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Abstract

This paper presents findings related to how the nature of class changes when asynchronous online courses are used rather than classrooms. The qualitative study involved interviews with 32 university professors who have taught both in-class and online courses. The findings provide insight into how when the medium of teaching changes, there is also significant change in the composition and indeed the very nature of class. Such change occurs as the students attracted have more work experience and groups such as those living in rural areas, older students with work experience or those living outside the province are more likely to be included in the composition of class. Also, the medium itself changed the dynamics of class interactions, not only those between students and professor, but also the interaction between students themselves.

Introduction

Online courses are a disruptive technology in the sense that it requires different pedagogical methods which may not yet be fully understood. In many ways it is a break with the past and requires professors to rethink their teaching practices. Also, the changes are not yet stabilized and possibilities such as hybrid courses and programs are emerging which include; video conference, chat sessions, immersive environments, various kinds of social software and asynchronous discussions. Just as the role of teachers and professors have been determined or greatly influenced in the past by the availability of certain kinds of technology, it is expected that the rapid development of new technology will necessitate role changes in the future (Alexander, 2006; Buck, 2000; Lawn, 1999; Prensky, 2006; Tiffin and Rajasingham, 2003; Hippel, 2005). Many scholarly writers see information and communication technology causing dramatic changes in society. These changes are not just of a technical nature, but more importantly of a structural nature (Christensen, *et al.*, 2004; Drucker, 1999; Garreau, 2005; Kurzweil, 2005; Sims, 2002; Tapscott and Williams, 2006). These same people also suggest the impacts of new technology on education will be very significant. The purpose of this research is to explore how

the nature of university courses changes when they are offered in an online format rather than in a classroom. Understanding the changing nature of university courses allows professors and university administrators to adjust current practice or develop new practices based on these evolving circumstances.



Literature

The idea that the nature of the task changes when the medium is changed has been discussed in detail in scholarly literature (Birkerts, 1995; Hughes, 2005; Manguel, 1997; Marvin, 1998; McLuhan, 1964; Norman, 1998; Tenner, 2003). The offering of online courses is still a relatively new and evolving field of practice and at this point, teachers are still experimenting with this medium to discover some of the advantages and disadvantages of an online educational environment (Haythornthwaite, *et al.*, 2007; Inglis, *et al.*, 2002; Legutko, 2007; McElrath and McDowell, 2008; Shotsberger and Vetter, 2000; Tisdell, *et al.*, 2004). In an early article related to online delivery, Jones (1996) outlines his experience offering online courses. He found that courses on the Internet were productive, especially in cases where students were mature and comfortable with independent learning and computers. Writing a few years later, Salmon and Giles (1998) of the Open University Business School in the U.K. also arrived at a similar conclusion. They asserted that key features for successful implementation involve student familiarity with information technology in advance of the course and also online moderators (professors) being trained before they take responsibility for such courses. These early observations have been supported in more recent research. Hricko (2002) recognizes the importance of preparing students and taking their views into account in order to develop an interactive online course. O'Regan (2003) investigated the importance of student's emotions in online learning and found that they play a critical role.

The advantages and disadvantages of the online format have been explored by many researchers (Buckingham, 2003; Inglis, *et al.*, 2002; Meyer, 2004; Roval and Barnum, 2003). One of the common findings of the research literature is that teachers or tutors have some difficulty because of the lack of feedback provided in the online environment. The main advantage for face-to-face was the immediacy of the response from students, in both language and gesture. Also, students form closer relationships in face-to-face contact because voice and body language are important in forming these relationships. Another issue which was evident in the literature was the increased amount of time it took to develop and teach online courses (Cavanaugh, 2005; DiBiase, 2004; Lazarus, 2003; Meyer, 2003; Shea, *et al.*, 2005). Common advantages of the online format which are identified include (1) the quality of interactions may be better because more thought had been placed into responding; and, (2) students feel they are part of a broader community.



Theoretical framework

Rogers' (2003) theory of diffusion of innovations provides the theoretical framework for this study. His diffusion theory encompasses the models presented by many other authors and the five elements of Rogers' theory includes many components of change. Rogers examines the variables which determine the rate of adoption — 1) perceived attributes of innovations; 2) type of innovation–decision; 3) communication channels; 4) nature of the social system; and, 5) extent of change agent's promotion efforts. This research focuses on one aspect of the first variable of Rogers' theory, professors' perceptions of the changing nature of university courses when they are offered in an online format. The paper also uses Rogers' concept of “discontinuous innovations” to examine how innovations that require a dramatic change from past behavior, but result in dramatic new benefits, require special adoption strategies.



Methods

This qualitative study involved semi–structured interviews with 32 of the 84 professors who had taught asynchronous online courses at Memorial University of Newfoundland at the time of data collection. Memorial University is one of the leading universities in Canada both in terms of the number of online courses offered and the number of students involved. The professors interviewed taught asynchronous online courses and this study did not include classroom courses with an online component. The study does not include immersive environments such as learning through gaming. The primary means of delivery in the courses examined is through applications such as Web pages, e–mail, and electronic discussion forums. This format sometimes included streaming video or real time chat sessions and in some cases the online component may have been supplemented with CD–ROMs, video tapes, or textbooks. The assessment in some cases was done at in person at invigilated testing sites.

The purposeful sampling provided a varied section of the individuals offering online courses at the University. The sample included an equal number of males ($n = 16$) and females ($n = 16$) and both full–time ($n = 24$) and part–time ($n = 8$) professors. The professors varied in age from 30 to 70 years, with the vast majority ($n = 29$) between the ages of 40 and 60 years. In terms of qualifications and experience, the sample included 12 professors with Masters degrees and 20 with Doctoral degrees. Seventeen of the professors had more than 20 years teaching experience, while only five had less than one year's experience. Professors also had varied experience teaching online courses. Some of these professors were just starting to teach in this medium while others had used this format for over five years. The sample was drawn from various subject areas including: medical/nursing ($n = 7$), business ($n = 5$), education ($n = 6$), arts/social work ($n = 9$), and math and science ($n = 2$).

Flexibility was maintained throughout the data analysis process to accommodate any unexpected findings as suggested by Gay and Airasian (2000), Bogdan and Biklen (1992) and Charmaz (2006). The research question which guided this research was — How does the use of online

courses change the nature of University courses and what implications does this have in terms of the development of adoption strategies for online courses? Qualitative methods were used in answering these questions because they are especially well suited to explore the lived experiences of professors and providing an initial examination of a situation.

This research is also a case study, in the sense that it examines a “bounded system” [1] and supports the close examination of the event, instance, or experience in question (McKee, 2004). The work of Flyvbjerg (2006), which asserts the value of the case study approach, is used as a guideline for how the findings are presented:

Good narratives typically approach the complexities and contradictions of real life.... This tends to be seen by critics of the case study as a drawback. To the case study researcher, however, a particularly ‘thick’ and hard-to-summarize narrative is not a problem. Rather, it is often a sign that the study has uncovered a particularly rich problematic. The question, therefore, is whether the summarizing and generalization, which the critics see as an idea, is always desirable. [2]

He continues to emphasize the value of allowing complex stories to evolve when discussing the way the findings of case studies should be presented:

It is a ‘virtual reality,’ so to speak. For the reader willing to enter this reality and explore it inside and out, the payback is meant to be sensitivity to the issues at hand that cannot be obtained from theory. [3]

Flyvbjerg also emphasizes that “something essential” may be lost in summarizing or erasing details “in favour of conceptual closure.” [4]

Memorial University is the largest university in Atlantic Canada and the only university in Newfoundland and Labrador. There are 17,000 students engaged in full- and part-time studies at undergraduate and graduate levels at the University. The university employs 950 full-time faculty, 850 sessional instructors, and 2,300 administrative and support staff (Memorial University, 2007). Over the past 30 years, Memorial University has a record of leadership in distance education and today the University offers online degree and certificate programs in many areas. Support services for students and professors are provided through the office of Distance Education and Learning Technology (DELT). This study is part of a larger study that looks at factors influencing the adoption of the use of online courses by University professors.



Findings

The findings of this research indicate that when the medium of teaching changes, so do the composition and indeed the very “nature” of classes. The composition of class alters in that students typically have more work experience, they are more likely to be living outside the province or in rural areas of the province. The altered class composition affects the “nature” of classes because the dynamics of discussion becomes different as the composition of class becomes more diverse. Also the technology itself has certain characteristics which also change the “nature” of class.

Changing composition of class

Many professors noted that, compared to in-class day time students, the students in online courses have more work experience and were bringing this experience to class interactions. In some fields of study the students were more likely to be full-time, on campus students who were adding a course to provide more flexibility in their schedule. These were very different from the part-time students. One professor noted that the online students who were doing the course part-time were generally more mature and “a little bit more timely and responsible in terms of getting work in” (Prof. 003). Another professor however noted that these students are also often very busy and may not be able to fully share their perceptions and experiences with the class because of the demands on their time.

“I get the feeling, as well, that these are also the students that are very pressed for time, which limits the amount of contribution they are able to make to the online course. So, whereas they may be in a position to make those additional contributions, it is difficult for them to do so because of the exact same reasons they are taking the online course.” (Prof. 002)

The application of learning with respect to the workplace environment was much more immediate in online courses. One professor noted that the working students in the course he taught were immediately integrating what they had learned in the course to their work situation. For example, in the field of education, teachers were accessing the course from their work site and the connection of the learning to workplace practice was much quicker than before. A professor (Prof. 043) in education reported that his students, who were mostly working teachers, were adopting concepts from his course into their own class and then shortly after, reporting how it went to the rest of the students in the online course.

Another factor related to composition of class is the location of the students. One professor (Prof. 019) explained that about 60 percent of his students lived within driving distance of either St. John’s or Corner Brook, where they could take the same course in class. They have chosen to take the course online to add flexibility to their schedule. The other 40 percent were what he termed “genuine distance education students”, who were “scattered all over.” Many of these were people who had started to do a degree at Memorial University of Newfoundland (MUN) and then moved. Engaging in online courses brought them closer to finishing their degree. The geographic dispersion of students was a problem for one professor (Prof. 011) when he attempted to set up real-time chat sessions for his course. With students all around the world,

choosing a time convenient for everyone was problematic. Even within Canada, there is a four-and-a-half hour time difference, which can contribute to the challenges in this area.

One positive aspects of having students dispersed geographically was that in the discussion forum they could compare current practices across various regions. For example, a professor (Prof. 015) in the health care sector found students would describe how different services were provided in their area. So there was a lot of sharing of information happening. Professor 34 observed that for practical courses the benefit of having students in dispersed locations is more evident, but it is less significant in more theoretical courses. Professor 028 said in the online course she taught the fact, not only that her students were working, but that they were working in different fields added to the course. Professor 018 noted that because her students are more geographically dispersed and older changes the dynamics of the class. Working adults bring a better perspective of how course content could be applied in the work place. Despite recognizing this she had not reorganized the course in any way to take fuller advantage of the possibilities being presented by this situation.

On a similar point another professor (Prof. 020) noted that if you have students in your class who are working they are more likely to relate the class material to their work. She noted that often the two became inter-related as students take a new perspective on their work based on the things which they are getting from class and from discussing course content with students from other jurisdictions. She has changed her course to make it more generic and to promote discussion on differences in various jurisdictions.

A professor (Prof. 022) in the business faculty also agreed that the mix of older and younger students often leads to interesting discussions in class.

“The student mix is generally very good for that and I have students every semester who can relate real life experiences from trying to start a small business or running a small business in the past or in a lot of cases still running a small business to the support material within the student groups is excellent.” (Prof. 022)

One professor (Prof. 033) explained students from other locations can have a very positive impact on a course, especially if new dimensions of a course can be explored with the help of people from other areas. For example, one professor who deals with the topic of cultural difference as part of the course she teaches feels students from other areas have more experiences to bring to class on this topic than students from Newfoundland and Labrador might because of the relatively homogenous population in the province.

The mixture of full-time students and part-time mature students sometimes leads to richer discussion in online courses. Since several professors noted that a number of the students in their online course were on-campus students who were in these courses for scheduling or convenience reasons, this resulted in a good mixture of students some with work experience directly related to the content of the course, while others have no experience at all. One professor explained how this mixture created an environment in her course where fuller discussions were generated.

“Online, every semester, I have had maybe two or three [mature students] who are incredibly articulate, very knowledgeable about the issues, well read, who do a lively discussion.” (Prof. 007)

Another professor (Prof. 009) noted that students in outlying areas of the province may not have been included in class discussions in the past. Such students would have to take drastic measures, sometimes including leaving their families and incurring significant expenses, to complete a program. This resulted in many potential students not participating.

“It gives a broader experience to draw on. The students the ones who are taking it distance, they are full-time working students, they tend to be more focused on the practical aspects of the course rather than the theoretical aspects. They tend, therefore, to bring in their experience. They say, well, this does not match up with what I am seeing day to day.” (Prof. 009)

Professor 019 observed that having students located in various locations around the world can sometimes present “a fortuitous teaching opportunity.” One example of this was a professor who was teaching a course related to the Second World War. Students located in Germany and France who could bring diverse insights to the class because of where they were and what they had seen.

The fact that students are from different locations sometimes results in changes to the content of the course. Professor 031 explained that when he puts his course online, he has to reconfigure it somewhat to take into account people from outside the province. He does not use examples that are specific to the province, which people in other places might not understand. In some cases, the difference can be an interesting issue for discussion. For example, if you are talking about recycling programs, students in different jurisdictions might ask important questions like; “Why don't we have a blue box program here?” So, in some cases this professor felt geographical diversity lead to “a much richer variety of discussion.”

Interactions with students

Several professors explained that the discussion forum was a major part of the course they taught. One professor (Prof. 042) described how she used the discussion forum.

“I use the discussion a lot. I would not offer a distance course without having a discussion forum. For me it is the one place where the students can meet and learn from each other. They can bounce ideas around and they can sort of discuss things in depth, there is richness and the potential for collaborative work. So I really agree with having these groups. We built it in so there have to be group reports.” (Prof. 042)

She found the results superior to those in classroom environments.

“So, in all cases, I believe that the group reports were far superior to any individual report because people came up with really fine ideas once they had to beat around ideas, toss them around and come up with a report that was facilitated by one member but was really a group report.”
(Prof. 042)

Some other professors did not consider the discussion forum to be very useful for the course they taught. For example, one professor (Prof. 005) said for the course he teaches the discussion forum works as a way for students to “register” concerns. This then offers him an opportunity to clear things up, but it is not a substitute for classroom interaction.

“Rather than waiting until the following day, when they see me in class or when they can come in and see me in my office, they fire something off. They post something immediately and it is often not phrased in a way that is intelligible or where the student appears to expect an answer, but it is more a venting of frustration and that sort of thing.” (Prof. 005)

A factor which might impact on the usefulness of the discussion is subject matter. One professor (Prof. 021) said the discussion forum was a very small part of the course she was involved in teaching.

“The three science courses are not geared towards discussion in the same way as the graduate courses are. The discussion forum is used to post answers to cases and class questions. It is not marked, its stated purpose, stated by me, is to share their answers if they want to and to answer questions. This course we are doing this is about certain kind of practitioners and they are given a group project. So it depends on the course I think and the purpose of the discussion.” (Prof. 021)

The professor thought the purpose of the discussion would change depending on the nature of the course content and how well it lent itself to discussion.

Another significant finding of this research was the difference in the way professors managed the discussion forum in terms of response time and level of involvement. Some professors have student assistants who help them by monitoring the discussion group. One professor (Prof. 003) explained he had an assistant who answered any straightforward questions and brought other things to his attention if necessary. Another professor (Prof. 042) explained that she “interferes” as little as possible in the discussion forum.

“I don’t engage in those discussions hardly at all. What I do is I hire a student and they monitor the discussion groups and I say monitor them and these are students who have no interest whatsoever in the content or what is going on. But I will say monitor them and let me know if there are any interpersonal problems, if somebody is not carrying their weight because they keep track of participation and if people are in it or not and alert me if there are people not using it at all and let me find out what is going on.” (Prof. 042)

She gives examples of circumstances where she would get involved in the forum, such as when a question is directed specifically at her or if she gets the sense that students are becoming frustrated and not making progress. She says she is aware that other professors have different approaches so sometimes students are not sure what to expect from the professor.

“I have colleagues here who believe that they have to be a member of the group and a member of every group and they are on all hours of the night and they are run ragged because they are engaged so much in these conversations. To me, that takes away from the learning of students and I just don’t do it. I sometime find that when students come into my class, if they have already done an online course with a colleague who is in there all the time their expectation is that I am going to be in there all of the time.” (Prof. 042)

One professor (Prof. 007) explained that she had to change her strategy in dealing with the discussion forum. In the past she would respond to individual postings by students, but now because the number of students in her class has grown to close to 50 she provides a summary response to what all students have posted.

“I always respond to the group, but if the individual posting seems to require response directly I will do that right away. The group response I will wait for most people to reply and towards the end of the section, like the week goes from Thursday to Wednesday so say tomorrow I will post my response to what they have been asking for an answer.” (Prof. 007)

Another professor (Prof. 020) explained that she did not participate much in the discussion forum.

“I would not interfere with their discussion unless they were off track and then I would only bring them back on

track. I would wait until the end of the posting period and I would review it all and I would do a summary of what I saw in them.” (Prof. 020)

Professors were able to give examples of how they were both structuring their courses and using strategies to encourage participation. Some professors explained they do not assign marks for participation. One professor (Prof. 001) explained this was her first year teaching this way and in the future she plans to get more creative in what she does in the discussion forum. Professor 020 explained that the next time she teaches the course she will try to structure the discussion forum better so students get more from it. She would put students in smaller groups and asking them not to spend too much time summarizing readings. She was somewhat hesitant in centralizing the forum too much and she would like to “have some agreement from the group members” before imposing her views on how it should be organized and used.

Some professors structured their course in such a way as to encourage participation. One professor (Prof. 007) explained that in order to encourage participation in the discussion she sets up folders for each one- or two-week section of the course and posts questions for students related to the topic. Students are invited to answer the question or ask questions of their own based on the readings for that section of the course. One professor (Prof. 009) explained that the way a course is organized changes depending on the course content. The course she was currently teaching was structured into modules with three components: lecture, discussion and presentation. She explains how she has students view short videos and report back to class.

“So they have a certain number that they have to view and you can’t report on one that someone else has reported on. So every person in the course has to take a different, three or four of the videos, and provide a summary of those videos. So then even though you may not have seen all the videos, you get to read about all of them. Then the next phase in that activity the discussion activity you have to comment on how what was present in one of the videos is similar or different from your own experiences.” (Prof. 009)

She explains that she also has a “water cooler” area in her course for discussion and social interaction. As the course progresses she has students do things which involves different levels on Bloom’s Taxonomy. She has students summarize, do comparisons, application and evaluation.

Another professor (Prof. 015) organizes the discussion forum to encourage students to share activities which they have done as part of the course. This can be very interesting for students as they compare practices in different jurisdictions. One professor (Prof. 018) explained that she has structured her course to have several kinds of discussions. There are; general discussions, discussions of the case studies and discussions of the proposal ideas. Another professor (Prof. 022) also explained that he has the discussion forum broken down by topic. He makes a comment on the topic and students then make their individual comments. He keeps the forum in

each topic open for a specific period of time and closes it and moves on to the next topic. One professor (Prof. 033) explained she asked students to use their first posting to introduce themselves as if they were in a classroom setting. She says many students also exchange e-mail messages outside the classroom discussion forum.

Another point made by several professors is that some students are still uncomfortable online and only do such courses because that is all that is available. One professor (Prof. 031) made the point that different people have different learning styles and prefer different formats. Professor 014 pointed out that some students don't like online courses and they prefer the face-to-face contact with the instructor. According to one professor (Prof. 033) these students were usually older professionals who might be embarrassed by their lack of computer skills. Based on her experience, once people get started they can overcome any problems they might have, but the initial fear of trying something new holds a lot of people back.

Another issue for many professors was the lack of feedback they were getting from students compared to teaching in class. It is a handicap not being able to tell if students are following what is said in class or if they are interested. Whereas in class you can sense if they are confused and you can do things such as adjust the pace or introduce more examples to illustrate a point. In online courses it is more difficult to react to students feedback.

“With the correspondence or the online courses, you are designing content a long time ahead of having any students. You have to be imagining what the students’ vocabulary may be. What background knowledge they may have, what they know, what they don’t know.” (Prof. 019)

A related problem is that sometimes communicating through e-mail can result in misinterpretations. A short quick message can come across as rude or a question from the student is unclear and it takes time, exchanging e-mail messages to clarify what would be resolved quickly in person.”

Changing the dynamics of class

Several professors noted the different mixture of students created some interesting situations and dynamics in class, as each group of students had various expectations as to the role of a professor and students within a course. The younger students, for example, were often more used to class interactions, whereas older students who had not taken a course for a while had another approach to learning and expected more structure. The difference in the age and expectations among different groups of students sometimes caused friction within class.

“I have actually had a couple of incidents where one student would sort of chastise another one because they were criticizing things I had said. ... To the kids who are used to the situation here on campus, my opinion is just one more opinion basically. They are much more in tune

to challenging the professor and so forth, but a couple of the older ones thought that was terribly uppity.” (Prof. 012)

In relation to the interactions between professors and students two interesting dynamics were at work as well. First, professors have more time to think before responding to questions in online courses. One professor (Prof. 007) noted that in-class professors have to respond to situations immediately as they arise, but in an online course they have more time to think before they respond. Even having a few extra minutes to think can be important in situations where there is a disagreement between two students in class and the professor has to intervene.

The second observation was that at this point in the development of the technology for online courses, professors are able to interact more effectively with students in classrooms than online. One professor (Prof. 008) explained in class a professor is better able to deal with concerns students raise immediately and for subjects such as math, they are able to draw diagrams or work through calculations while students asking questions.

“When we go to the blackboard you can freehand sketch almost anything you can think of in mathematics if you want such a diagram. I gave a lecture today, I probably made 20 different diagrams. Now if I were giving that or writing a note for students, I probably wouldn’t write 20 different diagrams. Everyone has got to be specially put together as an image created, so probably I would have three.” (Prof. 008)

He believes that in time the technology may change to make such interactions possible online, but right now the technology is either not readily available or in some cases, where it is available, professors are not sure how to use it.

Another dynamics which has been noticed by professors is that some students participate more online than they do in class. These professors note that some students may feel intimidated to speak out in class but they are comfortable putting their thoughts into written form. Also, several professors noted that once the discussion gets going online it can be richer than that which occurs in class in many cases. Professors (Prof. 001, 010, 014, 024, and 031) noted that the characteristics of the medium allowed people to take more time to think and develop their ideas before offering them to other students in the course. Also, because the time is less limited, in the sense that they are not limited to a one-hour session as in many classrooms, some students are more inclined to ask questions without worrying about interfering with the progress of the course. Several professors also made the point that in online courses they spent more time discussing things with individual students. This was also an issue for some professors in terms of the increased amount of time it took to teach online.

One professor (Prof. 010) thought some students were holding back on participating because they didn’t have cues such as body language to help determine the receptiveness of other people in the course. Professor 024 noted that this is a factor especially at the beginning of class because

students don't get to know each other as well online as in classrooms. The discussion in classrooms are more free flowing and often go beyond the narrow course topic and this helps develop personal relationships in the face-to-face context. Several professors were concerned about the difficulty of building learning communities.

“I think that interaction is essential. I think pedagogical relationships are the hallmark of our education and I see the relationship suffering in a way. There is very little interaction, very little community, either between the student or with you as an instructor. It is very sterile teaching. But it is an effective means of teaching, it can augment the traditional learning. I am leery of it.” (Prof. 023)

There are several other dynamics of online courses that change the nature of class. One dynamic is there is a record of what was said in the course. This has some positive aspects such as students can see the questions asked and comments made by other students. Also, if the professor wants to leave a message for students it can be placed in a permanent place on the course Web page where everyone can see it, whereas in class students sometimes miss important announcements. Such a record of what is said in class can play an important role in assessment as well where professors have the option of using the record to determine a grade for participation. Despite these many advantages of having a written record some professors see it changing the way people interact within courses. For example people may change the comments they make and the way they make them because there is a permanent record. Professors noted that they were more formal and more pre-planned in their presentation in online courses. Another aspect of this is that sometimes people are more cautious or at least less spontaneous with their comments in online courses and this changes the nature of the discussion.

Another dynamic which is present in online courses is that students have to be more responsible for their own learning in the courses. Some professors see this as an advantage of the medium while others see it as problematic especially in the case of introductory courses. While developing independent, self-directed study skills are important for university students, many professors noted the importance of the socialization and the importance of the coming together to help create an environment where students keep up with the rest of class.



Conclusion

In the [Methods section](#) of this paper the research question which guided this research was presented — How does the use of online courses change the nature of university courses and what implications does this have for adoption strategies for online courses? Professors were able to provide insight into how the very nature of the courses they taught changed because of the more diverse composition of class. Many professors made the point that students doing online


courses generally had more work experience to share with class. Therefore the courses tended to take on a more practical, rather than theoretical direction. In some cases students who were doing the course from their work site were attempting to immediately integrate course content into their working lives. This is a significant shift from the traditional classroom course with younger students who usually have very little work experience. This might also be an early indicator of the potential to make the connection between education and the workplace more direct and immediate.

The location of the students was another factor which changes the nature of the course in some cases. Because online courses draw students from a broader geographic area the experiences these students bring to class are different as well. The students in online courses are often more diverse than those in classroom courses. Although, most of the students are still from within the province where the university is located, more are from smaller communities or out of province. There is also a greater mix of full- and part-time students. The greater variety of students usually resulted in more interesting discussion on issues as students offered their differing perspectives. This was especially true of courses in the social sciences or professional fields. This is significant in that it is an example of how students who currently avail of classroom courses might benefit from taking online courses. For some professors, the changing “nature” of the class posed a dilemma. They want to keep the course format consistent with the in-class version of it, but the different composition of class sometimes requires a different approach.

The significance of the discussion forum in online courses varied greatly depending on factors such as the teaching style of individual professors, the subject matter, the number of students and the level of the course. This research reinforces the existing literature which recognizes the importance of the discussion forum in terms of building a “learning community”. This research identifies several characteristics of interactions in the discussion forums of courses which constitute a change in the nature of class. For example, the interaction with students in the online discussion forum is relatively slow in comparison to face-to-face interactions and this has both advantages and disadvantages as a teaching medium. Several professors noted that they were having problems with the discussion forum ranging from, difficulty managing the large number of postings, to the other extreme of not being able to generate any sustained meaningful discussion. Also, the level of involvement of professors in the discussion forum varied greatly. Some professors checked it several times a day, while others had assistants who monitored it for them and only participated if a question was asked directly of them or when a serious problem arose. Professors thought students had very high expectations of a professor’s involvement in the course. This sometimes caused problems as the level of involvement varied from one professor to the next. Several professors were able to provide examples of how they were effectively using discussion forums in their courses and more research would be useful in identifying best practices in the use of the discussion forum in online courses.

The idea that the nature of the task changes when the medium it is done in changes has been discussed in some of the scholarly literature (Birkerts, 1995; Hughes, 2005; Manguel, 1997; Marvin, 1998; McLuhan, 1964; Norman, 1998; Tenner, 2003). This research identifies some of the ways teaching changes when courses are offered online rather than in the classroom. While we do not have agreement on what are best practices, and in fact at this early stage such understandings may still be emerging, there is clear evidence that the nature of the change holds

the possibility to transform educational practice. Overall without taking into account variations such as class size, subject area, level of the course and the teaching style of individual professors it is possible to classify the type of change occurring as discontinuous. In change theory generally discontinuous change are those that require major changes in practice (Christensen and Overdorf, 2000; Moore, 1999; Rogers, 2003).

Because of the discontinuous nature of the change special adoption strategies will need to be implemented by those who want to ensure the full possibilities of the new technology is realized. While further research is certainly needed on this issue, this research indicates that such strategies should involve individualized supports which take into account the variety of teaching circumstances faced in each course as well as a more generalized training related to online teaching. 

About the author

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Notes

- [1.](#) Creswell, 1998, p. 61.
- [2.](#) Flyvbjerg, 2006, p. 237.
- [3.](#) Flyvbjerg, 2006, p. 238.
- [4.](#) Flyvbjerg, 2006, p. 239.

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