EXAMINING STUDENT PERCEPTIONS OF IMPORTANT FEATURES IN ONLINE COURSES: A STUDY BASED ON DEMOGRAPHIC AND CONTEXTUAL CHARACTERISTICS

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ABSTRACT

This study used a survey-based research methodology to examine the perceptions of 206 students of important features of online courses based on demographic and contextual factors. Overall, learner interaction was rated the least important compared to course design, course facilitation, course assessment, and learner support. The results show that English as Second Language (ESL) students rated the importance of learner interaction significantly higher than native English speakers. Graduate and undergraduate students also had significantly different ratings for course design. Students enrolled in accelerated online programs compared to students enrolled in regular, semester-long online programs had significant differences in terms of course design, course facilitation, and course assessments.

Keywords: online learning, course design, online course quality

INTRODUCTION

There has been a steady increase in the number of students enrolling in online courses in higher education. Statistics from the United States Department of Education (USDE) indicate that there were 6 million students enrolled in distance learning in Fall 2016 (Allen & Seaman, 2017). Similarly, the percentage of undergraduate students who exclusively take online classes grew from 8.4% in 2011-2012 to 14.4% in 2015-2016 (National Center for Educational Statistics, 2019a). The USDE also predicts the number of online students in the United States to increase by 15% in 2025 (National Center for Educational Statistics, 2019b). This explosion of the online delivery mode has prompted scholars to explore quality criteria for online learning that support student success and persistence. For that reason, multiple online quality frameworks have been developed to guide and promote course quality in the online learning environment in multiple aspects such as course design, course facilitation, evaluation and assessment, learner interaction, learner support, etc (Online learning scorecard, 2019; Quality Matters, 2019). Researchers have examined the importance of specific features in online courses, which are described below.

LITERATURE REVIEW

Course Design

Researchers have examined the importance of effective course design in online courses, some of which include clear navigation in online courses (Smisson & Sims, 2002), including course orientation (Ali & Leeds, 2009; Bozarth et al., 2004), measurable goals, and objectives clearly presented (Czerkawski & Lyman, III, 2016), a variety of instructional materials (Stavredes, & Herder, 2014), accessibility of the course materials through various devices (Dell et al., 2015), and chunking and organizing materials into smaller units or modules (Ko & Rossen, 2017).
Course Facilitation

Along with design, facilitation is a key element in online instruction. Instructor presence and connection are achieved through the facilitation practices of the online instructor (Martin et al., 2018). Some of the important facilitation aspects for online courses include the instructor introducing the course (Jones et al., 2008), sending periodic announcements to students (Eskey & Schulte, 2010; Kelly (2014), setting clear expectations, and communicating them (Stavredes & Herder, 2014), and participating in discussion boards (Mandernach et al., 2006). Other effective online facilitation techniques include the instructor being available for online office hours (Lowenthal et al., 2017), responding to questions promptly (Sheridan & Kelly, 2010), providing multiple ways of contact (King & Doerfert, 1996), and soliciting feedback from students about the online course (Watson et al., 2017).

Course Assessments

Course assessments that are used in face-to-face courses have to be redesigned for online delivery. Some of the common online course assessments include quizzes, essays, projects, research papers, discussions, surveys, etc. (Martin & Ndoye, 2016). It is critical for online courses to include assessments that are aligned to the course objectives (Jaggars & Xu, 2016). Students have to be given an opportunity to monitor their progress in the course through an online grade book (Sharp & Sharp, 2016). When online students are allowed to receive feedback from their peers, it assists them with their learning (Hsia et al., 2016). In addition, prompt feedback from instructors on assignments is critical for online learner success (Badiee & Kaufman, 2014; Sheridan & Kelly, 2010).

Learner Interaction

In online courses, it is common for students to feel isolated if the course is designed to be a self-paced course without any opportunity for engagement or interaction. Research has found that interaction is enhanced by providing opportunities for students to work in small groups or projects (Akcaoglu & Lee, 2016), providing multiple ways for students to interact with other students in the online class (Dixson, 2015), and having a discussion forum to discuss class-related issues or other issues without being graded (Cho & Tobias, 2016). Furthermore, research has also found that using synchronous tools enhances interaction among online students (Martin et al., 2017).

Learner Support

Learner support is critical to the success of online learners. If they do not receive the support they need, students tend to drop out of online courses (Milman et al., 2015). Research has examined the different types of learner support that are essential for learner success including technical support, academic support, and student support (Conceição & Lehman, 2016). Peer support in terms of online learning communities is also essential to the success of the online learner (Sundt et al., 2017).

Based on the research, all these five elements are essential in an online course to maintain quality: course design, course facilitation, course assessments, learner interaction, and learner support (Online learning scorecard, 2019; Quality Matters, 2019). A few studies have focused on examining multiple features in online courses in a single study. Martin et al. (2019) recommend three areas based on their interviews with award-winning online instructors for effective online course design and delivery: 1) online course design, 2) online course facilitation, and 3) online course assessment and evaluation. Sadaf et al. (2019) examined the impact of the eight categories of Quality Matter’s rubric and found that course activities and learner interaction had the highest impact on both student learning and engagement. There is still a need for more studies to examine multiple course features in a single study.

Demographic and Contextual Differences in Online Learners

While the quality elements reviewed above are important, demographic and contextual factors can also influence how online learners view the importance of these elements. Most of the studies inspired by the online quality frameworks tend to look at the online student population as one homogenous group without taking into account differences that could result from varied demographics and contextual characteristics.

Demographic characteristics such as age, marital status, whether native speakers or second language learners, first-generation or continuing students, full-time or part-time students, graduate
or undergraduate students, etc., may affect a student’s perceived importance of the features of an online course. There is little research that takes into account online student differences based on these demographic factors. Swaggerty and Broemmel (2017) found that graduate online students reported interaction and collaboration among students and between students and instructors as one of the features that facilitated learning. Similarly, Sebastianelli et al. (2015) found that MBA students’ perceptions of online course quality were significantly related to factors such as course content, interaction, and support. In both these studies, the students were from the same program and took the same course; however, there are only a few studies that differentiate different student level groups (graduate or undergraduate) and their perceptions of online course characteristics. For example, undergraduate students who grew up with the explosion of technology might adapt easily to online learning while that may not be the case for nontraditional, adult students who may have different needs and perceptions of an online course’s important features (Garces-Ozanna & Sullivan, 2014).

Hixon et al. (2016b) reported that nontraditional students rated factors such as course overview and introduction and course technology higher than their traditional counterparts in terms of online course quality. The authors further commented that “Because nontraditional students have multiple responsibilities, they need their online courses to be well designed, consistently presented, easily navigable, and appropriately aligned” (p. 1). While Hizon et al. compared traditional to nontraditional students, variations can exist within each one of these groups. For example, a traditional or nontraditional student who has only enrolled in one online course may have a different perspective than a traditional or nontraditional student who only takes online courses.

In addition to demographic factors, contextual factors such as whether a student is enrolled in a fully online program or a face-to-face program may influence students’ perceptions of what is considered important in an online course. Further differences could even exist with online programs depending on whether they are accelerated (condensed) online programs or regular, semester-long programs. As Hixon et al. (2016a) reported in another study, experience with online courses can positively impact students’ self-efficacy, which in turn can predict student satisfaction with online learning and successful completion of the course. The authors indicated that students with prior experience in online courses have different perceptions of their quality than those without similar experience. Other studies reported similar results in terms of students’ study skills (Wang et al., 2013), a higher level of satisfaction regarding course quality, and successful completion (Shen et al., 2013). While there is a significant amount of research to investigate online learners’ preference in terms of online course features, few studies have taken into account both demographic and contextual factors that may affect their perceptions. Most studies either focus mainly on demographic factors or on contextual factors alone. The present study is a contribution to fill that gap.

PURPOSE OF THIS STUDY AND RESEARCH QUESTIONS

This study considers the online student population as a diverse group based on demographics and contextual factors and examines whether online learners’ perceived importance of course features differs based on these two factors. In other words, this study aims to investigate what features that students consider important in online learning and how demographic and contextual factors may influence such considerations. The following research questions are addressed in this study:

1) What are students’ perceptions of the important features of an effective online course?

2) What demographic and contextual factors are related to online students’ perceptions of important features in online courses?

In this study, online courses are defined as courses that are completely offered online without any face-to-face meeting between students and instructors in the same physical space. Online courses as defined in this study may or may not include virtual synchronous meetings.

METHODS

Study Setting

This study was conducted in a four-year metropolitan midsize university with a mix of commuter and residential students. The total enrollment was 14,795 in the academic year.
2018-2019, with 82.1% being undergraduate and 17.2% graduate students, and 12.4% of students enrolled in fully online majors. About 40% of the undergraduate students are first-generation students, and 1/3 of the students are 25 years or older.

**Instrument**

This study used a survey-based research design and data were collected using a questionnaire we developed that integrated the various features of effective online courses. While we recognized the existence of instruments to assess online courses’ quality, this instrument was designed to include all aspects of online course design and delivery including course design, course facilitation, learner interaction, course assessment, and learner support, in addition to demographic and contextual factors. Only a few studies have taken into account different aspects of the diversity of the online student population in one instrument (i.e., synchronous vs asynchronous, accelerated vs full semester-long, student experience with online courses, etc.). It is for these reasons that we decided to develop an instrument that will integrate these different aspects of online course design and delivery along with demographic and contextual factors.

We developed the questionnaire by adapting questions from multiple survey instruments (Bangert, 2008; Bounds, 2001; Westra, 2016; Wilcox, 1998). We also used reports such as the 10 Principles of Effective Online Teaching (Hill, 2009), and the online college students’ comprehensive data on demands and preferences (Clinefelter & Aslanian, 2017).

The questionnaire was divided into 6 sections: Demographic and Context, Course Design, Course Facilitation, Course Assessment, Course Interaction, and Learner Support. There were 44 questions that included 10 demographic and contextual questions, and the remaining 34 questions focusing on the course features. Information related to whether a student is enrolled in an online program or a face-to-face one was obtained from the Office of Institutional Research. Such information also included whether the online program was accelerated or a regular, semester-long one. The student perceptions of the importance of course features were rated on a 4 point Likert Scale, with 4 being Very Important to 1 being Not Important.

The following procedures were taken to validate the instrument. First, content experts reviewed the developed questionnaire for content, construct, and predictive validity. We then gave the revised questionnaire to a small group of students who, through a read-aloud protocol, evaluated whether the questions were easily understandable. This process also aimed to reduce the risk of multiple interpretations of the questions being asked.

Cronbach alpha was used to measure the internal consistency of the instrument. The Cronbach for the overall instrument was .86. The different factors yielded the following results, course design = .64, course facilitation = .79, course assessment = .75, student interaction = .85, and learner support = .84. All factors had a Cronbach alpha above .70 except for course design.

**Data Collection**

This study was approved by the Institutional Review Board of the university. The survey was sent electronically to a sample of 2,440 students in both Spring and Fall of academic 2018-2019 at a midsize university in the United States. The inclusion criterion was that a student was to have taken at least one online course. An email invitation was sent to the student population via Qualtrics survey software. Two follow-up reminders were also sent before closing the survey. As an incentive, respondents were invited to enter a raffle to win $20.00. A total of 206 students responded, which corresponds to a response rate of 8.4%.

**Data Analysis**

Different analysis techniques were performed. First, descriptive statistics were used to report on the students’ perceptions of the importance of online course features. The second analysis was based on Pearson correlation to explore relationships among the different factors of the survey instrument. Finally, inferential statistics (T-tests) were used to examine the differences in the students’ perception of the importance of online course features across demographic and contextual factors.

**RESULTS**

**Survey Respondents**

The gender distribution among the 206 respondents was as follows: female 71.4%, male
indicated having taken between 1 and 3 online courses, 30.6% indicated having taken four to six online courses, 35.4% had taken more than six courses, and 6.3% did not respond. The majority of respondents (74.1%) were enrolled in face-to-face programs. Of the 53 respondents who indicated that they were enrolled in fully online programs, 30 of them (56.6%) were in accelerated online programs while 23 (43.6%) were in a regular, semester-long online program. The average age of the respondents was 28.8 years. Undergraduate students represented the majority of the respondents (73.3%) compared to graduate students (26.7%).

The sample demographics appear to be representative of the population under study. For example, institutional enrollment records indicate a higher proportion of female students during the time of the study. In the academic year 2018-2019, the total enrollment for the institution was 14,795 students with 8,884 (60.0%) of them being female and 82.1% undergraduate students. Furthermore, the majority of the students in the academic year 2018-2019 (87.5%) were also enrolled in face-to-face programs. Enrollment records also show that 1,840 students were enrolled in online programs with a higher proportion in accelerated online (62.5%) than in regular, semester-long online programs (37.5%).

**Relationship among Online Learning Course Factors**

Correlation coefficients among the different factors of the instrument were moderate and ranged from .457 to .729. This is within the range recommended by Watson et al. (2017), who suggested that correlation coefficients should be in the “moderate range wherein r values are between .20 and .80” (p. 1). Correlation coefficients among factors are reflected in Table 1.

<table>
<thead>
<tr>
<th>Online Course Features</th>
<th>Course Facilitation</th>
<th>Course Assessment</th>
<th>Student Interaction</th>
<th>Learner Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Design</td>
<td>.648**</td>
<td>.533**</td>
<td>.556**</td>
<td>.461**</td>
</tr>
<tr>
<td>Course Facilitation</td>
<td>.729**</td>
<td>.632**</td>
<td>.585**</td>
<td>.457**</td>
</tr>
<tr>
<td>Course Assessment</td>
<td></td>
<td></td>
<td>.587**</td>
<td></td>
</tr>
<tr>
<td>Student Interaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).

**Student Perceptions of the Importance of Online Course Features**

Table 2 provides the descriptive statistics of the course features in the five categories: course design, course facilitation, course assessment, course interaction, and learner support. At the category level, Course Assessment (M = 3.41), Course Design (M = 3.38), Course Facilitation (3.32), and Learner Support (M = 3.32) were rated higher than Learner Interaction (M = 2.64) in terms of importance in online courses. Items with the highest rating are indicated in italics in the table. For example making the course easy to navigate, setting clear and manageable goals, presenting lesson objectives clearly, and having a course accessible via different devices were the most desired features of course design for these respondents.

In terms of course facilitation, these findings also indicate that online instructors should post and send periodic announcements to course participants, clearly communicate expectations and requirements with specific criteria of success, and respond to students’ questions promptly within 24 to 48 hours. For course assessments, providing prompt feedback, providing an online grade book for students to monitor their progress, and aligning course objectives to assessments were highly rated features.

Learner Interaction was the lowest-rated category and the most desired feature was the opportunities to ask questions to the instructor and discuss assignments and other class requirements. Ease of access to technical support and, academic support online were the most desired features of learner support systems for the respondents of this study.

**Demographic Factors in Online Learning**

T-tests were computed to compare respondents on the different factors based on the following demographics: gender, age, first-generation,
Table 2. Descriptive Statistics of Online Course Features

<table>
<thead>
<tr>
<th>Online Course Features</th>
<th>M(SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course Design</strong></td>
<td></td>
</tr>
<tr>
<td>The course is easy to navigate</td>
<td>3.83 (.410)</td>
</tr>
<tr>
<td>An online course orientation on how to get started</td>
<td>2.90 (.997)</td>
</tr>
<tr>
<td>Goals are clear and manageable throughout the online course</td>
<td>3.79 (.508)</td>
</tr>
<tr>
<td>Module/lesson objectives are clearly presented</td>
<td>3.78 (.449)</td>
</tr>
<tr>
<td>A variety of instructional materials aligned with course and module objectives (e.g., textbook readings, video-recorded lectures, web resources) are available throughout the lesson/module</td>
<td>3.38 (.780)</td>
</tr>
<tr>
<td>Optional supplemental reading material from other sources available on the site that covers the same material</td>
<td>2.66 (.945)</td>
</tr>
<tr>
<td>A course that is accessible via different devices (phone, tablet, laptop, or desktop)</td>
<td>3.52 (.745)</td>
</tr>
<tr>
<td>Lessons being broken into smaller units or “chunks” (10–15 minutes instead of long sessions of 45–50 minutes)</td>
<td>3.26 (.891)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3.38 (4.01)</td>
</tr>
<tr>
<td><strong>Course Facilitation</strong></td>
<td></td>
</tr>
<tr>
<td>Instructor introduction is available</td>
<td>3.00 (.967)</td>
</tr>
<tr>
<td>Instructor posts or sends periodic announcements to the course participants</td>
<td>3.48 (.721)</td>
</tr>
<tr>
<td>Instructor clearly communicates the expectations and requirements with specific criteria of success</td>
<td>3.83 (.413)</td>
</tr>
<tr>
<td>Instructor participates in discussion board topics</td>
<td>2.80 (1.00)</td>
</tr>
<tr>
<td>Online “office hours” when the instructor is available to respond to questions</td>
<td>3.09 (.934)</td>
</tr>
<tr>
<td>Instructor responds to students’ questions promptly (24 to 48 hours)</td>
<td>3.81 (1.476)</td>
</tr>
<tr>
<td>Instructor provides multiple ways of contact (email, phone, face-to-face, etc.)</td>
<td>3.31 (.863)</td>
</tr>
<tr>
<td>Instructor solicits feedback from students about the online course</td>
<td>3.78 (.886)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3.32 (.515)</td>
</tr>
<tr>
<td><strong>Course Assessments</strong></td>
<td></td>
</tr>
<tr>
<td>Assessments are aligned to stated course objectives</td>
<td>3.62 (.624)</td>
</tr>
<tr>
<td>Opportunity to demonstrate learning through a variety of assignments and activities (quizzes, tests, discussion, essay, projects, and surveys)</td>
<td>3.37 (.748)</td>
</tr>
<tr>
<td>There is a focus on problem-solving assessments that are applicable to real-life situations</td>
<td>3.33 (.754)</td>
</tr>
<tr>
<td>Opportunities for students to monitor progress instantly after submission through an online grade book</td>
<td>3.63 (.639)</td>
</tr>
<tr>
<td>Explicit performance/grading criteria, rationale, and/or characteristics are provided for assignments</td>
<td>3.66 (.554)</td>
</tr>
<tr>
<td>Opportunities for students to receive feedback from peers before assignment submission</td>
<td>2.68 (1.01)</td>
</tr>
<tr>
<td>Prompt feedback from the instructor on assignments</td>
<td>3.64 (.627)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3.41 (.456)</td>
</tr>
</tbody>
</table>
employment status, native language, and student level (graduate or undergraduate).

Significant differences were only found with two factors: student interaction and course design with specific groups of respondents. There were significant differences between English as Second Language students and native speakers concerning student interaction. Similarly, there were also significant differences between graduate and undergraduate students in terms of course design.

There were no significant differences with respect to gender, age, first-generation, and continuing generation students, and whether students are employed outside of school or not. There were also no significant differences between students in online majors and students in face-to-face majors in terms of their preferences. The number of courses a student has taken was also not significant. The next section presents the findings for those two factors where significant differences were found.

Course Design

There were significant differences between graduate and undergraduate students in terms of course design. Graduate students have a higher rating of importance for course design with a medium effect size based on Cohen’s (1977) d guidelines (see Table 3).

Since graduate students may be older, a follow-up regression analysis shows that age is a predictor of students’ perceived importance in terms of course design. The model explained 12% of the variance ($R^2 = .126$, $F[5, 176] = 5.06$, $p < .001$). The older students have a significantly higher perceived importance for course design ($\beta = .423$, $p < .001$).

Learner Interaction

Learner interaction was the factor with the lowest average score. This is also the only factor that was significant when English as Second Language (ESL) learners were compared to native speakers. Even though there were fewer ESL learners (13), they had a significantly higher mean than their native speaker counterparts. In other words, students who don’t have English as a first language rated student interaction as more important than students whose first language is English, with a medium Cohen’s d effect size (see Table 4).

Contextual Factors in Online Learning

The contextual factor that was examined in this study was whether the online course was accelerated or not. Students in accelerated online programs had significantly higher means than their counterparts in nonaccelerated online programs based on the importance of course design, course facilitation, and course assessments. Table 5 shows the results for the three factors with a medium to large effect size according to Cohen’s (1977) guidelines.

Table 3. Comparison between Graduate and Undergraduate Students with Respect to Course Design

<table>
<thead>
<tr>
<th>Student Level</th>
<th>Graduates</th>
<th>Undergraduates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Course Design</td>
<td>28.1</td>
<td>2.81</td>
</tr>
</tbody>
</table>

* $p < .05$

Table 4. Comparison between ESL and English Native Speakers Students with Respect to Learner Interaction

<table>
<thead>
<tr>
<th>First Language</th>
<th>ESL</th>
<th>English native speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Learner Interaction</td>
<td>15.53</td>
<td>3.84</td>
</tr>
</tbody>
</table>

* $p < .05$
Learner Support Rated High

Students rated course design, assessment, facilitation, and learner support high in terms of their importance. This shows that the respondents thought that these factors are important to succeed in an online course. Descriptive data in Table 2 shows which specific items were rated higher in terms of their importance within each factor. Researchers have examined these factors and recommended their importance in online learning (Jaggars & Xu, 2016; Lee et al., 2011; Martin et al., 2018; Vonderwell & Boboc, 2013). Jaggars and Xu (2016) in their article discussed the importance of online course design features, including course organization and presentation, learning objectives and assessment, interpersonal interaction, and helpfulness of twelve facilitation strategies in their article. Vonderwell and Boboc (2013) discussed the importance of formative assessments in instructional support, peer support, and technical support as three important areas of support for online learners.

Learner Interaction Rated Low

On the other hand, it was surprising that the respondents in this study rated learner interaction as low in terms of its importance. Several researchers have examined interaction and its importance in online learning (Abrami et al., 2011; Croxton, 2014; Sher, 2009). Online learning research has examined and found that interaction and engagement were critical to online student success and also that students value instructor interaction higher than learner interaction (Martin & Bolliger, 2018). Our findings conflicted with findings from Sadafet al. (2019), who found that course interaction had the highest impact on student learning and engagement when examining several online course features based on the Quality Matter’s rubric. Our findings also conflicted with Arbuaugh and Rau (2007), who found significant correlations between students’ perceived learning and different types of interaction in MBA online courses. This category could have been rated low because four out of the five items in the instrument focused on learner-instructor interaction and only one item focused on learner-learner interaction. Furthermore, the item related to learner-instructor interaction—“Opportunities for students to ask questions to the instructor (discuss assignments, class requirements)”—was the highest-rated item in the Learner Interaction factor, as opposed to working in small groups with peer students, which was the lowest-rated item. Another reason for it being rated low could have been due to the different types of learners who completed the survey and courses they took. While higher level and graduate-level courses need a significant amount of interaction, lower-level courses may need minimal interaction (Rungtusanatham, Ellram, Siferd, & Salik, 2004)

ESL Students Rated Interaction Higher than Native Speakers

This study revealed that students whose first language is not English significantly rated learner interaction as very important compared to native speakers. More specifically students whose first language is not English rated working in small groups on class projects as more important than the native speakers. Researchers have examined the importance of interaction for ESL learners in online learning (Choo et al., 2014; Omar et al., 2012; Wu & Marek, 2011). Wu and Marek
(2011) found that interaction increases confidence, motivation, and the ability of English as foreign language learners. Choo et al. (2014) in their study found evidence of the coconstruction of knowledge among ESL students through interaction and collaboration. This shows that non-native English speakers might value interaction in online learning more than native English speakers.

**Graduate Students Rated Course Design Higher than Undergraduate Students**

While researchers have examined age as a factor in online learning studies and found that fully online students tend to be older (Johnson, 2015; Kummerow et al., 2012) and more self-regulated (Colorado and Eberle, 2010), there is still limited research comparing graduate and undergraduate students in online courses. Another finding from our study that contributes to the literature is how graduate students significantly differ from undergraduate students in terms of course design. More specifically, graduate students show a higher level of importance for features like having an online course orientation component, varied instructional materials in terms of types and format, and the provision of optional supplemental materials. Graduate students may be older and see the importance of course design differently compared to undergraduate students. There is still a need for more research to examine student perceptions of online learning features based on undergraduate or graduate student status. This finding is different from findings from Lao and Gonzales (2005), which found that graduate students considered online learning communities, availability of their professors, and having the right equipment to be important for online courses but did not emphasize the importance of course design.

**Accelerated Online Program Students Rated Course Design, Course Assessments, and Course Facilitation Higher than Regular, Semester-long Online Program Students.**

Several universities are moving to accelerated models for online learning. Our study found that students in accelerated online programs rated the importance of course design, assessments, and facilitation higher than those in regular, semester-long programs. Trekles and Frampton (2017), when examining graduate students’ perception in accelerated online courses, found that consistent course structure, content, and delivery are highly important as students can quickly acclimate themselves to the course. Since the course time is condensed, the students in accelerated programs might have valued these elements similar to the findings from Trekles and Frampton’s (2017) study.

**IMPLICATIONS**

Our findings have practical implications for online course instructors, instructional designers, institutional effectiveness coordinators, administrators, and students. Online course instructors can use these results to make sure their online teaching practices take into account practices that promote the important features reported in this study by learners, but more specifically to make sure differentiated instruction is applied to address the different needs of diverse learners as indicated in these results. Exploring and understanding features that online students consider important in distance learning could increase students’ satisfaction with online courses and potentially help enhance program retention and completion (Song et al., 2004b). Specifically, it is important for online instructors to include all the elements essential for course design, assessment, and facilitation, and learner support as students consider these elements as important. Though learner interaction was not rated high, it was found that ESL students considered interaction to be more important compared to the other students. Hence online instructors who work with ESL students have to take this into account and build learner interaction opportunities that can support ESL students. Also, when instructors teach graduate-level courses, it was found from this study that graduate learners considered to be important features like having an online course orientation component, varied instructional materials in terms of types and format, and optional supplemental materials and therefore these have to be built into the graduate-level course design.

The findings also have implications for instructional designers who support faculty in designing online courses. Instructional designers can offer professional development focusing on the effective elements in online courses for faculty who wish to transition to online teaching.
These professional development sessions can specifically focus on course design, assessment, and facilitation, and on learner support. The findings from ESL students and graduate students can also be included as recommendations by instructional designers as appropriate when they work with faculty in one-on-one consultation or large group training. Institutional Effectiveness coordinators can also use these results and make sure they are taken into account when developing procedures and instruments for evaluating online courses. Including aspects related to the findings of this study in the student course evaluations, for example, can help institutions monitor the effectiveness of their online course delivery. The findings are helpful for administrators who provide resources for online course development. They could offer incentives for faculty to design effective online courses, train faculty on how to design effective online courses or other support, and recognize faculty for effective online course development. Finally, effective online courses benefit online students, especially when learner differences are considered.

LIMITATIONS
A major limitation of this study is the low number of certain groups of students (i.e., non-English native speakers and graduate students) that hinders a thorough analysis of the results based on the demographic characteristics. Since this is survey-based research, the majority of the data collected were self-reported and there could be a response bias in the participants’ responses. Also, the 8.4% response rate of the survey is low but is similar to what is seen in online surveys (Fan & Yan, 2010; Manfreda et al., 2006). Finally, the course features included are not an exhaustive list, and there could be items that we did not include.

FUTURE RESEARCH
Future studies are recommended to focus on investigating various groups of students in terms of the factors they consider important for an effective online course. Specifically examining the differences of ESL students and native speakers and the perceptions of graduate students and undergraduate students, and students in accelerated courses and regular, semester-long online programs could be explored in detail. Comparing faculty perception of important online course features with the students might be helpful to see if faculty and students agree on the importance of various features.
REFERENCES


National Center for Educational Statistics (2019a). Number and percentage of undergraduate students taking distance education or online classes and degree programs, by selected characteristics. Retrieved from https://nces.ed.gov/programs/digest/d16/tables/dt16_311.22.asp?current=yes


APPENDIX
Online Course Features Questionnaire

On a scale of 4 to 1 where 4 represents “Very Important” and 1 represents “Not Important” please rate the importance to you of each of the items for online courses.

Course Design
• The course is easy to navigate
• An online course orientation on how to get started
• Goals are clear and manageable throughout the online course
• Module/lesson objectives are clearly presented
• A variety of instructional materials aligned with course and module objectives (e.g., textbook readings, video-recorded lectures, web resources) are available throughout the lesson/module
• Optional supplemental reading material from other sources available on the site that covers the same material
• A course that is accessible via different devices (phone, tablet, laptop, or desktop)
• Lessons being broken into smaller units or “chunks” (10–15 minutes instead of long sessions of 45–50 minutes)

Course Facilitation
• Instructor introduction is available
• Instructor posts or sends periodic announcements to the course participants
• Instructor clearly communicates the expectations and requirements with specific criteria of success
• Instructor participates in discussion board topics
• Online “office hours” when the instructor is available to respond to questions
• Instructor responds to students’ questions promptly (24 to 48 hours)
• Instructor provides multiple ways of contact (email, phone, face-to-face, etc.)
• Instructor solicits feedback from students about the online course

Student Interaction
• Opportunities for students to work in small groups on class projects
• Multiple ways for students to interact with other students in the class (discussion, email, chat, etc.)
• Availability of a discussion forum where students can post and respond to other students’ questions about assignments or other issues without it being graded
• Opportunities for students to ask questions to the instructor (discuss assignments, class requirements, etc.)
• Use of synchronous web conferencing tools to enhance interaction among students

Course Assessment
• Assessments are aligned to stated course objectives
• Opportunity to demonstrate learning through a variety of assignments and activities (quizzes, tests, discussion, essay, projects, and surveys)
• There is focus on problem-solving assessments applicable to real-life situations
• Opportunities for students to monitor progress instantly after submission through an online grade book
• Explicit performance/grading criteria, rationale, and/or characteristics are provided for assignments
• Opportunities for students to receive feedback from peers before assignment submission
• Prompt feedback from the instructor on assignments

Learner Support
• Technical support resources are easily accessible online
• Academic support services are easily accessible online (library, tutoring, etc.)
• Student support services are easily accessible online (counseling, disability services, career center, etc.)
• Availability of online learning communities

What other components should be included in an enjoyable and effective online class?

Other Comments:

Demographics
• What is your gender?
  • Male
  • Female
  • Other

• What is your age? _____________________________________________

• Are you a first-generation student?
  • Yes (1)
  • No (2)

• Which of the following best describes your marital status?
  • Married (1)
  • Divorced (2)
  • Single never married (3)
  • In a relationship (4)
  • None of these (5)

• Is English your first language?
  • Yes (1)
  • No (2)

• Are you employed outside of school?
  • Yes, full time
  • Yes, part-time
  • Not employed outside of school

• How many online courses have you taken so far?
  • 1–3
  • 4–6
  • More than 6
• Do you plan to take more online courses?
  • Yes
  • No

• Based on your answer above, please explain why.

• Given the choice, which of the following best represents your course delivery mode preference?
  • Definitely prefer a totally online course
  • Prefer a mostly online course with few face-to-face meetings
  • Prefer a mostly face-to-face course with some online modules
  • Definitely prefer a totally face-to-face course

This survey will redirect you to a site where you can enter your name and email address to participate in the raffle to win $20 on your university card. Participation in the raffle is optional and not required.