Moral Spaces in MySpace: Preservice Teachers' Perspectives about Ethical Issues in Social Networking

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Abstract

MySpace and Facebook are innovative digital communication tools that surpass traditional means of social interaction. However, in some instances in which educators have used these tools, public reactions to them have resulted in sanctions. With the notion that traditional ideas of privacy and teacher conduct are not yet defined in online worlds, the researchers developed a case-based reasoning intervention to support more informed decisions by preservice teachers. The case-based coursework led students to perceive a need for more definitive guidelines about their participation in social networking spaces. The findings have professional development implications for educators and educational institutions that wish to harness the positive potential of social networking tools without risking professional status. (Keywords: social networking, case-based reasoning, online ethics, professional development, teacher education)

INTRODUCTION

Stacy Snyder, an English education teacher candidate at Millersville University, was denied her teaching certificate and given an English degree rather than an education degree after campus administrators discovered photos on her MySpace profile portraying her as a "drunken pirate." She filed a lawsuit against the university claiming an infringement upon her civil liberties (Read, 2007). Stacy's situation is just one of many recent cases in which aspiring and practicing educators have faced unfortunate consequences because of the way others perceive the use of social networking tools such as MySpace and Facebook (Carter, Foulger, & Ewbank, 2008).

As faculty serving students in a teacher preparation program, we recognized that our students, like the ones in these stories, might not realize the potential

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consequences of publishing personal information for public view in an online social networking community. Social networking tools like MySpace and Facebook have become a normal part of social life for many of our preservice teachers. Our sense of urgency to support our students was confirmed by several incidents at our college, including the dismissal of a student teacher from his internship placement because of the information he published on his MySpace page. We were motivated to develop an intervention that could support our preservice population by helping students be able to comprehensively evaluate the usefulness of a social networking tool, understand the visibility of their online behaviors and choices, and recognize the public nature of their future career. The purpose of this article is to share the findings and questions raised by the research conducted on the coursework intervention, and to assist the larger education community in taking a proactive stance in dealing with the complex issues surrounding social networking.

Before we conceived of the coursework intervention, we collected stories that illustrated the complexities of preservice and inservice teachers' participation in these online communities and published our commentary (Carter, Foulger, & Ewbank, 2008). The article highlighted stories about educators who were sanctioned for inappropriate or immoral behavior not suited for the teaching profession when they exposed information about themselves through their social networking profiles. We described online social networking as an uncharted landscape where legal systems have not yet established a precedent about how educational institutions should deal with the idea of social networking, especially during what could be considered off-duty participation in online spaces by students, teachers, and administrators.

Our next step was to move beyond the stories and adopt a proactive approach for our students and for other educators faced with similar dilemmas. As we discussed possible interventions, we debated about the position we should take. We wanted some sense of practicality that could be replicated by other teacher educators, but we were hesitant to prescribe conditions under which teachers or students should or should not participate in online social networking. If we suggested that educational institutions ban the use of social networking tools, our position could stymie the development of innovative uses of these types of tools for teaching and learning. On the other hand, if we promoted educators' free speech rights, no matter what the medium, educational institutions might be prompted to develop rigid guidelines for the use of such sites by their teachers and students.

We commenced with the study described in this article as an attempt to help preservice teacher educators prepare new teachers for the apparent risks by helping them understand the nature of social networking tools. We designed an activity to help students look beyond their student identity, toward the development of a teacher identity—to realize any impressions, benefits, and negative aspects of their current choices upon their future profession. The assignment asked the students to read and reflect upon controversial and complex cases of teachers' uses of social networking. The following questions guided the investigation:

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1. What are preservice teachers' perspectives regarding a social networking scenario that involves multiple ethical dilemmas?
2. In what ways does a case-based homework assignment change preservice teachers' reasoning about social networking?

BACKGROUND

The advent of Web 2.0 and online social networking tools has enhanced communications capabilities and at the same time has challenged traditional ideas about privacy and ethical conduct. The issue of ethical conduct is especially relevant for those in education, because teachers across the United States have been dismissed for such broad and undefined reasons as "conduct unbecoming" and "immorality" (Fulmer, 2002). A 1915 document outlines rules for teachers at that time prohibiting them from dyeing their hair or keeping company with men and is often seen posted on classroom walls as a tongue-in-cheek reminder of the way things used to be (Ramsey, 2006). This document is evidence that society made it their business to hold teachers to a higher level of ethical conduct, even during off-duty times. Today, state certification procedures still reflect this notion in policy clauses that restrict teachers from "engaging in conduct which would discredit the teaching profession" (Arizona Administrative Code, 2007, p. 102).

Today, debate exists over the interpretation of how these state clauses are applied in emerging virtual worlds. Teachers' ethical conduct within social networking sites has been met with a variety of responses from teacher preparation programs, school districts, and universities, as traditional tests of rights versus duty have not yet been defined for online environments. Do teachers have the right to free expression online even if they oppose the values of the institution? Do teachers have a duty to uphold the values of the educational institution in their personal online activity? Some educational organizations have warned teachers not to use social networking sites (e-School News Staff, 2007), while others have provided guidelines for responsible use (Pennsylvania State University, 2007).

One particularly striking example of this dilemma is the Tamara Hoover case. Hoover, a high school art teacher in the Austin (Texas) Independent School District, was fired when nude photographs were discovered on her MySpace profile and on the photo-sharing Web site Flickr (May, 2006). Hoover was fired for conduct unbecoming a teacher, although the photographs displayed could be interpreted as artistic and professional. Hoover agreed to a cash settlement from the school district and now uses her MySpace profile to promote teachers' free speech rights (Hoover, 2008). The Hoover case has attracted national media attention, but it is not an isolated incident. Other teachers have also been disciplined for their off-duty conduct, and some claim that such discipline is unconstitutional (Fulmer, 2002). Clearly the concern, debate, and vulnerability for educators who use social networking sites suggest a proactive strategy to minimize risks.

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ANALYTICAL FRAMEWORKS

Two analytical frameworks guided us in our attempts to create an intervention that could develop student reasoning surrounding the ethical issues in social networking and to analyze the effect of the intervention on students. We selected social cognitive domain theory (Turiel, 1983; Turiel, 2002) as our starting point for understanding the ethical complexities in online social networking because of its long legacy for describing and distinguishing moral and nonmoral features in complex social issues. The intervention we developed was informed by a case-based teaching approach that has been shown to be successful for developing reasoning skills (Kim et al., 2006). Before we describe the design of our study, an overview of these two frameworks is warranted.

An Ethical Concerns Framework

Social cognitive domain theory (Turiel, 1983; Turiel, 2002) provides an analytical framework that differentiates moral from nonmoral concerns in social interactions. Prior research applying this framework has demonstrated that people consistently think about moral matters (such as notions of harm, fairness, and rights), conventional matters (such as social roles, institutional organization, and matters of social efficiency), and personal matters (such as tastes and choices) in different ways (Davidson, Turiel, & Black, 1983; Nucci, 1981; Smetana, 1988; Smetana, 2006). From early childhood, individuals actively distinguish among these domains and make domain-specific judgments. These insights are critical because many real-world social interactions are multifaceted in the sense that multiple social domains are involved. Judgments and actions often involve weighing and coordinating various moral and nonmoral concerns. For example, a judgment about whether a teacher should be disciplined for approaching parents with alarming information acquired from a student's online profile involves the consideration of multiple issues. There are concerns for the student's welfare (moral), the limits of teacher authority (conventional), and the student's right to privacy (moral) when choosing to post information in a public forum (personal). The framework also allows for analytical investigation rather than a prescribed approach to how one should behave in ambiguous situations. There are conflicting perspectives about whether a teacher should be disciplined in such a situation; we are not certain about the right or ethical course of action in complicated, multifaceted events. Our purpose in the present study was not to prescribe a set of moral standards but to better understand the issues involved and discover the ways preservice teachers weigh these issues in their thinking as online social networks continue to grow.

A central issue in the present study concerns appropriate teacher conduct and authority in social networking sites. A social-cognitive domain approach has been used extensively to examine reasoning about role-related authority, particularly reasoning about the scope and limits of authority of parents and teachers (Laupa, 1991; Laupa, 1995; Laupa & Turiel, 1993; Nucci, Guerra, & Lee, 1991; Smetana & Asquith, 1994; Smetana & Bitz, 1996). Findings suggest that, as students get older, they are more likely to judge teachers' legitimate authority over students as limited within the concrete boundaries of the school

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context (Laupa & Turiel, 1993). For instance, 9th and 12th graders viewed drug and alcohol use as a personal/prudential decision that is outside of school jurisdiction (Nucci, Guerra, & Lee, 1991) unless it occurs within the school confines (Smetana & Bitz, 1996). As classroom and school boundaries become progressively virtual, limits on educators' responsibilities and authority may be unclear for students and staff alike. There is already evidence that some matters of in-school teacher authority result in mixed viewpoints. For example, Smetana & Bitz (1996) found that students are divided in their perceptions of legitimate teacher authority toward contextually conventional issues that might normally be matters of personal choice but that are often regulated within schools to facilitate institutional functioning (e.g., going to the bathroom without permission, passing notes to friends, public displays of affection). This research suggests that the use of social networking tools in classrooms might expand the scope of the school context beyond the physical school borders and hence widen the legitimacy of teacher authority to include students' use of those tools.

Other research within a social-cognitive domain framework suggests that thinking about issues that fall within the realm of technology are not always consistent with thinking about similar issues outside of technological realms. For example, a recent study showed that, whereas 100% of participants thought that reading someone's personal diary was an invasion of privacy, only about one quarter of the participants thought that live image video of someone in a public space violated their privacy (Friedman, Kahn, Hagman, Severson, & Gill, 2006). Another study demonstrated that many students who believe in property and privacy rights in nontechnological arenas condone activities such as illegal file sharing, piracy, and hacking on computers (Friedman, 1997). Student interviews revealed that this apparent contradiction had to do with fundamental aspects of technology: the perceived distance between the actor and potential victims, the indirect nature of the harmful consequences, the invisibility of the act, and the lack of established consequences for such behavior online. Social networking tools share these same technological features, and the spaces in which they operate are frequently public. An examination of reasoning about privacy rights in social networking media will likely reveal a variety of perspectives.

Our study examines reasoning about teacher responsibility and authority regarding students' social networking behaviors. A social-cognitive domain approach can help us to classify and distinguish the domains of reasoning used by students. Furthermore, by using this approach, our findings can help to bridge two independent strands of reasoning research on teacher authority and privacy rights in technology.

A Case-Based Reasoning Framework

Research within several independent domains of learning has converged to suggest that case-based reasoning is not only a prevalent everyday reasoning strategy, but is also synonymous with deep learning (Kim et al., 2006). Studies of case-based reasoning interventions have shown a variety of benefits in terms of increasing content knowledge (Koehler, 2002), developing critical

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thinking and inquiry skills (Barnett, 1998; Gilboy & Kane, 2004), improving students' abilities to attend to the information or features necessary for making better decisions (Copeland & Decker, 1996; Chew, 2001), and for improving decision-making skills in a variety of clinical realms (Eurell et al., 1999; Hudson & Buckley, 2004; Malloy, 2002). These recognized benefits have encouraged case-based teaching designs, with cases (events, instances, problems, stories, etc.) rather than conceptual elements or units driving the instructional design in at least 100 recent educational interventions (Kim et al., 2006).

Research shows that case-based teaching helps students develop complexity of reasoning to identify dilemmas, recognize multiple points of view, and integrate perspectives when making decisions (Flynn & Klein, 2001; Levin, 1995; Lundeberg & Scheurman, 1997). Unlike the case-based interventions designed for medical uses, where there may be one correct, but complex, diagnosis, the appropriate ways and methods for using social networking tools are far from established. As such, case-based methods might be used to develop the complexity of preservice teachers' reasoning that should inform decisions but not lead students toward one particular decision or prescribed judgment.

There is some evidence that case-based reasoning approaches are effective for developing preservice teacher thinking. For instance, Barnett (1998) showed that using teacher-authored cases of classroom mathematics events helped preservice mathematics teachers develop their understanding of the discipline of mathematics and enhanced preservice teachers abilities to critically analyze alternative viewpoints about mathematics teaching and learning. Findings from another study (Copeland & Decker, 1996) indicated that more than one third of the teaching and learning cases used in one course were adopted or transformed in some way into preservice teachers' own meaning systems, as evidenced by discussion three weeks after the cases were presented. Finally, a third study examined the effectiveness of a course using cases to examine key social and pedagogical issues in education (Harrington, 1995). Preservice teachers increased significantly in the number of issues they recognized within the cases, in the scope of the consequences (immediate as well as far reaching) embedded in the issues, and in their abilities to include multiple forms of evidence to support their own points of view. Taken together, results suggest that case-based approaches can be effective in teacher education for constructing knowledge, developing critical-thinking skills, recognizing multiple perspectives, and developing evidence-based reasoning skills in a variety of domains (including mathematics teaching and learning, general pedagogy, and social issues in education). Despite a lack of research into the use of case-based teaching about controversial social networking issues, we take the review above to suggest that such a case approach has the potential to (a) increase students' recognition and integration of multiple perspectives or viewpoints about the benefits and harms of teachers' use of social networking tools and (b) develop students' appreciation for the range of ethical vulnerabilities inherent in social networking media.

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METHODS

Participants

We were interested in the effect of the intervention on students in the early stages of a teacher preparation program, so we targeted lower-division introductory courses in education. One instructor (not an author) was willing to incorporate a case-based reasoning intervention that the researchers had developed into two course sections with a combined enrollment of 68 freshman undergraduate education majors. Students participated in a 2-week online homework process that included anonymous pre- and posthomework reflections. Although all students participated in the homework, the reflections were optional and anonymous, per institutional review board procedures. Students received credit regardless of their decision to respond to the anonymous surveys and reflections embedded in the process, resulting in some students not responding to some or all of the measures. We were able to match 50 pre- and postintervention student responses. The majority (44) of the matched sample was female, with few males (6), which is consistent with female–male ratios in our college. Nearly all students were 18–25 years old, except for two students who were older than 40.

Students also responded to background questions regarding their knowledge of social networking tools. Responses reflected a high degree of familiarity with social networking sites. Forty-nine of the 50 students responded that they were familiar with social networking sites such as MySpace or Facebook, and 44 (88%) reported that they have an account. The two students older than 40 indicated little or no familiarity with social networking functions compared to the majority of younger students, who responded that they understood social networking functions "very well" or "somewhat well."

Students also responded regarding the variety of ways they use social networking sites. Responses reflected that most students reported uses that involved social communication and the sharing of personal information with friends. Most students responded that their sites contained information about their current or past school, but few believed that teachers visited their sites. Similarly, whereas some students reported having information about their current or past employment on their sites, few students believed that employers would look at their sites, and none used the social networking site for finding employment. Participants' use of and beliefs about social networking were consistent with a large-scale survey of social networking. The Higher Education Research Institute, in a survey of 31,500 U.S. college freshmen, reported that 94% spent time on social networking sites in a typical week, mostly interacting with friends and family (Hurtado, 2007). Similarly, the Pew Internet and American Life project reports that 75% of online adults ages 18–24 have a social networking account primarily to maintain personal contacts (Lenhart, 2009). Table 1 (p. 8) lists student-response percentages regarding perceived viewership of students' social networking sites. Appendix A (page 22) contains details of student responses to other social networking background questions.

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Table 1: Student Responses Regarding Social Networking Site Viewership

Who do you think looks at your social networking site?	
Your friends	86%
Your relatives	60%
Your boyfriend/girlfriend	46%
Your co-workers	42%
People who want to date/hook up with you	22%
Your parents	20%
Your boss/employer	8%
Your teachers	8%
Anyone who feels the need to look at my page	2%

Note: N = 43

Procedures

Online coursework. We constructed a three-stage assignment and outlined the process on a Web site, with links to separate pages for each step. Web-specific content was embedded into each step as hyperlinked text (see Appendix B, page 24). In the first step, students were asked to gain a functional understanding about social networking tools and the specific features of tools such as MySpace. In step two, students learned about specific instances in which teachers' use of social networking sites for educational purposes followed their pedagogical positions. They also read an opinion piece about the benefits and pitfalls of social networking in education, as written by inservice educators. In the third step, students clicked on links and read news stories about teachers and soon-to-be-teachers who were reprimanded for their use of social networking sites by their educational institutions. Responses from all three steps were collected via an online form.

In an attempt to move students beyond superficial understandings of cases (March, 2007), we used Thinking Routines (Project Zero at Harvard Graduate School of Education, n.d.) as an inquiry-based pedagogical protocol for all three steps of the assignment. This involved the learners being asked to read or view media linked from the Web page (e.g., news cases, commentary and opinions, policy, etc.) to gain new information. Then, through a series of open-ended, opinion-based questions, the Thinking Routine was used as an instructional method to help students make more thoughtful interpretations, back up their interpretations with reasons, and become more conscious about the complexities of social networking.

Thinking Routines involve three consistent sequences:

1. See–Think–Wonder: What did you see/read about X? What do you think about X? What does it make you wonder about X?
2. Claim–Support–Question: Make a claim about X. Identify and support your claim. Ask a question related to your claim.
3. What makes you say that?: What's going on with X? What do you see that makes you say that?

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Using this strategy, we attempted to create a "culture of thinking" (Ritchhart, Palmer, Church, & Tishman, 2006) for students surrounding this topic. We provide the Thinking Routine process and materials used in this study in Appendix B. We have also made them available at http://web.mac.com/teresa.foulger/iWeb/SNhomework/Intro.html, should other teacher educators wish to review or use them for professional development purposes.

Pre- and postintervention student reflections. After completing the background survey, students reflected upon a prehomework hypothetical scenario involving the use of a social networking tool. In the scenario, a teacher invites students to view his profile. After class the teacher explores his students' profiles and discovers illegal activities. He contacts the parents. The parents believe the teacher has violated student privacy and complains to the school administration. After reading the scenario, students were asked to reflect upon whether they felt that the teacher's actions in the scenario warranted discipline or not, and to explain their reasoning. Responses to this scenario served as baseline data, as they were collected before the homework began. Then, following the three-step assignment, students were asked to read and consider another scenario that was parallel to the one given before the homework, but with different superficial features (such as the teacher's name) so the likenesses would be unrecognizable to the students. Appendix C (page 28) provides the scenarios.

We constructed the pre- and postscenarios in a way that would represent (a) the composite of issues found in current newsworthy cases of teachers who used social networking tools and suffered negative consequences, (b) the kinds of real-life, complex cases students would view in the intervention, and (c) multiple ethical issues and complex dilemmas. For example, there are at least two central dilemmas that students might consider and attempt to resolve. First, what is the appropriate teacher role in this situation? Is the teacher responsible for alerting parents to the student's illegal activities, or is the information outside of the teacher's jurisdiction? If the action of viewing a student's profile is outside of the teacher's jurisdiction, should the teacher be disciplined for acts that are permitted and even encouraged in a social networking community? Second, does a student have a right to privacy regarding a posted social networking profile, or has the student given up those rights by making the profile publicly available? For example, do participants see the profile like a diary that students have shared with some but do not intend for others to view? Or, conversely, do participants think that the principal characters in the scenarios have waived their rights to privacy by posting this information to a space owned by a private company? Which features of which dilemmas would students focus on as they constructed their judgments of discipline? How would the intervention change their ethical positions?

Analysis

The two analytical frameworks described previously guided our examination of student-written responses to the pre- and postintervention reflections. We designed two a priori coding systems to reflect each framework.

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Table 2: Justifications, Explanation, and Examples for Ethical Concerns

Justification	Explanation and Examples
Others' Welfare	Reference to an effect on others' physical, psychological, material, or emotional welfare. ("She works with younger students who are impressionable," or "If she found out something about the student that was seriously wrong, she helped out the student and the family in the long run.")
Others' Welfare Not Affected	Reference to not affecting others' welfare or to an insignificant effect on others. ("She was not meaning to stalk the student," or "She has done nothing wrong except care about the wellness and safety of her students.")
Assumed Risk	Reference to the cost or risk to the actor by virtue of engaging in a social practice; however, the cost or risk is acceptable because it is expected, known, or elected by the individual by virtue of the individual choosing to participate in the practice. ("When anyone, teenagers and adults alike, put information or photos on the Internet, it's not private anymore.")
Fairness and Rights	Reference to fairness and rights, potentially in the context of claims based on merit or ownership. ("If it's something that you create ... you should be able to determine whether you want to make it public or not," or "She was using her own computer to view whatever she wanted to view. It's her right to look at whatever she wants to.")
Social Contract	Reference to requiring the agreement of all members of society or not allowing a social practice when even one person does not agree. (Online social network users agree to common terms and conditions of the service.)
Social Convention: Role of Student	Reference to customs, traditions, and common expectations of students. ("It's not right for the students to view their teacher's profile," or "If the students were doing what they were supposed to do, it wouldn't have been an issue.")
Social Convention: Role of Teacher	Reference to customs, traditions, and common practices of teachers. ("It's not her fault. She followed through as her responsibilities as a teacher," or "She should strictly be the students' teacher, not their friend.")
Social Convention: Role of Parent	Reference to customs, traditions, and common responsibilities of parents in terms of children's privacy and overall behavior or lack thereof. ("If the parents were really concerned about the privacy of their kids, they wouldn't let them have a MySpace profile in the first place," or "It is the parents' responsibility to watch their children," and "The parents are the ones allowing this inappropriate behavior.")
Authority	Reference to authority, typically in terms of law or school policy or the role of administrators. ("The teacher's use of social networking is not illegal," or "There should be school rules teachers should follow if they are going to be part of social networking," or "She should be told to avoid any kind of interactions with her students through her MySpace.")

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Ethical concerns framework. We coded justifications for ethical concerns using an a priori coding scheme developed by Friedman (1997). Similar coding schemes have been used extensively in moral psychology to examine ethical judgments and reasoning (for review, see Smetana, 2006). Table 2 (p. 10) provides justification categories used for coding, with explanations and examples.

We coded student responses according to the ethical concerns framework. We established the codes by consensus and applied them to both judgments (i.e., did the student clearly express a viewpoint supporting no discipline, or did the student endorse discipline in some form as an appropriate consequence) and justifications. (Examples of student responses are available in Table 2.)

Case-based reasoning framework. A review of the case-based reasoning literature (e.g., Kim et al., 2006) led us to believe that teaching about controversial social networking issues using cases would help increase students' recognition of multiple perspectives as well as the range of ethical vulnerabilities inherent in social networking media. More specifically, we expected our case-based intervention to develop the complexity of students' responses to the scenario we provided. To capture changes in complexity, we measured three components of their responses:

1. We thought that students who entertained multiple perspectives would be less likely to hold an absolute judgment that discipline was deserved. To test this, we coded whether their judgments of discipline were absolute ("Yes, the teacher should be disciplined," or "No, the teacher should not be disciplined") or moderated ("I don't know about discipline, but the teacher should be talked to," or "Policies should be established").
2. We suspected that after the intervention, students would more likely consider multiple perspectives in their reasoning, so we coded responses in terms of whether they recognized only one side (one) or multiple sides (multiple) of the dilemma.
3. We also thought that students who were thinking about multiple sides of the dilemma would also be more likely to consider multiple stakeholders in the dilemma. To test this, we coded students' responses in terms of the number and type of stakeholder(s) they referenced in their responses. Potential stakeholders in this dilemma included the teacher, the student, the student's parents, the school administration, and the social networking company.

Analysis procedures. Four researchers conducted the qualitative analysis. Two researchers worked side by side to analyze the full dataset according to the ethical concerns framework. The other two researchers followed the same procedures to analyze the dataset using the case-based reasoning framework. Each team of researchers established all codes by consensus, and the other team reviewed them.

We present, in tabular form, counts of coded responses using both frameworks for the pre- and postscenarios. We assessed the degree of difference between student responses, pre- and post-, by applying McNemar's test for comparing dependent proportions on the codes for both coding frameworks.

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Table 3: Oriented Toward Discipline and No Discipline Coded Responses (Pre and Post)

		Postintervention		
		Oriented Toward Discipline	No Discipline	Total
Pre-intervention	Oriented Toward Discipline	9	4	13
	No Discipline	13	16	29
Total		22	20	42

We report significance levels ($\alpha = .05$) and estimates of effect size (95% confidence interval for the difference in proportions).

RESULTS AND DISCUSSION

Ethical Concerns Framework: Discipline or No Discipline for Teacher Actions

Before and after the intervention, we asked students to respond to a hypothetical scenario (see Appendix C, p. 28). Both scenarios were comparable and embedded multiple ethical dilemmas concerning (a) the teacher's appropriate jurisdiction over students regarding information students in the scenario exposed online, and (b) student rights to privacy regarding that same information. We used the ethical concerns coding framework to determine that, before the homework, 31% of the preservice students recommended discipline of the teacher in the scenario. After the intervention, 52% of students took a position oriented toward discipline. The pre–post difference (.21) was significantly different, with a McNemar's test significance level of Exact $p = .05$, (CI for the difference: .03, .40). Table 3 shows pre–post contingencies for position toward discipline.

Most ethical justifications for student responses changed little between pre and post, but the distribution of justifications showed clear preferences for a few categories (see Table 4). Before and after the homework process, students' justifications for their judgments of discipline most often referenced the role or jurisdiction of the teacher.

Teacher Conduct in a Networked World

Justifications referencing the "role of teacher" tended to fall into two categories. Some participants thought the teacher was acting within the appropriate role of the teacher by looking out for the student's wellbeing. For example, one student stated, "No, I don't think she should be disciplined by the school board, because she did not do anything wrong. All she did was to tell the parents of one of her students about something that she believed was wrong, and that's her job in the first place," and another student wrote, "She was simply trying to inform the parents of something that she as a teacher was concerned about one of her students."

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Table 4: Counts of Ethical Justifications Coded for Scenario Responses (Pre and Post)

Justification Category	Pre	Post
Other's Welfare	9	4
Other's Welfare Not Affected	1	1
Assumed Risk	18	12
Fairness and Rights	11	12
Social Contract	1	0
Social Convention: Role of Student	2	5
Social Convention: Role of Teacher	37	33
Social Convention: Role of Parent	8	9
Authority	2	15

Note: N = 50

Other participants thought that the teacher breached school norms by investigating students' nonschool lives. For example, one student stated, "I don't think it's her job to rat out the students to their parents." Another student said, "It really is not her place since it is outside of school."

These divergent views may reflect a contemporary struggle for preservice and inservice teachers alike regarding a clear code of teacher conduct in a networked world. Research has shown that students have generally seen the teacher's authority as limited by the concrete boundaries of the school (e.g., Laupa & Turiel, 1993; Smetana & Bitz, 1996). Our observations—that participants differ over the boundaries of teacher jurisdiction—may reflect the ways that social networking tools transcend classroom walls, muddy the boundaries between school and nonschool jurisdictions, and lead to lack of clarity about what constitutes legitimate teacher authority and responsibility. If so, this "muddying" might represent an ethical vulnerability in the professional use of social networking tools and deserves more concentrated study.

Teacher and Student Rights to Privacy in an Online Forum

To a lesser extent, two other justifications were common. Some participants referred to the "assumed risk" (the belief that people forgo any rights they might have when posting to a public space), as in these student comments:

> No, he should not be disciplined. MySpace is open to the public so he has a right to view anyone's MySpace, as do the kids. This goes both ways, kids view teacher's MySpaces and teachers are viewing the kids'.
>
> I do not think Mr. Peterson should be disciplined for using a public website. That, I think, would be an infringement on his rights. The student chose to make this incriminating evidence public, which means the public should be able to use it.

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Others referred to the privacy rights that were violated by the teacher's action. For instance, some participants likened the act to "snooping," "spying," or being a "child predator" and expressed concern that an adult would pry into a child's private space:

> Yes, I think Mr. Peterson should be disciplined. I don't think he should be fired but he needs to realize that his actions were inappropriate and he did not have the right to snoop on his student's profile.

Even though the profile was publicly accessible, these participants maintained that students still had privacy rights over the information they posted. Perhaps, for these participants, the social networking profiles function like a personal diary that is intended for a privileged readership. We believe the divergent perspectives reflected by the frequent use of both the "assumed risk" and "rights" justifications reveal a second potential ethical vulnerability of social networking tools: unclear rights to privacy in public spaces. These mixed perspectives are consistent with previous studies of reasoning about privacy issues in the use of technological media (Friedman et al., 2006; Friedman, 1997). Taken together, these findings suggest that our thinking about privacy in technological interactions is complicated. Future studies should look more carefully at the ways specific technological features mediate our thinking about privacy issues in educational contexts. For example, Palen and Dourish (2003) have begun to "unpack" the concept of privacy as it plays out in networked worlds. They suggest that the concept of privacy is, at its core, a process concerned with establishing boundaries, and that three such boundaries are negotiated and regulated in novel ways in online interactions: (a) between self and other, (b) around selective disclosure of information, and (c) between past and present selves. Future research into these boundary processes may help us think more clearly about complicated privacy disputes in social networking interactions.

Clearer Protocols for Teacher Conduct in Virtual Worlds

The only statistically significant pre–post change in justifications was for Authority, with far more students citing Authority as a justification following the intervention with a difference in proportion of .22 (McNemar's test: Exact $p < .01$, CI for the difference: .08, .36). Examples of student responses for Authority included, "There should be school rules teachers should follow if they are going to be part of social networking," and "She should be told to avoid any kind of interactions with her students through her MySpace." In line with the increase in judgments advocating some form of discipline, the increase in reference to authority in their justifications suggests that reflection about controversial cases led students to recognize the need for clearer guidelines and school-wide policies around appropriate teacher conduct in virtual worlds.

Case-Based Reasoning Framework: Moderated or Absolute Judgments of Teacher Actions

Coding within the case-based reasoning framework lends further support to the interpretation that reflection led students to perceive a need for clearer guidelines for conduct in online spaces. Whereas 16% of students expressed moder-

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Table 5: Moderated and Absolute Coded Responses (Pre and Post)

		Postintervention		
		Moderated Judgment	Absolute Judgment	Total
Pre-intervention	Moderated Judgment	4	2	6
	Absolute Judgment	11	21	32
Total		15	23	38

ated judgments before the intervention, 40% of students expressed moderated judgments afterward. Moderated judgments included references to warnings, meetings, or clarification of school policies before more serious discipline would be appropriate. The pre–post difference (.24) between the proportions of students with a view that expressed a moderated form of discipline was significantly different, with a McNemar's test significance level of Exact p = .02. The 95% confidence interval for the difference is .07, .41. Table 5 displays moderated and absolute judgments before and after the intervention.

Signs of complexity in student reasoning. We also used the case-based reasoning coding framework to assess whether the intervention developed the complexity of preservice teachers' reasoning about social networking issues. As discussed above, judgments were more moderated after the intervention. In addition, the intervention process appeared to help participants recognize multiple issues or perspectives in the scenario. When we coded responses for whether preservice teachers mentioned only one side of a dilemma or multiple sides of a dilemma, only 12% of student responses described more than one perspective before the intervention, whereas 30% described more than one perspective after the intervention. However, the difference (.18) was found to be just beyond the level of statistical significance (McNemar's test: Exact p = .06, CI for the difference: .02, .34). Table 6 (p. 16) shows pre–post contingencies for perceptions of dilemmas.

When looking more closely at those who recognized multiple sides/perspectives of the dilemma in their justifications, we noticed a tendency for preservice teachers to grapple with (or at least connect) the issue of respecting a student's out-of-school life with the responsibility of caring for the students' wellbeing. In other words, they tended to more directly struggle to define a teacher's appropriate jurisdiction over his or her students. Two student comments demonstrate this:

> In a way he was continuing his care outside of the classroom for his students. Although he probably shouldn't have looked, and kept a distance from his students....

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Table 6: Dilemma Perception and Nonperception Coded Responses (Pre and Post)

		Postintervention		
		Multiple Perspectives	One Perspective	Total
Pre-intervention	Multiple Perspectives	4	2	6
	One Perspective	11	21	32
Total		15	23	38

> While I think he had the best of intentions and only meant to help ... he was kind of spying and the parents are parents for a reason. They need to deal with their own children.

Theses examples illustrate students' attempts to coordinate two perspectives on teacher jurisdiction (the role of the teacher to be concerned for the students and the limits on that role in students' out-of-school worlds). This kind of coordination tended to be more frequent after the intervention.

On the other hand, the roles or stakeholders emphasized in student responses changed little between pre and post. Most responses focused on the teacher's role, with about a quarter also incorporating the student's role, and another quarter involving the parent's role. Table 7 provides counts for roles mentioned in responses.

Absence of social contract issues. Our lack of findings in one area was notable. Preservice teachers in our study (with the exception of one) did not mention social contract issues inherent in teacher's use of social networking sites. Two kinds of social contract issues were apparent in the scenarios we asked them to consider. First, social networking media are not true public spaces. Facebook, MySpace, and other such networks are privately owned. Participants give up their rights to the information they post by agreeing to be part of this online community. Social networking companies provide guidelines about users' expectations for privacy. Facebook, for example, operates on two core principles: that users should be able to control what personal information they share and that they should have access to the information that others wish to share (Facebook, 2008). However, Facebook provides a caveat that users post content at their own risk, and the company "cannot control the actions of other users with whom [users] choose to share...pages and information" (Facebook, 2008). Facebook makes no guarantee that posted content is protected from view by unauthorized persons. MySpace also provides users with a privacy notice with a caveat informing them that profile information, including photos, videos, personally identifying information, and lifestyle information such as marital status and gender are provided at the sole discretion of the user (MySpace, 2008). The fact that this social contract perspective was not mentioned suggests that

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Table 7: Counts of Roles Coded for Scenario Responses (Before and After)

	Role			
	Teacher	Student	Parent	School Board
Before	48	11	13	2
After	47	9	11	2

Note: Total N = 50

users may have limited awareness of giving up these rights when joining these networks.

Second, teachers are sometimes asked to adopt a higher standard of conduct than the regular public because of their position. After all, the scenario asked preservice teachers to consider whether a teacher's use of social networking (that would otherwise be acceptable, and even encouraged, to any member of a social networking site) should be regulated. Only one preservice teacher thought to question this social contract idea:

> When do we cross the line to what someone is allowed to do on their own personal time? As a teacher is even our free time to be dictated by the school board? Personally, I do not go on the internet for that reason but I understand that others may feel it is their right to be able to use the internet for their own personal use without any criminal repercussions.

Future professional development or coursework that emphasizes ethical issues in social networking should highlight the social contract components in these kinds of dilemmas in order to develop deeper and more fully integrated views about issues of student privacy and teacher responsibility in these realms.

Generalizability

Our findings were based on the 50 matched pre and post responses of freshman undergraduate majors for an online, case-based coursework activity. The views of the 18 students who opted to not respond to significant portions or all of the reflection activities are not represented. The majority of students in our sample were also under the age of 25. We were not able to gather adequate data for the perspectives of older students that may be just beginning to discover and explore online social networking tools. We also chose to target preservice teachers at the earliest stage of their academic program, as freshmen. Students in their final semesters, after classroom experiences and substantial coursework in education, may respond differently to the case-based intervention. Despite these limitations, we feel that the design and implementation of this study could be easily reproduced for the investigation of other populations of interest, including inservice teachers as a part of a professional development experience. The case-based coursework intervention was designed as an online module that does not depend on the presentation of the instructor and contains content relevant

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to all preservice and inservice teachers. One recommendation for future implementation would be to randomly assign participants to each of the pre and post case-based scenarios upon pre administration and reverse the presentation of the scenarios upon post exposure to control for possible scenario effects.

CONCLUSION

Findings, guided by the two analytical frameworks, converged to one message: The case-based intervention, which used Thinking Routines (Harvard, 2007) as a pedagogical tool to structure the experience, helped students become more attuned to the needs for definition about the appropriate role of teachers in social networking spaces. Preservice students were more likely to be oriented toward disciplinary action and to see a need for clearer policies to guide online conduct after reflecting on controversial cases. However, we also found that student judgments were more moderated following the cased-based intervention, with more recommendations for warnings and informal disciplinary actions rather than harsh consequences. The scope of teacher authority and responsibility within this medium may not be clear, even to experienced teachers.

Two kinds of studies may be needed to help in this regard. First, studies of inservice teacher reasoning about teacher jurisdiction in student social networking behaviors would help to clarify "expert" perspectives on teacher conduct in this realm. Second, studies of teacher attitudes toward various school-wide policies about social networking use would help illuminate the kinds of guidance that teachers find useful.

Social networking technologies enable a new spectrum of teaching and learning opportunities in the classroom. However, they also present a number of ethical vulnerabilities that may be unlike those encountered in other areas of the teaching profession. This study suggests that, although many preservice teachers are immersed in social networking, there is a need to learn more about the development of professional ethics. Those who educate and support preservice teachers should consider ways they can assist the development of thinking about these kinds of ethical dilemmas so that new teachers can anticipate and prevent potential problems, develop well-reasoned responses to classroom decisions, and participate in the construction of school and district protocols that continue to harness the educational potential of social networking tools. Ultimately, many of these ethical dilemmas will play out in a court of law. We believe that preservice teacher educators can help future teachers realize the implications of their actions in online environments.

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APPENDIX A

Details of Student Responses to Social Networking Uses Survey Questions

Table A1: Student Self-Report of Social Networking Function Understanding

	Very Well	Somewhat Well	A Little Bit	Not at All	I'm Not Familiar with This Function
How well do you understand how the blog function works on a social networking site (such as MySpace or Facebook)?	32%	32%	20%	8%	8%
How well do you understand how the "friends" function works on a social networking site?	54%	34%	6%	2%	2%
How well do you understand how the photos upload/display function works on social networking sites?	54%	28%	10%	6%	2%
How well do you understand how the music/video embedding function works on social networking sites?	26%	40%	18%	10%	6%
How well do you understand how the messaging/comments function works on social networking sites?	62%	22%	12%	2%	2%

Note: N = 50

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Table A2: Student Responses Regarding Social Networking Site Uses

How do you use your social networking site?	
To talk to people I know in real life	84%
To find old friends/keep track of old friends	80%
To talk to people from school/college	76%
To keep up with relatives	56%
To listen to music/find new music	22%
To meet people I don't know	6%
To find people to date/hook up with	2%
To connect with other professionals	2%
To keep up with sports teams/celebrities	0%
To find a job	0%

Note: N = 44

Table A3: Student Responses Regarding Social Networking Site Content

What do you have on your social networking site?	
Pictures of myself/my friends	86%
Information about myself such as relationship status/other personal information	76%
Music	70%
Information about where I went to school/go to school	70%
Information about where I work/used to work	40%
Blog	26%
Video	20%
I just have the basics	2%

Note: N = 44

Table A4: Student Responses Regarding Use of Others' Social Networking Sites

How do you use others' social networking profiles?	
Message/talk to my friends	82%
View pictures	76%
Look up people I know to find out more about them	44%
Read blogs	32%
Find out about new music/bands	24%
I don't use social networking profiles	16%
Find out about celebrities	4%
Find people to date/hook up with	2%

Note: N = 48

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APPENDIX B

All teaching materials were Web-based and available at http://web.mac.com/teresa.foulger/iWeb/SNhomework/Intro.html

Introduction Page

THINKING ROUTINE
Teachers' Use of
SOCIAL NETWORKING

INTRO STEP 1 STEP 2 STEP 3 STEP 4 INSTRUCTOR NOTES

Teachers' Use of Social Networking

As students enrolled in classes designed for future teachers, it is important that they understand social networking and the use of these sites related to their future career. This assignment will help you gain a broader understanding of past, current, and future use of social networking sites and provide information to help you make informed choices about the use of social networking sites.

Directions
Read the articles listed in each step. Use the 'thinking prompts' to explore the information from each article and write down your responses to each article. Please type your response in the appropriate box next to each 'thinking prompt.' Make sure your answers/responses provide enough information for your instructor to determine if you fully understand the issues in each article.

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Step 1

THINKING ROUTINE
Teachers' Use of
SOCIAL NETWORKING

INTRO STEP 1 STEP 2 STEP 3 STEP 4 INSTRUCTOR NOTES

What is Social Networking?

What is social networking?
What is social networking? Click on the links below to open new windows.
How MySpace Works
Social Networking in Plain English (video)
After exploring the above links, think about and respond to the following questions...

SEE-THINK-WONDER
1. What do you see/read about how MySpace/social networking works?
2. What do you think about how MySpace/social networking works?
3. What does it make you wonder about MySpace/Social Networking?

Type your responses to the above questions in the box below. Make sure you address each question completely for full credit.

Type your response here.

CLAIM-SUPPORT-QUESTION
1. Make a claim about MySpace/social networking.
2. Identify support for your claim.
3. Ask a question related to your claim.
**Note: A claim is an opinion statement.*

Type your responses to the above questions in the box below. Make sure you address each question completely for full credit.

Type your response here.

WHAT MAKES YOU SAY THAT?
1. What's going on with MySpace/social networking?
2. What do you see that makes you say that?

Type your responses to the above questions in the box below. Make sure you address each question completely for full credit.

Type your response here.

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Step 2

THINKING ROUTINE
Teachers' Use of
SOCIAL NETWORKING

INTRO STEP 1 STEP 2 STEP 3 STEP 4 INSTRUCTOR NOTES

Teachers' Use of Social Networking

How are teachers using social networking sites?
Click on the links below to open the articles in new windows.
Do Social Networking Applications have a Place in the Classroom?
A Facebook Education
Warnings aside, teachers embrace Facebook
After reading these articles, think about and respond to the following questions...

SEE-THINK-WONDER
1. What do you see/read about how teachers are using social networking sites in the classroom?
2. What do you think about that?
3. What does it make you wonder?

Type your responses to the above questions in the box below. Make sure you address each question completely for full credit.

Type your response here.

CLAIM-SUPPORT-QUESTION
1. Make a claim about teachers' use of social networking in the classroom.
2. Identify support for your claim
3. Ask a question related to your claim
**Note: A claim is an opinion statement.*

Type your responses to the above questions in the box below. Make sure you address each question completely for full credit.

Type your response here.

WHAT MAKES YOU SAY THAT?
1. What's going on with teachers using social networking in the classroom?
2. What do you see that makes you say that?

Type your responses to the above questions in the box below. Make sure you address each question completely for full credit.

Type your response here.

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Step 3

THINKING ROUTINE
Teachers' Use of
SOCIAL NETWORKING

INTRO STEP 1 STEP 2 STEP 3 STEP 4 INSTRUCTOR NOTES

Teachers' Use of Social Networking

How are teachers using social networking sites?
Click on the links below to open the articles in new windows.
Teachers warned about MySpace profiles
Hoover: Caught in the Flash
A MySpace Photo Costs a Student a Teaching Certificate
After reading these articles, think about and respond to the following questions...

SEE-THINK-WONDER
1. What do you see/read about teachers' use of social networking sites?
2. What do you think about teachers' use of social networking sites?
3. What does it make you wonder about teachers' use of social networking sites?
Type your responses to the above questions in the box below. Make sure you address each question completely for full credit.

Type your responses to the above questions in the box below. Make sure you address each question completely for full credit.

Type your response here.

CLAIM-SUPPORT-QUESTION
1. Make a claim about teachers' use of social networking sites
2. Identify support for your claim
3. Ask a question related to your claim
**Note: A claim is an opinion statement.*

Type your responses to the above questions in the box below. Make sure you address each question completely for full credit.

Type your response here.

WHAT MAKES YOU SAY THAT?
1. What's going on here with teachers using social networking sites?
2. What do you see that makes you say that?

Type your responses to the above questions in the box below. Make sure you address each question completely for full credit.

Type your response here.

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APPENDIX C

Pre-Intervention Scenario Reflection Prompt

Ms. Cera is a 7th and 8th grade social studies teacher. She has a MySpace profile that is open to the public (meaning anyone can view her profile). She recently told some of her students casually that she had a MySpace profile. As a result, several students have asked her to be "friends" online. Although Ms. Cera did not accept the request to be "friends" with these students, she did look at some of her students' profiles, and she found some disturbing images on one student's site. When she called the student's parent about it, the parent reported to Ms. Cera's principal that she had been "stalking" students online through her MySpace profile. Now Ms. Cera is being investigated for possible disciplinary action by the school board. Should Ms. Cera be disciplined by the school board? Why or why not? Be as thorough and complete as possible in your answer.

Postintervention Scenario Reflection Prompt

Mr. Peterson is a middle school math teacher. He has a MySpace profile that is open to the public (meaning anyone can view his profile) and maintains a blog where he chronicles his "Daily Rants" according to the title "My Daily Rants and Rages." One of Mr. Peterson's students stumbled onto his page while online with a group of friends from the school. The student came to class the next day and asked Mr. Peterson if he could "friend" him on his MySpace profile. Mr. Peterson told the student no, but then after class, Mr. Peterson did his own search of students online because he was curious. He found some evidence of students engaging in illegal activities (i.e., drinking and smoking at a park after school) by looking up various postings on their Facebook page. Mr. Peterson called the parents of the students to inform them of what he found, and much to his surprise, the parents were extremely mad and accused him of being a "child predator" for looking up students online. The parents then called the principal to tell her everything they thought about Mr. Peterson. Now Mr. Peterson is being investigated for possible disciplinary action by the school board. Should Mr. Peterson be disciplined by the school board? Why or why not? Be as thorough and complete as possible in your answer.

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