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# Student Perceptions of Online and Face-to-Face Learning

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## Abstract

The rapid expansion of online learning in higher education in recent years has attracted a large number of students. In this paper, the researchers examined students' perceptions of both online and face-to-face learning by conducting a qualitative study that surveyed 313 students from an Ontario community college. The objective was to explore students' perspectives on the issues of learner preference, interactivity, workload, performance, and challenges. An analysis between the two groups, online and F2F, showed a difference in student perceptions and experiences.

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**Keywords:** Online; face-to-face; learning; higher education; community college

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## 1. Introduction

The advancement of information technology in the twenty-first century has profoundly changed our educational system. The use of the internet in teaching and learning has become more common in higher education (Hogg & Lomicky, 2012; Halawi, Pires, & McCarthy, 2009; Bhagat, Wu, Chang, 2016; Meng-Jung, 2009; Steel & Fahy, 2011). The reality is that online learning is the new mode of instructional delivery that is now available to students. Khan (2005) defines online learning as:

An innovative approach for delivering a well-designed, learner-centered, interactive, and facilitated learning environment to anyone, anyplace, anytime by utilizing the attributes and resource of various digital technologies along with other forms of learning materials suited for open, flexible, and distributed learning environments (p. 3).

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Due to the rise of technology, “Web course tools, such as WebCT, Blackboard, and eCollege” (Halawi, Pires & McCarthy, 2009, p. 374) are utilized in online course offerings. In the last decade, colleges and universities have seen an exponential increase in the number of online course offerings in response to technological, societal, and economic changes (Ozerbas & Erdogen, 2016; Bhagat, Wu, & Chang, 2016; Xu & Jagers, 2013; Cole, Shelley & Swartz, 2014; Renes, 2015).

The purpose of this study was to explore student perspectives and experiences with online and F2F learning. The experiences and perceptions of students who took the same college course F2F and online will be compared and contrasted to acquire a deeper understanding of current practices and provide further recommendations to leaders and educators to enhance students’ online experiences.

## **2. Literature Review**

Online program/course offerings in higher education are becoming an integral part of educational delivery for post-secondary institutions. The OPSEU (Ontario Public Service Employees Union) 2014 Report states, “Over the past 10 years, use of online learning has expanded throughout the post-secondary system in Ontario. The CAATs (Ontario Colleges of Applied Arts and Technology) have increasingly started to develop online courses with incentives and direction from the Minister of Training, Colleges and Universities” (MacKay, 2014, p. 19). The CAAT along with other educational organizations has touted the advantages of online learning, particularly the flexibility and convenience it offers. Students can take online classes anywhere and anytime as long as they have access to the Internet and an appropriate electronic device. Online learning has reached specific populations and given opportunities for students to access higher education. These students include, but are not limited to, (1) parents with childcare responsibilities; (2) students who live further from the institution; (3) students working full-time; (4) students with disabilities; (5) and “urban students who find it easier to time-shift rather than space-shift” (Renes, 2015, p. 348).

Convenience and flexibility of online learning fosters continuous learning opportunities, which is particularly important for those who have competing family priorities. Dutton, Dutton & Perry (2002); Driscoll, Jicha, Hunt, Tichavsky, & Thompson (2012); Cole, Shelley, & Swartz (2014); Renes (2015) state that students with childcare responsibilities and those who had greater commuting distances value the flexibility of online delivery. Students who are balancing family life, employment, and student life find online learning to be more conducive to their learning as it fits with their schedule. “Specifically, women who have families and jobs, students parenting young children, and students who are pregnant were found to benefit from E-Learning” (Renes, 2015, p. 351).

Moreover, this learning modality provides students with the study option to complete a wide range of diploma and degree programs, which has resulted in community colleges serving more mature students in the past decade. There has been an increase in adult learners accessing community college education with the average age being 28 years (Castillo, 2013; Ferguson & DeFelice, 2010; Jackson, Jones, & Rodriguez, 2010; Ozerbas & Erdogan, 2016). In addition, Diaz (2000) and Paul & Cochran (2013) note that students with more life and academic experiences are well suited for the independent, self-directed study associated with online learning. They access it primarily for the purpose of career advancement and preparation for economic changes. Furthermore, these students can balance their personal and professional activities while being engaged in their study. For younger learners, who comprise 40% of the population in community colleges, the online format provides a balance to their F2F studies by giving them the ability to study from home. These millennial learners, having used technology from an early age, have greater ease navigating and applying technological tools. (Coleman, 2009; Castillo, 2013; Cole, Shelley & Swartz, 2014; Ozerbas & Erdogan, 2016).

Even though the growth of distance learning offerings at community colleges have increased and the number of students taking these courses have multiplied exponentially, questions still persist whether online learning addresses the needs of all students. Students at risk of failing are one such group where there are mixed results about the effectiveness of online learning. Researchers like Xu and Jagers (2013) suggest there is administrative reluctance to offer online courses to these learners. These authors found that this reluctance is attributed to a lack of sufficient study skills required to be successful in online learning. Meanwhile, Flynn (2016) argues that with “the essential learning supports, online tools and psychosocial understanding of the unique characteristics and academic requirements of at risk students, they can succeed in online courses” (p. 130).

Students with disabilities is another group with questions about whether or not online learning addresses their needs. Dramatic increase in the number of students with disabilities accessing postsecondary education (i.e. Lazar and Jaeger (2011) state that 40% of student population in the United States colleges are students with disabilities) has created a concerted effort to identify and address the barriers these students encounter. Research has found that people with differing abilities use the Internet and technologies well below the rest of the population because they encounter many types of barriers. According to Lazar and Jaeger (2011), “The main reason for this is not a lack of interest or education, but that the Internet is inherently unfriendly to many different kinds of disabilities” (p. 70). Regardless of these challenges and barriers, people with specific kind of disabilities have benefitted from the use of technology. The Internet now provides opportunities to learn, communicate, and interact online to students with particular types of physical challenges. Specifically for those who are unable to travel due to their disability, the use of Internet provides an enormous benefit while promoting

social inclusion and access (Lazar and Jaeger, 2011). Moreover, the Ontarians with Disabilities Act provides standards in which colleges and universities must allow students with disabilities to choose the learning modality that is beneficial to them so that they can have equal access to education (Ontario Human Rights Commission, 2018).

Another area of interest of extensive discussion in the literature is related to the benefits and challenges of student interactivity or engagement in online courses. The methods of participation experienced by students in online learning are significantly different from those experienced in F2F classroom settings. Interactions with faculty and peers are largely, if not exclusively, text based, and they usually occur through discussion boards, emails, and chat rooms (Reisetter, Lorelee, & Korsuka, 2007; Arslanyilmaz & Sullins, 2013; Sturges, 2013; Kirmizi, 2015). These kinds of interaction may be beneficial to learners because they offer more time to process ideas and provide an informed response to the questions or problems posed. While this structure of learning could assist students to have a stronger academic focus, they could also have an impersonal experience, as this mode of delivery does not provide many opportunities for personal interaction. For this reason, the success of online learning experience is largely attributed to embedding of this “interactive dimension” (Reisetter, Lorelee & Korsuka, 2007, p. 57).

According to Wang (2007); Arslanyilmaz, and Sullins (2013); Kirmizi (2015), online interaction in learning occurs when students interact with course content and with instructors and peers. Well-designed interactive learning tasks tend to promote student interaction with instructors and peers and increase student involvement with course content. Students benefit from providing explanations rather than receiving them. In this form of interaction, students are encouraged to pose questions about an issue in order to find an explanation to their inquiry. “Such proactive learning engages students in a higher level of thinking than the reactive type of learning” (Wang, 2007, p. 18). In addition, Wang states that assessment, including assigning a grade to collaborative learning tasks, positively relates to students’ learning. Furthermore, Jackson, Jones, and Rodrigues (2010) find that significant factors that enhance student learning and satisfaction are instructors’ prompt responses, clarity of expectations, and accessibility of content. Overall, Carr (2000); Frederickson, Picket, & Shea (2006); Jung, Choi, Lim, and Leem (2002) agree that student interaction with instructors and peers play a pivotal role in student learning success. The authors emphasize the importance of student participation and level and quality of collaboration with peers and instructors.

An interactive online lecture has been discussed as an effective way to engage students in course content. However, lecture slides that are simply posted on a web page, otherwise useful in a traditional classroom, do not encourage engagement and interactive communication (Grosso, Teresa & Grosso, 2012). To help students become engaged in an online lecture, the instructor must be both a content expert to guide students in their

knowledge acquisition and a facilitator of the learning process. Reisetter, Loralee, and Korsuka (2007) state that online participants value “the expert voice” (p. 65). Some online learners thought that having a knowledgeable instructor was especially powerful “because it led to clearly focused content that could be lacking in a traditional setting” (p. 65). Successful facilitation involves incorporating questions into online lectures, which is proven to be an effective way to make lectures interactive and to increase student engagement with course content. “Since the importance of questioning in the classroom is well documented, it must also be extended to online classes as well” (Grosso, Teresa, & Grosso, 2012, p. 57).

Alongside interactive lectures, online discussions, and various assessment methods used to ensure the quality of a learning process, group work has been recognized as one of the key educational tools in the online environment (O’Neill, Scott & Conboy, 2011; Roberts & McInnerney, 2007). Morgan, Bruce, and Williams (2009) discuss the benefits and challenges of group projects in online classes, emphasizing the importance for instructors to support students by “developing ground rules, providing information on group work skills and roles, supporting effective communication, and facilitating social task development” (p. 293). If carefully considered and implemented, the authors’ recommendations could be a valuable solution to the group work challenges in the online learning environment. For online group work to be productive, it is also important to recognize the importance of professional development for faculty who implement this type of instructional strategy in their teaching. Faculty may benefit from training opportunities that focus not only on the technical components of online teaching (Glowa, 2009), but also on effective content development and building skills that help to manage “the unique social context of the online classroom environment” (Kanuka, Heller & Jugdev, 2008, p. 40).

### **3. Method**

To conduct this study, a General Education college-mandated course titled Global Citizenship: From Social Analysis to Social Action (GNED 500) was selected. The course focuses on topics related to social justice, equity, and inclusion, and it is required for graduation from a diploma program. Twenty-five percent of the course sections were offered online, and 75% were offered F2F, which, in itself, indicates a substantial increase from 2014 when only 5% of the course sections were offered online. The class size for both modalities was 35 students. The lectures and assessments in the online sections utilized PowerPoints with articulate software, voice over, videos, discussion boards, and emails. A total of 2064 F2F and 570 online learners were invited to participate in this study. A URL link to Survey Monkey was sent to all students who completed GNED 500 in the 2016/17 academic year. A total of 313 students completed the survey (response rate of 12%). Of these respondents, 207 were enrolled in F2F

modality and 106 in the online format. A qualitative methodology in the form of an online survey was chosen to gain insight on student experiences and perceptions about the effectiveness of online and F2F learning. The survey questionnaire was utilized with the intention of collecting rich descriptive data. This survey method provided “a way of looking at research that honors an inductive style, a focus on individual meaning and the importance of rendering the complexity of a situation” (Creswell, 2009, p. 4). The questionnaire consisted of 6 open-ended and 4 closed-ended questions centered on (1) learner preference, (2) interactivity, (3) workload, (4) performance, (5) challenges and (6) preference for future learning. Anonymity of the students was maintained: students were not asked to identify themselves as their participation was voluntary. A constant comparison method was used to analyze the data, drawing on emerging themes based on participant experiences.

#### **4. Results**

The objective of this study was to explore and share student perspectives on the online and F2F modalities of the GNED 500 course. Based on the data collected, 60% of the students who chose F2F delivery were between ages 18 to 24, and 40% of the students were 25 years or older. However, both age groups were equally represented in the online modality of the course. According to the participants’ responses to the question about their preferred mode of delivery, more male students (80%) chose F2F delivery, whereas, 75% of the female respondents expressed their preference for online learning.

The responses gathered from the six open-ended questions were coded into themes. In terms of the learner preference for online learning, the themes that emerged were ‘flexibility’ and ‘convenience.’ The majority of the participants (61%) chose to take this course F2F because it was their preferred method of learning. Questions related to interactivity revealed that for online learners, the main forms of engagement were online discussions, individual and group assignments, and reading course material online. In-class participants indicated their main means of interaction were through classroom discussions and debates, group work, attending lectures, and completing assignments. The student workload in the online format appeared to be more manageable than for those who took the course F2F. When students evaluated their performance in the course, the majority of online and in-class participants (70%) rated their performance as excellent and good. In terms of the course challenges, 58% of the participants of the two modalities agreed that group work was their main challenge. In addition, online students mentioned technology issues, timely faculty feedback, and clarity of communication as factors that impeded their learning.

#### *4.1. Learner Preference*

Students' responses regarding their preferred mode of delivery can be organized into the following categories: flexibility of time, location, and convenience of balancing personal, professional, and academic life. However, 14% of the participants indicated that online delivery was the only option that was available to them, which could be interpreted as not their preferred learning option. A number of students mentioned that they chose to take the course online because the F2F option was no longer available to them due to high demand.

##### *4.1.1. Flexibility of time and location*

Thirty-eight percent of online participants indicated that they chose to take the course online because it allowed them to complete the course at their own pace. They further indicated that they wanted to pursue their education, and online delivery provided the opportunity to achieve those goals. Students were able to complete the course according to their personal schedule and in a quiet environment. For many participants, online delivery also allowed them to take the course without spending time on travel because they lived farther away from the college. Some participants mentioned that they took the course to avoid early morning classes.

##### *4.1.2. Convenience of balancing personal, professional, and academic life*

Another important consideration for online mode of delivery was convenience of balancing personal, professional, and academic priorities. Twenty-four percent of participants indicated that the online option allowed them to pursue their academic studies, while maintaining full time employment and attending to their family needs. The participants of this study who took the course online mentioned that it was easier to complete their studies while working full time and having a family.

#### *4.2. Interactivity*

The findings and the analysis about interactivity are based on the learners' interaction with peers, faculty, and course content. Most of the online and in-class participants stated that class and group discussions were the main form for interacting and engaging in meaningful conversations. Although both groups indicated that discussions were an important aspect of interaction in the course, based on the data collected, it appears that online learners acknowledged using discussion boards as the only method of communication without identifying how this form of interaction enhanced their learning. According to the participants' responses, it is challenging to reliably determine how effective online discussions were for online learners. On the other hand,

participants who took the course F2F were more descriptive about their interaction. Another means of interaction with peers, faculty, and course content was through individual and group assignments. Both F2F and online participants mentioned that individual and group assignments were part of the course completion which fostered interaction with their peers. Finally, a large number of online participants stated that reading course materials also contributed to their engagement with the course content. However, F2F participants emphasized faculty expertise and knowledge of the subject as the main contributing factor to their learning. They mentioned that primarily faculty-led lectures and explanations helped students build their understanding of the principles and concepts taught in the course.

#### *4.2.1. Online Discussions*

Online discussion forums usually involve responding to initial questions posed by faculty. Students are expected to post responses to the questions and comment on their peers' opinions as well. This form of interaction is inclusive of all the participants and gives the opportunity for everyone to express their perspectives. Coleman (2009) identifies that "in an online environment, attendance to class is only evident if the student actually participates in classroom discussion. This increases student interaction and the diversity of opinion because everyone gets a say, not just the most talkative" (p. 97). Although the data do not provide an in-depth description of the nature and effectiveness of online discussion forums, most participants indicated that discussions were their main method of interaction in the course. This supports Coleman's claim that discussion forums support student engagement and learning. Participants who took the course F2F were able to reflect on their role in in-class discussions and comment on faculty expertise and teaching style. From the participants' responses, it appears that they appreciated immediate feedback from faculty and sharing views with both faculty and peers.

#### *4.2.2. Individual and Group Assignments*

Participants' interaction in the course was observed through individual and group assignments. While acknowledging the importance of completing group projects, the overwhelming number of the participants, both in online and F2F modalities, found it to be quite challenging. Rovai and Barnum (2003) note that group projects which are considered to be activities that promote active learning in an online setting, are believed to enhance student learning outcomes. However, they identified that students working with their peers in groups may pose "unique challenges and frustration" (p. 1). Students expressed their frustrations regarding poor communication among group members,



inadequacy of workload distribution, and difficulty of working with virtual group members.

#### *4.2.3. Reading Course Materials*

Students indicated that they engaged in the course by reading course materials posted on the Learning Management System. The study participants viewed their course participation through reading, listening, and interpreting course materials that are presented in required readings, videos, activities and interactive lessons. Evidently, online learners heavily relied on these resources, whereas F2F participants viewed their instructor as the main source of knowledge acquisition.

#### *4.3. Workload*

The majority of the participants (74%) who took the course online found the workload to be manageable. The findings showed consistency in responses across the different age groups. By contrast, F2F students indicated that they were overwhelmed with the course load that included a number of group assignments. However, it is important to note that in both modalities, students between the ages of 18 to 24 found the workload to be excessive, while students 25 years and older found the course to be manageable and informative.

#### *4.4. Performance*

Participants responded to the question regarding their performance by indicating excellent, good, adequate, and poor. Based on the data collected, both groups, online and in-class, viewed their performance as follows. For those who have noted excellent and good in both deliveries, there was no significant difference in opinion about their own performance (68% online and 74% in class). Online students who regarded their performance poor or adequate did not vary significantly in age. 15% of students aged 18 to 24 rated their performance poor or adequate, which is relatively similar to 16% of those aged 25 and above. There was some variation in in-class participants' responses who were not satisfied with their performance. Fifteen percent of students who rated their performance poor and adequate were between ages 18 to 24, and only 9% of students age 25 and above mentioned that they viewed their performance in the course as poor and adequate.

With respect to academic performance in both modalities, there was no difference in the number of students aged 18 to 24 who were dissatisfied with their performance in the course. However, it appears that there was a significant difference in the number of students in the 25 and above age group. As the data indicated, nearly twice as many

online students of this age group (16%) ranked their performance poor or adequate compared to their peers who took the course in class (9%).

#### *4.5. Challenges*

When responding to questions about challenges learners experienced in the course, both groups highlighted several challenges. For online participants, challenges mostly revolved around using technology, completing group work, and receiving timely feedback and communication from faculty. However, for in-class students, the greatest challenge was the group work.

##### *4.5.1. Technology Issues*

Some participants outlined that there were issues with accessing course information. There were technical challenges with weekly modules and completing tests, which added to their frustration and dissatisfaction with the course.

##### *4.5.2. Group Work*

A majority of the participants in the online and in-class course highlighted group work as one of the major challenges. Among the reasons adduced were difficulty communicating and collaborating with group members, unequal distribution of work, coordinating meeting times, and group members' disagreements. In addition, online learners also mentioned that group work was difficult to conduct because they never met their group members in person.

##### *4.5.3. Timely feedback and communication from faculty*

Some online participants voiced their dissatisfaction with the lack of communication and feedback provided by faculty. They found that the faculty were disengaged and participated minimally in the course. On the other hand, an overwhelming number of students (94%) who took the course in-class praised their professors for clarity of instruction, variety of instructional strategies, and genuine interest in student learning.

#### *4.6. Modality Preference for Future Learning*

When surveyed on their preference for the modality for future learning, 74% of the participants expressed their interest in taking another online course. However, only 59% in-class learners wanted to take their courses in the F2F modality. Even though the discrepancy is not significant, the interest in online modality is consistently rising. In

addition, a small number of participants (6%) expressed that they took the course online to gain a new experience.

## **5. Discussion**

This study examined student perspectives of their learning experience with online and F2F delivery of one course. The findings showed that students viewed their performance, challenges, satisfaction and achievement differently depending on the mode of delivery. Furthermore, this research identified the strengths and drawbacks of online and F2F learning.

Participants in this research highlighted that online learners appreciated the flexibility and convenience. The data collected in this study confirmed that mature students preferred online delivery. Particularly, students who had competing priorities and those who had to travel long distances stated that an online option provided them with the opportunity to pursue their education rather than postpone it. Some students (6%) specified that they preferred online modality to experience a new way of learning.

Students who chose the F2F modality highlighted the importance of interacting with faculty and peers because these interactions enhanced their learning through immediate feedback. Online learners, however, underlined a lack of prompt response from faculty. In fact, these learners indicated that it took a prolonged period to get feedback.

In terms of student engagement, in-class learners spoke favorably about the ability of their instructors to present course materials in an engaging and easily understood manner. On the other hand, online learners found it challenging to engage with faculty in this modality. Research has consistently shown that students respond favorably to instructor immediacy (Carr, 2000; Jung, Choi, Lim & Leem, 2002; Frederickson, Pickett & Shea, 2006; Grosso, Teresa & Grosso, 2012). In an online class, to increase instructor immediacy, student and faculty could interact through audio lectures, videos, emails, personal stories, images of faculty and students, and introduction pages (Halawi, Pires, & McCarthy, 2009).

Group work was overwhelmingly identified as the main challenge for online and F2F learners. In addition to unequal work distribution and poor communication generally related to group work, online learners were also dissatisfied with collaborating with group members virtually. Literature suggests that organizing group work and ensuring its success falls on the faculty. By establishing fundamental rules, identifying group member responsibilities, facilitating and supporting effective communication, faculty can assist in achieving higher success and collegiality among peers (Morgan, Bruce & Williams, 2009). These suggestions could also be applied to online and F2F group projects.

The limitations of this study were primarily related with its scope and chosen research method. The study was conducted at a Toronto college, and there was only one course was chosen to collect the research data. Although the findings from several sections of the course were included in the study, it could be beneficial to extend the scope of the study to gather input from students across various disciplines and colleges. This could provide more accurate and enriched data.

A survey approach has proven to be a valuable tool for data gathering in this study; however, other qualitative and quantitative methods could be used to provide more comprehensive view on students' perceptions about online learning. For instance, a facilitated focus group session could enhance the data. Each component that was researched in this study (learner preference, interactivity, work load, etc.) could be examined in more detail. A longitudinal study as a follow-up could offer valuable information about the impact of online learning and student success. Finally, conducting comparative research across similar countries could help recognize shortcomings and highlight the uniqueness of different practices.

## **Conclusions**

As online learning continues to be an area of growth in community colleges, the findings from this study provide information for institutions and college personnel to reflect on, and implement changes to their current practices. This study revealed that there was a difference in students' perceptions of their performance, challenges, satisfaction, and achievement in online and F2F modalities. Students taking online courses emphasize that flexibility, accessibility, convenience of balancing personal, professional, and academic life and their desire to experience a new way of learning as core factors that informed their decision. However, for F2F students, classroom interaction with peers, faculty, and course content were the main reason for their choice. The results from this research outlined that the greatest challenge for online learners is their ability to use technology and receive timely feedback and communication from faculty. However, the majority of online participants (74%) recognize that online learning is their preferred modality, and it provides them with the opportunity to achieve their educational goals.

As community colleges continue to expand their online offerings, higher educational institutions must continue providing professional development opportunities for faculty to further their knowledge in online learning. Such opportunities should include increasing faculty capacity to adequately manage a virtual classroom to effect a holistic student learning experience. Additionally, the ongoing allocation of funds is critical to ensure that instructional tools and pedagogies utilized in online and F2F instruction remain current and relevant for student success and satisfaction.

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