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Using Web 2.0 for Education Programs on Global Citizenship: Addressing Moral and Ethical Issues

*When students are asked what Internet-related subjects they would like to learn about in school, the top choice for 68% is "How to tell if information you find on the Net is true or not". (*Young Canadians in a Wired World *Survey, Media Awareness Network, 2005)*

Recently several examples of Web 2.0 were featured in prime time news stories. In one case, a website, FreeRice[1], allows users to simultaneously learn vocabulary and feed the world, one click at a time. To date over 27 billion grains of rice have been donated to the UN Food program. In another, eight Florida teenagers are facing prison charges after posting a 30-minute video of a brutal attack on a 16-year old girl on YouTube[2]. A third case asks whether students at a Canadian university should be charged with academic misconduct for using social software to study for a chemistry exam. Today school districts and post secondary institutions are trying to keep up with technological advances and growing moral and ethical issues implicated in these fluid forms of global communication. Information and communication technology (ICT) literacies are needed in order to both ward against the dangers these digital media pose for people of all ages and to recognize the possibilities they open up for informal

and formal learning. "Information and communication technology (ICT) has become, within a very short time, one of the basic building blocks of modern society. Many countries now regard understanding ICT and mastering the basic skills and concepts of ICT as part of the core of education, alongside reading, writing and numeracy" (Anderson and van Weert, 2002, p. 8). In this short paper, we describe a project undertaken at the University of British Columbia where a social software platform was developed to support the teaching and learning of global citizenship in the teacher education program. Specifically we examine changes to a mandatory course — Principles of Teaching. We argue that educators and students need to engage with and be informed about ICT literacies, particularly the moral and ethical issues associated with using Web 2.0 applications for learning.

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Web 2.0 and learning

Predictions about the coming of a new information age or knowledge-based society, and its implications on Canadian lives, have now given way to the very real acknowledgement that ICT profoundly impacts everyone each day. Web 2.0 refers to server-side Internet platforms and applications which facilitate engaged interactions among users, and between users and information. Where the Internet was initially used to distribute information and connect people electronically, advancements in ICT now allow users to participate, contribute, manipulate and create content on the web. Social software such as Facebook and MySpace provide ways to share interests, passions, pictures and daily activities with friends; information collaboration sites such as Wikipedia elegantly demonstrate that two or more minds are better than one; and blogs and mash-ups allow individuals to easily co-create a web presence that others can interact with.

Web 2.0 virtual spaces provide opportunities to engage in interactive, collaborative and participatory practices on the Internet. For example, contemporary practices such as online game playing, video-blogging, and instant messaging by people of all ages are challenging established power structures, interrupting notions of the authority of the written word and redefining how authors distribute information in societies. Online information aggregation systems such as Really Simple Syndication (RSS) feeds are arguably one of the most effective ways to begin to access and organize the immense amount of information being created in these times when information is exponentially increasing and the amount of technical information is expected to double every 72 hours by 2010[3]. To capitalize on this potential, an Internet platform was developed to support large group lectures and biweekly small group meetings as part of the Principles of Teaching course in the UBC Bachelor of Education program.

The server platform combined several open source software applications (i.e., drupal, moodle, mediawiki, and wordpress) and was housed on a secure and private in-house server. Using open source software and a private server, proprietary and privacy issues are minimized, since using existing applications provided by Facebook, Ning, or Google gives these companies ownership and rights over the content and locates the content outside of Canada. The UBC platform included space to create wikis and blogs, as well as a social networking space. Each user logged in as a member of the community, could create groups and connect to friends and colleagues. Each web page was editable online by each user using open source software called Drupal. The possibilities of this social software platform rival proprietary course management systems, currently used in many Canadian post secondary institutions, usually as a form of asynchronous communication between instructors and students. In this case, it was hoped that both students and instructors of the course would use these applications to engage in inquiry around notions of global citizenship and to enable the creation of artifacts of learning.

For example, the platform was used as a forum for the entire class (approximately 300 students) to generate multiple choice exam questions. An administrator structured and seeded a wiki space with some initial questions, and quickly hundreds of pos-

sible exam questions were submitted, commented on, and edited by students. From this large pool of questions the instructors chose a subset of 75 questions that were posted (without solutions) one week before the exam. Again students were invited to practice and work together on these questions, 50 of which would comprise the exam. Student generated exam questions were more challenging than questions the instructor would have posed and student success on the exam

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(which required a 70% to pass) was over 95%; a trend that has been previously observed in the literature (Angelo & Cross, 1993; Green, 1997). This wiki collaborative space was an ideal location for students to engage in active participation and direct responsibility for their learning. Students were confronted with issues such as what makes good exam questions and shared authorship, and their notions of testing were interrupted and expanded as they experienced processes where even multiple choice testing can be used as a site to stimulate deep engagement around concepts and theories being presented in the curriculum.

Global citizenship and ICT literacies

In 2007-2008, the UBC secondary teacher education program curriculum was partially revised with an increased emphasis on global citizenship to align with UBC's Trek 2010 vision statement. In particular, the study of social and ecological issues, sustainability, collective action, and the integration of ICT were introduced across all aspects of the program, including Principles of Teaching, a mandatory course. Specific changes to the course included 1) developing a social software platform that facilitated opportunities for learning such as collaborative weblog and wiki spaces and networking capabilities (described above), and 2) using a thematic approach to teaching learning theories and practices. In addition to large group lectures that

emphasized important lessons from the common text, students engaged in case studies during small group inquiry sessions. One of the case studies was on climate change that linked digital technologies to a wide range of large scale issues about global citizenship. For example: in one inquiry session students used RSS feeds and social bookmarking to gather information and tagging and a wiki to share ideas for lesson plans on climate change issues. The result was a rich variety of educational activities ranging from "The Paperless Classroom" to "Shop Local". Students reflected on their experience: "Studying climate change and having different groups narrow in on random areas of the issue was fascinating as no topic really overlapped, and all presentations gave me ideas about what I can do to help with climate change." Another student commented on the process of collaboration using technology: "This communal process of learning and problem solving seems to be a good model for approaching all kinds of social problems, including environmental ones." In general students observed that using social bookmarking, tagging, and wikis made it easier to approach a seemingly overwhelming, large topic in order to find ways to teach, learn together, and make a difference.

Teachers and students inquired collaboratively about ICT literacies that include, but are not limited to, teachers' and students' competencies and confidence in knowing about ICT moral and ethical issues in society and using digital media in education. In some academic circles, digital literacies are now being used interchangeably with ICT literacies. Paul Gilster (1997) defines digital literacy as "the ability to understand and use information in multiple formats from a wide variety of sources when it is presented via computers and, particularly, through the medium of the Internet" (cited in Pool, 1997). The term however, has historically placed too much importance on the media and the ones and zeros of the technology. By using the term ICT literacies we privilege the conceptual importance of the social and cultural aspects of information and communication conceived of as a humanly constructed and shared form of knowledge. Our project, focusing on the changes to the Principles of Teaching course, proceeded from the assumption that teachers' ICT literacies are critical for them to effectively use ICT in teaching (Zhao et al., 2002).

In this project ICT literacies were conceived as a means:

- to enable learning and pedagogical effectiveness,
- for people to establish and maintain collaborative connections,
- to provide opportunities for students to develop proficiencies in various forms of knowledge through engagement with various social networking spaces, and
- for developing an educational space for students to explore and interrogate global citizenship through collective action.

Although moral and ethical ICT issues were not explicitly stated, we aimed to infuse them throughout these four goals. Morals and ethics are grounded in the notion of responsibility and accountability. "In most societies, a system of laws codifies the most significant ethical standards and provides a mechanism for holding people, organizations, and even governments accountable" (Laudon, et al., 1996). ICT ethics are not exceptional from the above-mentioned view of ethics. In a world where ICT has come to define how people live and work, and has critically affected culture and values, it is important for us to have an informed view of ICT moral and ethical issues, as well as social responsibility, while recognizing the impact of ICT in the linguistically and culturally diverse Canadian context and in the face of globalization and internationalization.

Our project goal was for teachers and students to learn collectively about what it might mean to be a global citizen in an era of expanding worldwide knowledge-based societies and increased access to and engagement with ICT. If learning should be "without borders," then one of the moral and ethical obligations we face as educators is to prepare our young people early in their lives to become responsible global citizens and one of the opportunities we have is to use the digital media they know to engage them in learning. Through engagement with various technologies throughout the course, students became more confidant and adept with emerging technologies. In discussions and reflections about their learning experiences moral and ethical issues surrounding ICT literacies emerged. For example students recognized barriers to using technology extensively in

classrooms, citing inequality of resources in both schools and students' homes as their number one issue. Students also raised personal privacy as a concern along with a perceived gap between levels of comfort and competency with technologies. However, they acknowledged that students in their classrooms were more likely than they were to be familiar with emerging technologies, and that as teachers they have a responsibility to use processes and applications that students are comfortable and familiar with to create opportunities for learning.

Educational Policies and Practice, and Web 2.0

Some of the issues we faced as we introduced teacher education candidates to the concepts and uses of Web 2.0 in an educational context were: what are current acceptable uses of electronic systems, safety and security, privacy and confidentiality, and intellectual property and copyright policies in place locally, provincially, and nationally. Of course, we wanted teachers and students to know about these policies but more importantly, we wanted them to be able to inquire into the issues and make critically informed decisions about why and how the issues were important educationally. We were aware that some school boards have no existing educational policies concerning the use of social software in school settings while other school boards have either embraced its use or banned it completely. In order to avoid heightening any perceived disjunction between educational theory and practice, our strategy was to engage teachers and students in methods to develop ICT literacies and to provide opportunities to conduct their own critical inquiry about established and emerging moral and ethical ICT issues. This was stimulated by participation in the course activities on the platform such as online discussions, collaboratively creating exam questions and sharing resources. We invited teachers and students to openly question why or why not the educational use of the Internet was important, how and when its use supported specific and general educational goals and teacher and student learning, and to deliberate over the interpretation of particular Web 2.0 policies, rules and regulations, and practices. We found that, by integrating the platform into a core course and across other courses in the teacher education program, these discussions were more contextualized and meaningful.

Our point, then, is that ICT moral and ethical issues are extremely complex, dynamic, and need to be viewed within the situated contexts of educational, community, and societal perspectives. As in our opening examples, Web 2.0 can be used to enhance learning and for the benefit of global collaboration and it can also be used to distract learners or even as an instrument of social destruction and harm. Thus it is important to integrate ICT literacies across the curriculum and to recognize ICT literacies as a vital component of what it means to be a global citizen in an ever-changing social and cultural world.

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ENDNOTES

[1] http://www.freerice.com

[2] http://abcnews.go.com/GMA/story?id=4609528&page=1

[3] http://www.youtube.com/watch?v=pMcfrLYDm2U

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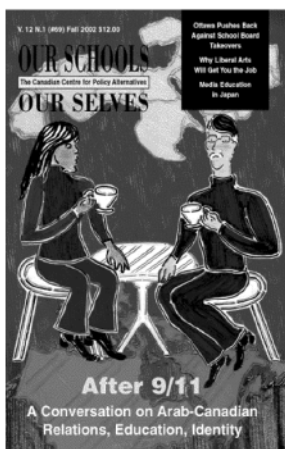
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