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"We just disagree:" Using deliberative inquiry to seek consensus about the effects of e-learning on higher education

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Abstract

Abstract: Building on the results of a prior study, the purpose of this qualitative study was to further explore where there is agreement on the effects of e-learning technologies in higher education learning experiences. The results confirm that (1) there are many varied and polarized perspectives about e-learning, and each position should be carefully considered by policymakers and administrators concerned with implementing e-learning technologies; (2) it is unlikely that e-learning experts will ever reach consensus on the effects of e-learning technologies within educational contexts; and, (3) the use of e-learning technologies in higher education will continue to vary based on subject matter, instructors, institutions, contexts, availability of technology and various other factors—not the least of which are the purpose of the learning activities and the epistemological beliefs about higher education. The diversity of opinions that currently exist does not make one view more correct or superior to another.

Résumé: Construisant sur les résultats d'une étude antérieure, le but de cette étude qualitative était d'explorer plus à fond s'il y avait consensus sur les effets des technologies de l'eLearning dans les expériences d'apprentissage aux cycles supérieurs. Les résultats confirment que 1) il y a plusieurs perspectives variées et polarisées sur le eLearning, et chaque point de vue devrait être sérieusement considéré par les administrateurs et les rédacteurs de politiques concernés par l'implantation des technologies du eLearning, 2) il est peu probable que les experts en eLearning en arriveront jamais à un consensus sur les effets des technologies du eLearning dans un contexte éducationnel, et 3) l'utilisation des technologies du eLearning aux cycles supérieurs continuera de varier en fonction de la matière, des formateurs, des institutions, des contextes, de la disponibilité de la technologie et d'autres facteurs. Le moindre de ces facteurs n'est pas le but des activités d'apprentissage et les croyances épistémologiques à propos de l'éducation universitaire.

La diversité des opinions qui existent présentement ne privilégie pas un point de vue en particulier.

Introduction

Course management systems (e.g., WebCT Vista, BlackBoard, Lotus Notes, Moodle, FirstClass, VirtualU, Desire2Learn, etc.) are currently being used by most, if not all, higher education institutions in Canada. While other asynchronous and synchronous Internet communication and social software tools are also beginning to have a greater presence in higher education learning environments (i.e., Centra/Elluminate, iVisualize/vocalize, Skype, blogs, wikis, podcasts, Groove), course management systems continue to be the dominant e-learning technology. The use of e-learning technologies has resulted in most higher education institutions engaging in a re-evaluation of how courses and programs are being delivered. In response to individual institutional contexts, e-learning technologies are being employed in many ways that have resulted in a continuum of courses offered entirely on-campus to courses offered entirely off-campus—and everything in between, including different configurations of blended and hybrid courses where e-learning technology is used to supplement and/or complement, and is supplemented and/or complemented by, face-to-face instruction (Rovai & Jordan, 2004).

In an effort to determine how to most effectively use e-learning technologies, public policy reports, task forces, and research projects have attempted to address the impact of e-learning technologies in the field of education in Canada (e.g., Abrami, et al., 2006; Advisory Committee for Online Learning, 2001; Natural Sciences and Engineering Research Council [NSERC], 2004). Implicit in many of the recommendations made in these documents is the assumption that e-learning technologies have the capacity to transform learning experiences in positive ways. These reports have tended to focus on the capacity of e-learning to increase access, effectiveness and efficiency. However, as Van Dusen (2000) points out, views on the use of Internet communication technologies "[run] the gamut of views from utopian to apocalyptic" (p. iii). Those who are more critical of the use of technology disagree that it enhances learning experiences. They argue that it actually diminishes educational experiences of learners (e.g., Dreyfus, 2001; Noble, Sheiderman, Herman, Agre, & Denning, 1998). Given the range of opinion on the impact of e-learning technologies, it is difficult for those involved with the implementation of learning practices in institutions of higher education to make informed decisions, especially in regard to how to most effectively use e-learning tools.

Building on the results of a prior study (Kanuka & Kelland, in press) the purpose of this study was to explore further where there is agreement on the effects of e-learning technologies in higher education learning experiences. Such information is critical for informed and effective e-learning policy implementation and practice.

One Perspective

The integration of e-learning technologies has been presented as a solution to problems regarding ineffective teaching in higher education—in a manner that is also cost effective

(e.g., Twigg, 2003). In Canada, the use of e-learning technologies has also been viewed as a solution to the social problem of availability and access to education. For example, the Advisory Committee for Online Learning (2001) promotes online learning as a way to address "every Canadian's entitlement to learning opportunities" (p. 6). It also sees online learning, coordinated at a national level, as a way to "meet the learning needs of individual Canadians, improve our economic competitiveness and sustain the health of our civil society in this new knowledge-intensive era" (p. ix). Similarly, Guillemet (2005) claims that distance education and technology increase access to education, but also that "DE [distance education] makes it possible to prepare, in a relatively short time, the kind of programs that address the changing needs of the society" (p. 199). Roberts (1996) also states that "distance education is grounded in values such as access and equity" (p. 814) and that "it protects minority cultures" (p. 814). Hodson (2004) affirms that "internet-delivered education" (p. 111) can address the educational and social needs of Aboriginal learners. Elsewhere, Treviranus and Coombs (2000), state that technology and education can support learners with disabilities by "reducing barriers and advancing education for all learners" (p. 3). They propose that some technology intended to assist learners with disabilities could also assist those who are learning a second language or have limited literacy skills.

Other Perspectives

The perspective that e-learning technologies can ameliorate, or even solve, many national social problems (including education) is contrasted by other perspectives. For example, the CMEC On-Line Learning Working Group (2001), in their vision statement which is based on the previously quoted Advisory Committee for Online Learning, see online learning as a way to address specific regional educational needs rather than the national concerns expressed by the Advisory Committee for Online Learning. Hodson (2004) makes it clear that "Internet-delivery education alone will not improve access and success in Aboriginal adult education" (p. 119). Treviranus and Coombs (2000) identify potential problems related to access and availability of education: "The imminent risk is that non-inclusive design of the digital campus will irreparably widen the 'digital divide' within higher education, to the detriment of learners and educators with disabilities but also to the detriment of society as a whole" (p. 3). Guillemet (2005) identified another set of challenges: those associated with the development and administration of educational programs intended to address the needs of a diverse audience of learners with different backgrounds, goals and educational expectations. Clearly the use of e-learning technologies is a complex question that needs to be considered from multiple perspectives.

Theoretical Framework

These diverse perspectives have been categorized by Boshier and Onn (2000) as techno-utopianism, techno-cynicism, techno-zealotry and techno-structuralism. The literature on the philosophy of technology is useful when attempting to understand the diversity opinions, as this literature goes to the core of our beliefs about the purpose of technology.

For example, Ihde's (1979) philosophical theorem on *technē* explains the diversity of perspectives on the impact of technological innovations by arguing that technologies are non-neutral and biases can arise from a technology's selectivity and intentionality causing changes in experience. The central position underpinning a technology's selectivity, according to Ihde, is that the use of technology both amplifies and reduces certain aspects of human experiences—thus providing an explanation for the positive (e.g., techno-utopian and techno-zealotry) and negative (e.g., techno-cynic and techno-structuralism) perspectives of educational innovations. More recently other philosophers of technology have advanced Ihde's theorem and built on the notion of amplification and reduction, and maintain that when a technology is used for any purpose its use becomes part of that purpose. Chandler (1996), a philosopher of technology, for example, explains a technology's selectivity as extending certain kinds of use or experience while at the same time inhibiting, restricting or reducing other kinds of uses, which results in losses as well as gains.

Specifically, Ihde (1979) argues that when people interact with technology, they act and are acted upon, use and are used. This argument is also consistent with Postman (1993), who maintained that "embedded in every tool is an ideological bias, a predisposition to construct the world as one thing rather than another, to value one thing over another, to amplify one sense or skill or attitude more loudly than another" (p. 13). Chandler explains further:

> the selectivity of media tends to suggest that some aspects of experience are important or relevant and that others are unimportant or irrelevant. Particular realties are thus made more or less accessible—more or less 'real'—by different processes of mediation. (1996, ¶ 10)

An example provided by Ihde of a technology's selectivity is the telephone. Using the telephone, people gain greater independence of place when communicating verbally but the experience is less real in that many paralinguistic cues are lost. In terms of higher education learning experiences, it follows that it is necessary to become aware of how e-learning technologies makes certain aspects of learning experiences more or less accessible and/or more or less real. Moreover, identifying these amplifications and reductions may explain the diversity of perspectives.

Methodology

The methodology used for this study was designed for establishing group consensus through public dialogue (for a further discussion on deliberative inquiry, see Kanuka & Kelland, in press). Deliberative inquiry was designed by the researchers of this study to determine where there is consensus about amplifications and reductions that occur as a result of the use of e-learning technologies for this study. A deliberative inquiry is a unique kind of group interview that combines the structure of a focus group with the purpose of the Delphi Technique, in a manner that draws data from a number of people that is non-quantitative. The deliberative inquiry process necessitates that participants talk not just about the issues but also carefully weigh the alternative possibilities posed by others and the consequences of those alternatives. The moderator was key to eliciting meaningful

information from each participant in a way that remained respectful and safe when divergence arose. Unlike other consensus methods (e.g., Nominal Group Technique) deliberative inquiry was not aimed at forcing a consensus on the use of e-learning technologies. Rather the aim was to deliberate about the effects of learning experiences as perceived by diverse stakeholders, and to provide an opportunity for challenging ideas, revealing misconceptions and establishing where mutual understandings exist. The main assumption embedded in the deliberative inquiry method is a belief that the decisions are socially constructed and grow out of discussion.

Our data showed that deliberative inquiries have the capacity to garner rich and credible qualitative data about the most important topics and issues, and to assess the extent to which relatively consistent, shared views exist among participants—as well as identifying inconsistent views. A distinct advantage of the deliberative inquiry used in this study was that it allowed our participants to react to, and build on, responses. The result was a synergistic and dynamic effect, resulting in data or ideas that might not have been collected in individual interviews. Moreover, because the deliberative inquiry tended to provide checks and balances that eliminated false or extreme views, it was fairly easy to assess the extent of consistent and shared views. Given these advantages, the deliberative inquiry was a powerful way to collect data.

Limitations

Among the challenges and limitations of using the deliberative inquiry method is that it represents feedback from a theoretical sampling rather than from a randomly selected population (Glaser & Strauss, 1967). As such, the results from this deliberative inquiry should not be generalized to other, larger populations. No guarantees of confidentiality or anonymity were possible because participants interacted with each other face-to-face. In addition, as one of the participants observed, the group setting led—on occasion—to uncomfortable power struggles associated with status differences among participants. It is a well-known limitation of group interviews (e.g., focus groups) that power dynamics may lead participants to feel uncomfortable raising issues or expressing opinions when they disagree with those who appear more dominant either in number or in status (Kitzinger, 1994; Madriz, 2000). Careful facilitation by an experienced moderator can help to ensure that this limitation is minimized. Finally, because this research method required bringing together participants to one physical location, it was also an expensive approach to data collection.

Methods and Data Collection

This study built on a pilot study (Kanuka & Rourke, 2006) with administrators of distance-delivered programs in institutions of higher education using e-learning technologies, as well as the results of a prior study with e-learning researchers (Kanuka & Kelland, in press). The results of this prior research revealed polarized opinions among the participants on the amplifications and reductions occurring as a result of the use of e-learning technologies. Building on outcomes identified in these prior studies, this phase of the study aimed to get a broader picture of where there is consensus and divergence

about the use of e-learning technologies. Participants were carefully selected to represent a range of perspectives and experiences from across Canada. All participants attended in person except for one who contributed via videoconferencing. The theoretical framework for the study was explained to participants who were then asked to consider what was amplified and what was reduced when e-learning technologies were used in higher education learning activities.

The data were transcribed and analyzed for themes and topics using grounded theory techniques. One of the researchers and a colleague performed the initial analysis and identified themes and topics. The two researchers did an additional review of themes, which produced similar themes to the initial review. Member check interviews were conducted based on a theme table constructed by one researcher and a colleague.

Participants

The participants for this study were interested stakeholders who also have expertise in the area of e-learning technologies and diverse interests, views, and backgrounds. The participants included experts from across Canada—including both internal and external stakeholders to ensure diversity of perspectives. The aim was to achieve both a cross-Canada perspective (including Northern Canada) and a cross-disciplinary perspective within the social sciences. Participants included one graduate student, with the remainder of the participants employed at higher education institutions (eleven) and government departments concerned with advanced education (two) in the provinces of Alberta, Ontario, British Columbia, New Brunswick, Newfoundland and Quebec, and the territory of Nunavut. It should be noted that four of the participants had recently relocated from other areas of the country (e.g., Ontario, Nova Scotia and Saskatchewan) and so their experiences represented those institutions as well. The participants included representatives from the fields of communication and culture, fine arts, elementary education, distance education, higher education, gender studies, philosophy of technology, educational technology and continuing education. They also represented the perspectives of university professors, distance educators, government administrators, university administrations, and students.

Findings

Similar to the results of the pilot study (Kanuka & Rourke, 2006), participants identified numerous examples of how e-learning technologies (most often referred to as *online learning* and *e-learning* by the participants) amplify and reduce learning experiences in higher education contexts. These examples fell into the following three categories: 1) access and participation issues, 2) the purpose of education, and 3) the practice of teaching. In many cases, the participants' comments have been edited for length, punctuation and to improve flow and clarity.

Access and Participation Issues

The first category covers a range of topics related to who has access to e-learning technologies, who chooses to learn with these tools and why, and who is excluded from

accessing e-learning technologies. The topics of access and ability to participate came up many times throughout the deliberative inquiry, indicating that it is an important issue.

One aspect of this topic was who chooses to use e-learning technologies, including both instructors and students. One participant stated that online instruction attracts certain kinds of instructors:

> *To a certain degree, to move into e-learning, you have to be a little bit of a risk-taker and you have to be a little bit of an innovator just by virtue of the fact that you're dealing with new technologies.*

Another participant, who was from a dedicated distance delivery university, explained that their typical learner is now a younger student taking one or two courses while working part-time—rather than what has been the norm in the past for distance-delivered courses (usually mature women with children):

> *Our typical distance and online student is becoming about a 24, 25 years old who could be either male or female and they're in a university and they're taking one or two of our courses. And the reason for this is that the typical university student is no longer the traditional university student. The age has gone up to, I think it's now 26 and going up every year and it's going up more. And they're not taking five courses a semester, they're taking three and they're working part time, they're having troubles with their scheduling and that's one of the reasons we think that they're looking more at our institution's [online and distance delivered] courses that they can take anytime, day or night.*

This statement suggests that e-learning technologies are amplifying the participation rates for some groups of learners and instructors, and reducing the participation rates for others.

Another aspect of the access and participation issue that arose was whether or not the online environment promotes a levelling among learners. Participants were unable to reach a consensus on this topic. Some felt there was an increased levelling between students with many e-learning technologies, which could produce a more equal learning environment. For example, with the use of text-based communication technologies, the learners' visual and auditory characteristics are reduced in importance because they are not present in text-based communication platforms. One participant stated: "There are a number of people who have done studies on discussions, who in that case, have affirmed things like more equality of participation." Another participant said that:

> *I think that because there is an absence of physical presence then there are things that don't act as an interference such as for example, race, gender, presence of say a handicap or something because, you know, they're not visible, then they don't necessarily interfere with the discussion. And then there are also all sorts of non-verbal cues for example. You might make a comment and I might roll my eyes because I disagree and you might perceive that or somebody else might, which affects the discussion face-to-face, which wouldn't be present online.*

Other participants disagreed, claiming that visual cues were replaced by textual cues that prevented the development of a more level environment. One participant who disagreed stated: "There are markers in textual forms and there are initiatives invariably made by interlocutors in those kinds of conversation to establish identity markers." Another participant who referred to the impact of writing skills supported these comments: "The better the writer you are, the stronger your presence in the group, the more time you have on your hands, the more assertive you are in writing."

The participants also questioned whether a levelling between students was in fact possible, or even desirable, goals. For example, one participant clearly saw a levelling as an unreasonable objective:

> *I'm getting the idea that people think that having it equal, this is a good thing and I would just like to challenge that premise because I think that you're going to get a normal curve, in most cases, of people's participation and if it's equal then I would suspect that there is something constrained. There is some kind of constraints put on the discussion. So, I'd just like to point out that I don't think equality is anything that we should be aiming at.*

This perspective was supported by another participant who pointed out that different students take on different roles within a discussion, which could influence their participation:

> *Sometimes we expect the leadership to occur in these discussions and some students are really inclined to play roles like that. […] So, I think we need to be more subtle about these things. The crude concept of equality or equity is indeed probably adequate in the sense of equity of opportunity but not necessarily what results out of this opportunity.*

And, one participant pointed out different cultures value different types of interaction, which could influence students' participation:

> *I think we need to be critical of cultural assumptions about what, for instance, a good learning environment includes or what good pedagogy is. An example of that is our love affair with collaboration, which is really a dominant culture perspective and it's not necessarily a perspective that is held by certain Asian cultures. For example, they find that very uncomfortable, you know, to engage in lively debate and question each other and challenge the instructor and so on. So, I think we need to broaden our critical understanding of this issue.*

The participants did not come to a consensus about the amplifications or reductions caused by e-learning technologies as regards to a levelling between students; indeed, there was not even a consensus about whether it would be desirable. Instead, there seems to be a focus on this issue as an ongoing concern for teacher-practitioners, administrators, and researchers as they try to understand how e-learning technologies impact learning experiences.

A third aspect of the issue of access and participation revolved around how e-learning technologies can be used to deliberately exclude certain learners. One participant, for example, explained how her institution admits only selected students to their online learning program to ensure the participation of Inuit students:

> *Working in the North with a population of 85% Inuit with clear self-determination goals, legislative goals in the land claims, sometimes you do consciously decide to exclude to be more inclusive. In other words, you exclude the dominant majority cultures' priorities in order to achieve inclusion of minority cultures.*

The same participant also stated:

> *When going to lectures in the first year with a thousand students and one professor we would definitely lose Inuit students; no question and we do, when they go to that environment. We have to make community building and interactive learning happen for certain people. […] I mean, I'm a woman. I think there's lot of research that proves I also work better in certain ways as well.*

In another context, a participant discussed the challenges of balancing inclusion and exclusion since each decision would result in some learners being included and others

excluded: "Every time we think we're making a decision for technological inclusion, we're also making a decision for exclusion." These quotes illustrate how such issues of inclusion and exclusion, as well as the levelling between students, are complicated. Specifically, they can be either an amplification or a reduction depending on perspective and circumstance.

Purpose of Education

This second theme that emerged revolved around a changing of values related to the purpose of higher education, where learning takes place, and the values expressed by those who administer programs using e-learning technologies. The first aspect of this theme was defining the purpose of higher education. A few participants pointed out that the experience of being a student in an e-learning environment reduces the focus on some aspects of campus life. One participant, for example, explained how she wants her daughters to move away for university in order to experience the university setting:

> *What is it about interaction that happens on a campus? I want them to live on a campus. I want them to interact. ... There are a lot of things that come when you go to university that are absolutely secondary, and primary in a way.*

Another participant also spoke about her children. She offered another example of how her daughter values a face-to-face, on-campus learning experience:

> *She [my daughter] wanted someone to stand up in front of her. She's paying for a certain experience not an online experience. Undergraduate students have this particular structure in their mind about what a learning experience is supposed to be, you know, it's supposed to look like this, and they're being cheated if it doesn't look like that.*

A third participant pointed out that the purpose of education is being defined in different ways than it was in the past:

> *People used to pursue a university education not to accumulate information in their repositories but in order to participate as a member of that culture. .... I think it's a really important part of what a university education was. It may not be what a university education has become but I think a lot is explained when we remember that.*

In response, another participant commented that many learners are not interested in the objectives that the previous participant outlined, rather they are seeking specific skills or credentials:

> *I think there are many different kinds of education to start with and the education [the previous participant's statement] was talking about was the type of education or model or vision of education which was intended to create the intellectual, the critically thinking citizen and that kind of larger thing behind it. But we have to realize that apart from that which is a legitimately noble goal, there are many other types of learning, teaching, and education in general where people simply want to receive a degree in a particular area in order to apply it to something. They may have already gone through that process of receiving the critical thinking skills and all that, so we're talking adult learners. We're talking about people who want to re-train, to re-specialize and turn to a different area, and to me, these are very different beasts. They are very different kinds of education and the whole process that they're involved in. So we can't judge that noble goal and try to implement it or try to judge all different forms of education through it, or gauge it as the value and then judge the other types of education that exist from that perspective.*

One participant raised another perspective on the first participant's comment in regard to the purpose of education by questioning the use of discussions. These comments suggest that online learners might be more motivated by the course requirements than by a desire to discuss the content and become critical thinkers or intellectuals:

I take exception, again, not to you, but to the word discussion. I mean, you know, given that we know that people will only read the stuff that they're forced to read and they'll only write when they're forced to write. In what sense, then, is there a discussion? I mean, I can send some message into, you know, some cyber place online and no one may read it at all. And have I contributed to class discussion? Well, yes, according to these definitions I have. But what is it about this that is a discussion? At least in a discussion like this, as we are having face-to-face, you either have to listen or you have to actively not listen to me.

These comments show that different purposes for learning are amplified when e-learning technologies are used in higher education. It appears that purposes that value credentials are amplified. At the same time those purposes that include the "noble goal" of scholarship and the out-of-classroom experience that happen around higher education courses are reduced.

A second aspect of this theme deals with where the learning takes place. A number of the participants pointed out learners are pursing their own learning goals in informal settings rather than organized higher education settings. A participant identified news groups as one setting for online learning that gets limited attention because there is no formal instructor:

And I get the feeling that in a lot of areas there's a lot more learning going on in these newsgroups, and some in particular like the java group or technical type things, but also many others like in social groups. There's an incredible amount of learning going on but we sort of don't want to study that because there's no teacher involved and the results might not prove what we want them to prove.

Another participant suggested that maybe it is shared interests that encourage people to participate and learn from these informal online settings:

I'm wondering in these kinds of situations where people are spending five hours a night. I know people who spend five hours after their day job on the computer talking, chatting, to special interest groups. And I have thought about how we could harness that for educational purposes. And it always comes back to: Do we have mutual common ground? Do we have interests that we want to talk about? And whether that's face-to-face or online, it always seems to come down to that.

These comments suggest that learners' individual interests are amplified through the use of e-learning technologies, especially in informal settings where learners seek their own resources for learning.

The third aspect of this theme addresses the values of institutions using e-learning technologies. Many participants pointed out that there is a perception that online learning is offered as a way of making money rather than as a way of supporting the educational goals (e.g., institutional missions and visions) of the university. One participant explained that faculty unions have begun to take issue with the use of e-learning technologies, including the number of sessional instructors offering courses and the financial incentives for faculty members:

There are issues related to distance education and our union has expressed a lot of concern about issues related to distance ed. One issue is sessionals but another is the issue that if you teach for over-load then you are to get paid one hundred dollars per student. So there is a different structure, you know they tend to treat face-to-face courses differently than they treat online courses. And it looks as if with the online courses they see them as an opportunity to either make a lot of money or save a lot of money. So there are definitely many issues there, which I think has led to a number of people being very opposed to distance education because they see it as a means for the administration to simply make more money to increase efficiency.

Another participant, from a dual mode university, explained how one institution also used financial incentives to motivate faculty to teach online:

> *To me, that's an example of not recognizing the history behind distance education. We've been using that for 50 years for print-based courses. And the per student payment was put in place to motivate professors to mark the assignments and so it wasn't an attempt to save money or make it more cost effective. It was really a way to motivate people to do their work. But now as we move online it's a different perspective. I think, we don't have to do it that way, we can certainly change it but I think it helps to look back and see why things were done the way they are and where the origins are. The other thing is, that is not on here, which I think it should be, is the whole issue of intellectual property and copyright and that's a huge issue that is really starting to come to the surface, certainly at my institution.*

These comments suggest that using e-learning technologies does not always reflect institutional values. Rather, there is a perception that institutions promote e-learning technologies because it is financially beneficial.

The Practice of Teaching

A third theme identified from this deliberative inquiry was the practice of teaching using e-learning technologies. Many participants identified how the private and public worlds of the instructor, time use, and classroom management are different when e-learning technologies are introduced to higher education.

First, participants identified how the distinction between the instructors' public and private worlds is less distinct in online learning. One participant explained:

> *In terms of private lives and I think something that's very interesting is how online teachers negotiate what teaching looks like. [...] Sometimes it's really hard to make people understand that you're really engaged in a conversation and no you can't get up and do something else because you'd be abandoning that interaction. And I think those are very difficult issues, they're psychosocial issues for teachers to negotiate. And I'm thinking we don't really pay very much attention to that.*

Another participant also addressed a related issue:

> *I know we spoke about it [online learning] from the professor's point of view. In my opinion, it's not structured in a hierarchy of lower and higher priorities, it's multi-tasking, which means you give your attention to different things. I've observed people teaching and learning privately in their home, they've made a commitment and their lives do change, I mean, and it is a high priority. They have decided to disrupt their personal lives [at home] while they work.*

The division between work and home, or public and private is reduced as instructors and students work from a variety of locations and at different times. This division relates to the next issue: time management in online instruction.

The second issue participants identified was how time use is different in online contexts. Two participants discussed how instructors often teach in short periods of time rather than in sustained periods:

> [First participant] *What is the impact of the kind of fragmented communication that I tend to have when I'm teaching online? [...] And the students are doing the same kind of thing, if they're participating in that same kind of fragmented, sporadic way. How does that affect their ability to learn and their ability to feel part of a community when the conversations are spread over many days for short periods of time?*
>
> [Second participant] *Well, I would assume that you would get the same thing if you had a face-to-face classroom, because you would probably meet say twice a week for an hour and a half, or once a week for three hours and then*

you wouldn't see each other again.

[First participant] *But, you'd have that concentrated hour and a half or longer together where, you know, you feel like you're part of something substantial whereas in the online fragmented communication approach you have these five and ten minute bursts of attention.*

Another participant raised a different perspective on time management by proposing that instructors in online courses become more organized since they are balancing multiple tasks at one time rather than having a concentrated time for teaching:

I think [time management issues are] something that's transferred in a kind of a way from the workplace. If you're not working on your job 100% somehow it's a lower priority and you're not worthy of promotion; when actually you're just more organized. [...] I don't really understand this at all, how technology makes learning become a lower priority just because we happen to be better organized about it, instead of just going and hanging out on campus all day, or hanging out at work all day.

The third issue in this area is classroom management. Some participants identified that different types of classroom management issues require attention online. One participant, for example, encountered fewer behaviour problems in online classes:

I found in my online classroom just simply because it was asynchronous, [the students] had more time to sort of schedule things. I didn't see the behaviour problems I have in my on-campus classroom. So for it me it was much more of a peaceful environment because it just felt like I was just dealing with them more at a human level, and also at a cognitive level and I didn't have to deal with all of these administrative or behaviour problems I was having in my face-to-face classes.

Another respondent added that there were different classroom management concerns, ones that focused more on participation:

I would argue that it's not that you don't have a classroom management problem in the online classroom. It's just that you have different kinds of classroom management problems. For example we use WebCT and we can check, you know, how many times people have logged in. And you look at some students and you see, ah yes you've got two or three in a class of 15 or 20 who haven't checked-in in the last two weeks, or you see you've got a few others who have been entirely absent and truant.

A third participant stated that there were fewer cases of learners monopolizing the discussion because everyone has a chance to participate:

There is a basic fact about asynchronous communication, which makes it easier for more people to participate, which is that there are no turn-taking issues. You can't monopolize the floor or interrupt people. I've observed that quite a few people will participate if you give them encouragement [...] So, I think there is a difference in participation between face-to-face and online—but whether it's related to gender issues or the broader social issues, I'm not sure. But I think it's just related to the fact there is no turn-taking, there are no time limits. But you do have a possibility online that you don't have in the classroom, which is to send a private email to a student suggesting that their contributions are really interesting and important to the class, but perhaps they could back off for a few days because some people are having trouble keeping up. So online you can manage the flow, whereas in an actual [face-to-face] class it's so embarrassing to say to someone, you know, you're speaking too much would you let someone else speak? I'm not likely to do it.

Hence, the practice of teaching online can amplify participation issues while reducing other classroom management issues. It also amplifies the role of the instructors' private life in their teaching; though it does not necessarily reduce the role of the public life. Teaching online also amplifies short bursts of teaching while reducing longer more sustained periods of teaching.

Conclusions

As the participants' diverse responses show, there are many varied perspectives on the impact of e-learning technologies within the higher education learning experience with little agreement or consensus on the issues discussed by the participants in our study. However, the participants did agree that this lack of consensus should not be seen as a problem with the deliberative inquiry or the research study. Rather, this process highlights many important aspects about the use of e-learning technologies higher education learning experiences. First, there are many varied and polarized perspectives on this issue, and each position should be carefully considered by policymakers and administrators concerned with implementing e-learning technologies. Second, it is unlikely that experts on the use of e-learning technologies will reach consensus on the impact of this technology within educational contexts. Consequently, projects attempting to standardize how and when technology is used in education will be met by opposition from multiple perspectives. Third, the use of e-learning technologies in higher education will continue to vary based on subject matter, instructors, institutions, contexts, availability of technology and various other factors—not the least of which is the purpose of the learning activities and the epistemological beliefs about higher education. The diversity of opinions that currently exist does not make one view more correct, or superior than another. The song lyrics by Jim Krueger (1977, sung by Dave Mason) nicely illustrate this point: "There ain't no good guys, there ain't no bad guys. There's only you and me and we just disagree."

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