Student Perceptions of Engagement in Online Courses: An Exploratory Study

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Abstract

Given the increasing numbers of students who choose to learn online, educators should understand the conditions necessary for student success in this environment. Previous studies have documented that student engagement is essential to student learning, retention, persistence, and satisfaction. In this descriptive qualitative study, we sought to understand how students conceptualize engagement in online courses as well as to understand what elements students perceive to be engaging. For this work, we interviewed or surveyed 40 students who shared their perceptions of engagement in online courses. We uncovered several key themes related to types of engagement including behavioral engagement, cognitive engagement, social engagement, emotional engagement, and agentic engagement. Additionally, the students described specific course elements they find engaging. We offer suggestions for distance learning administrators and instructional designers who wish to work with instructors on engaging students in the online learning environment.

Introduction

In 1998, too few fully online courses existed for researchers to take an account of student enrollment. According to the most recent Babson Research Survey Group report, which presents data collected under the U.S. Department of Education's National Center for Education Statistics' (NCES) Integrated Postsecondary Education Data System (IPEDS), in the fall of 2016 there were nearly 6.4 million students taking online courses (Seaman, Allen, & Seaman, 2018). This figure represents 31.6 percent of total enrollment. This report also documents that distance education enrollment has increased for the fourteenth straight year in an environment that that struggled within overall declining enrollment since 2012 (Seaman et al., 2018). According to the Education Departments National Center for Education Statistics, the proportion of all students who were enrolled exclusively online grew to 15.4 percent (which is up from 14.7 percent in 2016). This means that about one in six students are studying online. The share of all students who mixed online and in-person courses grew slightly faster, from 16.4 percent in 2016 to 17.6 percent in 2017. The proportion of all students who took at least one course online grew to 33.1 percent, which is up from 31.1 percent in 2016 (Grinder, Kelly-Reid, & Mann, 2019).

With the growth in importance of online learning as an instructional form, ever-increasing numbers of faculty are teaching online courses. Findings from a 2013 survey of more than 2,200 faculty members indicated that 30% of faculty have taught online (Seaman et al., 2018). Faculty at all career ranks, part- and full-time faculty, and faculty teaching at a range of institutional types have developed and taught online courses. Findings from this study about faculty participation in online learning correspond to other studies, which also indicate that a growing number of faculty are beginning to teach online. Lederman and Jaschik (2013) conducted a study with 2,251 faculty members. The findings support those of Seaman's (2009) earlier study of more than 11,000 faculty, which indicated that by the fall of 2008 just over one third (34.4%) had taught a course online and nearly one quarter of all faculty (23.6%) were teaching one course online at the time. More recent research involving a study with 95 chief academic officers (Learning House, 2019) found that about two-thirds of the online courses (67 percent) are taught by full-time instructors, and the other third by adjunct professors (31 percent). Institutions are less likely to require training than to require it. Almost a quarter of institutions (23 percent) do not require professors to any activities to prepare for online teaching, and the percentage of academic officers ranged from a high of 45 percent for self-paced training on the institution's online education technology (learning management system, etc.) to about thirty percent for training on online course design. With evidence to suggest that almost one third of faculty members are teaching online and that more are planning to do so in the future, this instructional form appears to have reached what Rogers (1983)

called the "tipping point" in diffusion of innovation, in this case instructional innovation. According to Rogers (1983), it takes 25% of individual adoption to reach a "tipping point" of acceptance. That is, online learning appears to have become common instructional practice among higher education faculty. The evidence suggesting that most faculty don't receive any formal training for teaching online suggests that we need to provide faculty with more information about teaching in the online environment.

High-ranking officials also have signaled the growing importance of online learning in higher education in several ways. In the Sloan Foundation survey, for example, while in 2002, fewer than 50% of all higher education institutions reported that online learning was critical to their long-term strategy, by 2011 that number was 66%. In the 2013 survey, 90% of administrators indicated a belief that it is "very likely" or "likely" that all students will be taking at least one online course in the next five years. It seems clear that administrators believe that online learning is occupying an increasingly important role in institutions of higher education.

In 2016, Quality Matters and Eduventures Research formed the Changing Landscape of Online Education (CHLOE) to conduct research on online learning. Among their first efforts was to track Chief Online Officers (COO) perspectives of the field. Their survey of 280 COOs signifies the growing importance of online learning. From increased number and types of campuses, to increases status of online learning officers (growing numbers and shifts in the organizational chart), to the amount of time and effort being spent on online innovation, clearly this form of distance learning is getting a stronger hold on higher education (Garrett & Legon, 2019).

With the growth of online learning during the past three decades and the likelihood for its continuation, there have been notable challenges to its success, which are largely connected to the concept student engagement. While we know from research on onsite courses that engagement is critical to student success (Bawa, 2016), researchers have not fully addressed the question of what makes an online course a more or less engaging learning experience for students. Since student engagement is critical, we need to understand what engagement is and how we can best plan for it in online environments. The purpose of this descriptive qualitative study was to discover how students conceptualize and recognize student engagement in the online setting.

Literature Review

Online Learning

A growing body of evidence suggests that online learning is an effective method for helping students achieve learning outcomes. A recent Education Resources Information Center (ERIC) search found more than 3,000 research or evaluation studies on the effectiveness of online learning at the higher education level were published in peer-reviewed journals between the years of 2000 and 2019. Around a tenth of these studies involved a direct comparison between online and offline program models. These studies largely suggest that online and offline courses often have similar outcomes, or a finding of "no significant difference," with some studies suggesting online are slightly better and some suggesting offline are slightly better, in the area of cognitive gain (National Research Center for Distance Education and Technological Advancements, 2019). According to the National Research Center for Distance Education and Technological Advancements (DETA), strong evidence exists to defend the "no significant difference finding." That said, this research is accompanied by much criticism. Some educators argue that online learning is inferior to onsite learning. Indeed, in ten national surveys of chief academic officers conducted by the Babson Survey Research Group from 2002-2015, no more than about a third of the officers reported that faculty accept the value and legitimacy of online education. These numbers ranged from a low of 28 percent in 2002, 2005 and 2014, to a high of 34 percent in 2007. As the researchers concluded, "a continuing failure of online education has been the inability to convince its most important audience— higher education faculty members—of its worth."(Allen, Seaman & Straut, 2016). Additionally, the criticism has included questioning whether the "no significant difference" studies were rigorous or if they asked the right questions. Specifically, DETA has compiled a bibliography of hundreds of studies that compare online courses (or other forms of distance education) to onsite ones. Many of these have questioned the "no significant difference" research itself, from whether the studies were rigorous to whether they asked the right question. Some meta-analyses of such studies, however, have in general confirmed the "no significant difference" indication. One of the most recent meta-analyses of these studies was conducted by the US Department of Education. The researchers found that "*on average, students in online learning conditions performed better than those receiving face to face instruction*" (Means et al., 2009, p. ix). The researchers also found that "*the effectiveness of online learning approaches appears quite broad across (p. xv)*. In other words, online learning has proven effective for undergraduates, graduates, and academic and professional students. Several scholars claim that research aiming at the comparison between online and offline courses has been largely exhausted (Bernard et al., 2009; Clark 2000; Gunawardena and McIssac, 2004; Mishra & Koehler, 2006; Lockee, Moore, and Burton, 2001; Yin et al., 2018). What we have yet to document as clearly is what experiences or course features make online courses more or less effective for student learners and learning.

Student engagement

Educators suggest that we don't have a clear understanding of what student engagement is. As one educator suggested, "an explicit consensus about what we actually mean by engagement or why it is important is lacking," which illustrates the complexity of the idea (Bowen, 2005, p. 3). There is some agreement at a broad level about what student engagement is, however, and these characteristics provide an essential framework for understanding student engagement. Student engagement in general is students' willingness and desire to contribute and be successful in a learning process that leads them to higher-level thinking and long-term understanding. Barkley and Major (2020) suggest that student engagement is the mental state students are in while learning, representing the intersection of feeling and thinking. We believe that "engagement requires a psychological investment on the part of the learner as well as persistence in undertaking the learning task" (Major, 2015, p. 208). Additionally, several interconnected factors such as motivation, attention, involvement, and intellectual effort can support engagement initiatives. Finally, instructor actions can prompt engagement. In one study for example, researchers found that students in courses where faculty used more non-verbal immediacy behaviors (e.g. emoticons/figurative language, color, cohesion, visual imagery, and audio in course design; response latency, length, time of day, and message frequency in forums; and type and promptness of feedback via grading and email), student engagement was higher (Rogers-Stacy, 2017). In order to engage online learners, we need to advance a distinct understanding of student engagement in an online setting. Likewise, we need to understand the concept from the perspective of the ones who are, or are not, engaging: the students. And we need to understand common features and elements of online course design and delivery that can promote student engagement.

Conceptual Framework

With little research on creating engaging experiences online and multiple perceptions of the term "engagement," a conceptual framework helps the various concepts and themes derived from the review of literature and data analysis. Reeve and Tseng's (2011) study described various levels of student engagement. Specifically, the researchers argued that student engagement is a four-component construct: behavioral engagement, emotional engagement, cognitive engagement, and agentic engagement.

Behavioral engagement includes students' effort, determination, contribution, and compliance with the course (Wentzel, 2003; Reeve & Tseng, 2011). There is little consistency on the definition of emotional engagement (Wentzel, 2003; Reeve & Tseng, 2011). While perceptions differ, two definitions have emerged from prior research. Sciarra and Seirup (2008) described emotional engagement as the degree to which students feel a sense of belonging and "the degree to which they care" (p. 218). Skinner and Belmont (1993) defined emotional engagement as students' feelings of curiosity, pleasure, apprehension, and irritation during their efforts towards success. Cognitive engagement includes students' motivation, skills, and approaches to improving their work (Metallidou & Viachou, 2007; Reeve & Tseng, 2011).

The prior three variations of engagement have been continuously defined and described in prior research. However, Reeve and Tseng (2011) were the first to suggest that agentic engagement is a fourth aspect of student engagement. They defined agentic engagement as "students' constructive contribution into the flow of the instruction they receive" (p. 1). Figure 1 displays their four-component model and suggests interactions between different types of engagement leads to student achievement of learning outcomes. Since prior research noted the discrepancy of student engagement meanings among students and faculty, using various components of the term should invoke more meaningful discussions.

Methods

The purpose of the study was to explore the concept "student engagement" in online courses. Our research questions were:

- How do students define student engagement?
- How do students define student engagement in online courses?
- What experiences and features of online learning do students find engaging?

Our research approach for learning about the concept of student engagement was a descriptive qualitative study. A descriptive study is useful for examining events or phenomena experience by individuals or groups. The approach is useful for providing an extensive summary of the situation. Rather than asking "why" or "how," the descriptive qualitative researcher examines the "what" (Major, 2013).

To carry out this descriptive study, we created an open-ended, online survey for students on "student engagement." The survey consisted of nine of open-ended questions about engagement. Forty students participated in our study.

Demographic data from students was collected prior to the open-ended questions.

Seventy percent of students were classified as full-time taking between six and sixteen credit hours per semester. A majority, 75.7%, were graduate students. Eighty percent of students listed their ethnicity as "white" and 70% identify as female. While most students (86%) classified themselves as residential students, defined as most courses taken were taught in-person and on-campus, all students had taken at least one course online. Areas of study varied, but the majority of the students were enrolled in an education program. Higher education administration and instructional leadership were the two most common.

We used thematic analysis to identify common themes and trends in the data. During the first cycle of coding, we used initial coding and read transcripts as we created codes that defined what we were reading (Charmaz, 2014). Saldaña (2013) explains that "initial coding is breaking down qualitative data into discrete parts, closely explaining them, and comparing them for similarities and differences" (p. 100). The second cycle of coding, or recoding, was needed to better refine the categories and themes found in the data. Abbott (2004) likened this round of coding to "decorating a room; you try it, step back, move a few things, step back again, try a serious reorganization, and so on" (p. 215). We coded all surveys and found that we reached theoretical saturation, in which we were able to answer the research questions and were finding recurrent themes.

Findings

We found several key themes in the data. The themes most often were associated with different types of engagement and the strategies or course features necessary for engagement to occur. They also included students' thoughts about who is responsible for student engagement.

Cognitive engagement

Definition. Most student respondents stated that engagement in the classroom must be "active." They pointed to the idea of their own involvement in their learning as well as to the notion of intellectual effort. As one participant explained, students "must be involved in the learning process." Interestingly, when asked about student engagement online, several of the students tipped to descriptions of learning that happen in a physical classroom. For example, one student said:

> "Student engagement is defined as students actively participating in the learning process. Instead of passively sitting in a classroom and doing the bare minimum to get by, student engagement entails that students participate in thoughtful discussion, and go above and beyond on assignments in order to learn."

Another student, talking about student roles, said that students:

- "are fully invested in the learning process, whether by participating in classroom discussions with faculty and classmates, completing reading assignments or other projects outside of class time, or by generally committing to the class.

Students felt they had to put forth cognitive effort in order to engage. But they did not articulate how that engagement differed between online and onsite classes.

Strategies. Students often described active learning strategies in which they had participated as engaging. Strategies included leading the discussion one week, completing activities such as WebQuests, and developing authentic projects, such as portfolios kept them active and engaged in learning online. Students knew that to engage, they could not be bystanders, but instead participatory members of the learning environment. They wanted important and meaningful work, not busy work or rote tasks. While they knew they had to engage, they wanted teachers to design environments in which that is possible. Another student explained a positive and engaging experience as follows:

> "The best experience that I had in an online course is where the professor had us post weekly on two different topics. The first topic was given to us by the professor. The second topic was picked by the individual student but had to be relevant to the weekly lesson. Each student had to respond to two classmates. With the first topic, the professor was preparing us for the type of questions that were typical on comprehensive exams. The second topic was to engage the student by letting us research and pick something that was interesting to us as individuals. Some students complained that it was a lot of extra writing due to the length of the posts. I aced my comprehensive exams for the program and that class was a big factor in my improving my writing skills. She also sent us weekly motivational quotes or pictures."

Emotional engagement

<u>Definition</u>. Students had to connect with the course on an emotional level. That is, they had to have a positive view of the course and of the importance of learning. They had to believe that they could succeed. They had to want to learn. And, they understood this as well as its interconnection to other types of engagement. One student described engagement, specifically pointing out the personal and emotional aspect, in addition to the cognitive one, say that engagement is "The level of involvement of students personally, emotionally, and academically pertaining to a course both in and out of the classroom."

<u>Emotional engagement strategies</u>. Students were unsurprisingly less vocal about emotional engagement than they were about cognitive engagement, but they had some specific suggestions for faculty, as follows:

- "Be challenging, but again show some personality in the class. Incorporate some reflective or introspective assignments."
- "Be open minded to different viewpoints. Encourage creativity. Allow time and space for collaboration. Provide students a rubric or expectations for student engagement. Allot time for students to respond to posts"

Engaged behaviors

While our conceptual model suggests that behavior and agency are types of engagement, we found that cognitive and emotional engagement had to be in place for students to demonstrate engaged behaviors. That is, students had to want to engage, and they had to exert the effort to engage, prior to *doing* things that demonstrate engagement and prior to taking ownership for the course. They recognized when they were engaged and offered several behaviors that document their engagement in their own learning. Moreover, agency emerged as a type of engaged behavior. Students described the following engaged behaviors.

<u>Showing up.</u> One of the key indicators of engagement was simply showing up. Engaged students describe logging into the course and completing their assignments and talking with their instructors and peers. They demonstrated engagement through trying to learn the information, rather than just passing the test. They showed engagement by demonstrating their attempts to understand the bigger picture of the assignment rather than just attending to the requirements. They were active in reflections about their learning. One student shared that to be engaged, students have to, "Be open-minded. Be active participants. Put forth an effort to deep thinking and constructing a sound response. Be a good listener. Make sure you reread for clarity."

<u>Interacting with others.</u> Students often mentioned collaborating with peers as a key way they demonstrated engagement. Specifically, many students responded that discussion boards and forums are ideal tools for engaging. As one student said, "Therefore, I would suggest that a professor's foremost objective is to rekindle the social interactions of online students. Once the students begin working as a unified system, then learning outcomes/processes become more alluring." Additionally, they also noted the importance of interacting with the teacher. They wanted timely and insightful feedback from the instructor. Social presence was an important factor to their perceptions of engagement.

<u>Exercising self-management and agency</u>. Students believed that a level of accountability and self-direction should be implemented in the classroom. One respondent said that students should be "actively involved in and accountable for their own learning." Another said, "self-discipline is key." They indicated that this autonomy leads to further involvement and comprehension of the material. Additionally, this self-guidance can result in students taking the initiative to reach out to their classmates and/or instructors and yield better efficiency within the online course. They also wanted leadership opportunities in the course, sharing some of the authority with their instructor and their peers.

Shared responsibility between faculty and students

Most students believed that engagement should be a shared responsibility. One respondent stated, "We are all-students and faculty- fully responsible for both teaching and learning." Another said,

> "Just as a student must take the initiative to learn, the teacher must take the initiative to teach (mutual responsibility). This sense of 50/50 can also be applied to student-student relationships, too. Any situation in which one side is exerting too much and the other is not receptive/contributing is doomed for inadequacy."

For online learning, the interconnectivity of the course can be an ideal setting for this shared responsibility.

Even though describing it as shared responsibility, they acknowledged the instructor's critical role in student engagement. One student said:

> "An engaging professor draws students in. Even students who are not inclined to be engaged. Part of prof's responsibility is to make students engage and learn, even when they don't know they want to. An engaging and fun class can be refreshing and fulfilling."

Another said, "While students must take the initiative to interact and build up trust with each other, it is up to the professor and course design to facilitate this process."

Discussion

Distance learning administrators need to set policies that encourage faculty to build in efforts to engage students in their learning. While students understand their role as engaged learners, it is essential to design courses that create opportunities for engagement to happen. The key is for instructional designers to help faculty learn how to make their courses more engaging for the students who will participate in them. These strategies need to blend cognitive engagement prompts with emotional engagement and motivation in ways that will lead students to engaged behaviors. From our findings, we offer the following strategies for engaging students online.

Encourage online faculty to use student-led pedagogies. Pedagogies such as lectures and demonstrations tend to be instructor led, while pedagogies such as cooperative learning, team-based learning (TBL), and problem-based learning (PBL) tend to be learner led. While both approaches have value, pedagogies in the latter group provide opportunities for students to take an agency role in their own learning. The best approach is likely a mix of instructor-led and student-led pedagogies, which will help students understand that both the teacher and the learners are involved in and responsible for learning.

Encourage online instructors to use pedagogies that empower students in the pedagogical process. Students can be involved in the pedagogical process in a variety of ways, through contributing their own goals to course goals. They can also have opportunities to serve as the instructors at some point in a given course, for example through student created micro teaching videos, digital stories, web sites, collages, letters, personal learning environments, or other (for a fuller list of teaching techniques, see the K. Patricia Cross Academy, nd). These approaches are motivating and provide students with an opportunity to engage cognitively and to exert agency.

Encourage online instructors to use pedagogies that allow students to connect their personal interests to course content. Students are more likely to be interested in topics that involve them directly, as an adult educational theory suggests. Adult learners are internally motivated and self-directed. They bring experiences and knowledge to their learning that they want to apply. They are practical and want learning to be relevant to their own experiences. In addition, adult learners want to be respected. Designers can work with instructors to build in these opportunities.

Encourage instructors to use pedagogies that simulate reality. Students tend to be more engaged in activities that feel real to them. Pedagogies based on realistic experiences for students can range from case-based learning in which students strive to solve real-world problems presented in the form of case studies to game-based learning, in which students participate in simulations and immersive games. These approaches are motivating and they provide opportunities for deep learning and higher order thinking.

Encourage instructors to use pedagogies that have students create authentic products. Authentic learning involves activities that are contextualized in real life, rather than decontextualized to the classroom. These approaches not only make engagement and ultimately learning more visible, but also more real for the students. Activities like book reviews, digital storytelling, surveys, data analysis, book reviews, case studies, and so forth can allow students to approach a meaningful task and to produce a real and enduring product that documents their learning in a tangible way.

Encourage instructors to use varied pedagogies that require documented student action
Just as onsite students need breaks from content consumption to actively engage in their learning, so do students in online courses. There are many activities that faculty can implement to ensure student activity, even when presenting content. Short video lectures juxtaposed with active learning assignments (such as posting to a discussion board or uploading content), for example, is one option. Written content maybe be interspersed with links to assignments that invite activity, such as the opportunity to comment on a content

post. Students can engage in a range of activities such as accessing information, sharing information, contributing information, creating information, and curating information.

Conclusion

Our study revealed that students view "student engagement" to be active and participatory amongst both students and faculty. Our findings show also that in order for "student engagement" to be achieved, communication must be encouraged and accessible for all members of the course. Our hope is that this research will help those who are developing online courses to create opportunities that enable students to communicate, problem-solve, critique, and create. While most are familiar with these techniques in the traditional, face-to-face setting, they cannot be ignored or neglected in online classrooms. Technology, including Learning Management Systems, can be used to support different types of student engagement among the digital learning community resulting in deeper and more meaningful learning.

Table 1. *Research Question & Methods*

Research Question	Methods
What experiences and features of online learning do students find engaging?	Questions from the semi-structured interview questions. Interview questions related to this question included questions about emotional, behavioral, cognitive, and agentic engagement. Specifically, we asked students to describe both the positive and negative attributes of online courses as it related to their level of engagement.
How do online students define student engagement?	Each semi-structured interview began by asking the participant to define student engagement. Specifically, "What is student engagement and what are your experiences with the concept?"

Figure 1. *Reeve & Tseng's (2011) four-component model of student engagement*
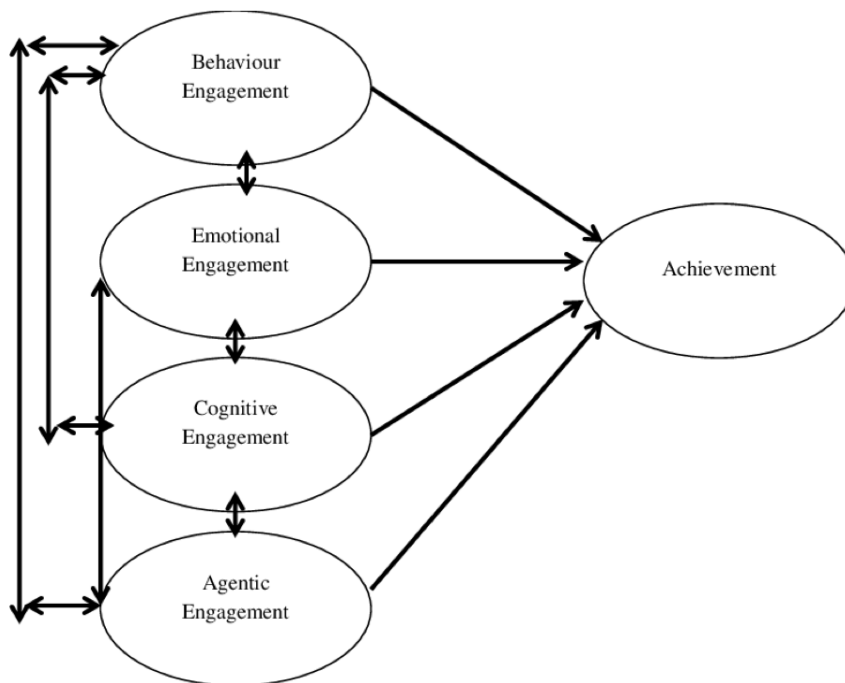
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