this, I included human characters on both sides of the bridge, since these two sections of information detailed the problems that both technical communicators and end users face." Every other student used the readings in the same way as this student—rather than using the readings to evaluate the ethics of their design decisions, they used the readings to prescribe what design actions to take.

In weekly observations, students rarely reflected on their personal or professional ethics. Instead, they thought about their mastery of ethical terms or how they would apply those terms in class assignments. On whole, students reported gaining understanding of the concepts thanks to class discussions: "I have a different understanding of the Kienzler's article and how it fits with the Rose [reading about visual design theories] and well as with the Kosteinick's and Roberts' [reading about visual design principles and elements]." Or, they commented how preparing for class acquainted them with new concepts: "I enjoyed giving this presentation because this is a topic that I'm very interested in and because I gained a different perspective from the questions and comments that the class gave. In compiling my information, I became more familiar with some of the ethical theories that we've read about." While these cases demonstrate that students grasp the ethical concepts, they are not evidence that students have internalized the lessons—they do not prove that students will use the information in their professional or personal lives. Only two students' observations show some semblance of internalization. One student commented that s/he "…believe[s] that all visuals are designed to elicit certain responses (even stop signs and yellow lights). We must be conscious of the purposes of visuals and images we see every day and be aware that we react to persuasion in all our actions/reactions." Another said that class discussion "…really made me think about the use of manipulation by advertisers, and the ethical considerations inherent in designing a visual image intended to persuade an audience." In both cases, students moved beyond reporting concept comprehension and turned ethical lessons learned outwards, evaluating their consumption of media at large.

Finally, in mid-term and final self-evaluations, students were more likely to report mastering terms than they were to reflect on their own ethical decision-making. For example, students were quick to report that they discussed ethical concepts accurately or with confidence:

> In a post-class reflection…, I mentioned that we debated about visual ethics and whether the intention of the designer matters over the outcome of the image. Now that we are at the end of the semester, I would expand on this statement by including which theory, consequentialist or nonsequentialist, seems more applicable to the image or situation we were discussing. I remember debating with confidence that the site of the audience gave the image its meaning and that the outcome was more important than the intention.

This case is representative of the majority of instances in mid-term and final self-evaluations where students report a clear understanding of ethics for completing course work. Only one student gestured toward internalizing those lessons for application beyond the classroom. S/he asked, "When as technical writers can we not consider all of these obligations in any of our work?" Since the implied answer to this rhetorical question is "never," the comment suggests that this student might use the lessons learned in situations beyond the classroom.

James R. Rest's Four-Component Model of ethical behavior can help explain my findings beyond the colloquial saying that it's one thing to know what's right and another to do it. According to Rest, four inner psychological processes work together to manifest outwardly observable ethical behavior:

> 1. Moral sensitivity (interpreting the situation, role taking how various actions would affect the parties concerned, imagining cause-effect chains of events, and being aware that there is a moral problem when it exists). 2. Moral judgment (judging which action would be most justifiable in a moral sense—purportedly DIT research has something to say about this component). 3. Moral motivation (the degree of commitment to taking the moral course of action, valuing moral values over other values, and taking personal responsibility for moral outcomes). 4. Moral character (persisting in a moral task, having courage, overcoming fatigue and temptations, and implementing subroutines that serve a moral goal). (Rest 1999, p. 101).

Ultimately, in terms of Rest's Four-Component Model of ethical behavior, integrating the readings and activities helped heighten moral sensitivity (i.e., identifying the visual principles and elements that led to moral problems in visual design) and moral judgment (i.e., evaluating the ethical value of a visual design), but failed to yield measurable evidence of moral motivation (i.e., the degree of students' commitment to take moral action in their professional or personal lives) or character / behavior (i.e., fortitude to follow through on moral goals in their professional and personal lives).

Other research also reports similar failings of ethical education to actually motivate right action in lived experience. Studies indicate that ethical education is often limited to practicing ethical judgments and prescriptive reasoning processes (Armstrong, Ketz, & Owsen, 2003; Izzo, 2000). Others show that moral sensitivity does not always increase moral behavior (Fulmer & Cargile, 1987). Some have employed (with mixed results) more sophisticated pedagogies—simulation, service learning, multimedia reinforce-

ments—to motivate behavioral changes (Hanson, Tulsky, & Marion, 1997; Ziv, Wolpe, Small, & Glick, 2003). Weber (1990) found that students' ethical awareness was short-lived with formal training; he found studies showing that students' ethical awareness regresses four years post-training. And de Rond (1996) found that case studies often present ethical dilemmas that can only be resolved at high-levels of management (rather than entry- or mid-level), thereby making it harder for students to visualize their part in the ethical decision making (p. 55); he also criticizes the pedantic, "preachy" nature in which professors often present ethical lessons (p. 56).

I believe that improving my course design, activities and assessment can help facilitate development of moral motivation and behavior. To be fair, the survey I designed might not have allowed students to report the full scope of their absorption. I could have worded the questions to ask to what extent students intend to use the lessons learned in their professions and in their personal lives, although such a directed question would reflect only self-reported and projected actions rather than actual occurrences and implementations. I also did not make ethical awareness or absorption an explicit goal of the course (for students to track in their learning record). Had I done so, they might have been compelled to do the deeper self-reflection that might have precipitated their judging their own ethical behavior. And, while I encouraged more personal, ethical self-reflection during face-to-face discussions, I could add to the case studies and writing response prompts an invitation for students to write about their own anecdotes and experience dealing with ethical dilemmas similar to the ones covered in class. Furthermore, I can be sure to make clear in each case where mid- and entry-level employees might play a part in the ethical decision-making (by, perhaps, creating personae for students to assume as we read and interact with the case). While these improvements might not actually train up more ethical-acting technical communicators and grad students, it will yield the kind of evidence that shows that (at least during the course) students were, indeed, involved in the deliberation indicative of moral motivation and behavior.

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