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Building a Sense of Belonging in an Asynchronous Online Course: Lessons Learned from Student Voices

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Abstract

A sense of belonging is a significant factor in college students' satisfaction, persistence, and ultimate graduation from an institution of higher education. This fact is equally important to traditional and virtual classrooms. Given the increase and popularity of online learning, it is imperative that approaches that foster a sense of belonging are included in the strategic planning process to improve student retention among online students. In this pilot study, 33 online undergraduate students' perceptions of a sense of belonging were examined using a modified version of the Psychological Sense of School Membership Scale. Students submitted their responses to the scale anonymously via a Qualtrics survey. Results suggest students experience a sense of belonging in the virtual classroom and attribute their perceptions to the instructor's teaching strategies and a positive online environment.

Keywords

Sense of Belonging, Online Learning, Teacher-Student Relationships, Higher Education

1. Introduction

Online learning has expanded exponentially over recent years. Data provided by the National Center for Educational Statistics reveals that 36 % of undergraduate students were enrolled in at least one online class in 2019. In contrast, 61% of Fall 2021 undergraduate students were enrolled in at least one distance education course (NCES, 2024). This educational delivery system continues to trend upward. Projections reported by Carlton et al. (2024) in *Forbes Advisor* suggest that the e-learning market will grow by 20.5% from 2022-2030. The popularity of online learning has been attributed to many factors. The most often cited is flexibility.

Online learning allows students to be employed and simultaneously complete a degree or certification. Accessibility is another appealing aspect. The convenience of online learning offers students access to instruction anywhere where the internet is available. The cost of online learning compared to traditional in-person learning is another glaring factor. Tuition for online learning tends to be higher. According to Hanson (2024), the in-state tuition cost for an online degree compared to tuition for a public university is approximately $40,926 versus $39,000 for the same degree in person. However, once the cost for housing, meal plans, transportation, and other ancillary (i.e., recreational center, campus parking, etc.) fees are assumed by in-person students, the traditional mode of instruction is considerably more expensive. Ultimately, online learning offers academic institutions and policy makers an educational platform that meets the needs of the communities in which they serve. At the same time, this welcomed tool also invites similar discussions framed around retention management and student success strategies associated with traditional enrollments (Muljana & Luo, 2019: pp. 19-57; Peacock & Cowan, 2019: pp. 67-81). The retention of online students is a major problem for institutions of higher education. Although there is not a substantial body of research in this area, James et al. (2016: pp. 75-96) found that the retention rate for fully online students at 4-year institutions was 60% - 65% compared to 75% - 80% for students in blended or seated courses. Students experiencing a sense of belonging is a key factor in student retention. Satisfaction rates, persistence rates, graduation rates, and GPAs rise when students feel a sense of belonging in their online program (Laux et al., 2016: pp. 452-464; Thomas et al., 2014: pp. 69-80). Therefore, it is imperative that approaches to foster a sense of belonging are included in the strategic planning process to promote student retention among online students.

2. Theoretical Framework

A sense of belonging and student connectedness are often used interchangeably. Student connectedness encompasses the feelings of involvement and closeness in a specific group, environment, or organization (Townsend & McWhirter, 2005: pp. 191-201; Hagerty et al., 1996: pp. 235-244). However, a sense of belonging goes much deeper in that it refers to a student feeling accepted, valued, and understood by a group and feeling they fit within the group (Goodenow, 1993: pp. 21-43). School belonging is predicated on social and psychological positive interactions with peers, teachers, student support personnel, and other members of the academic community that influence the educational environments of the students (Booker, 2021: pp. 65-84). Maslow's Theory of Self-Actualization offers a useful theory for examining how educators can support school belongingness with their students. According to Maslow's hierarchy (Maslow, 1943: pp. 370-396) of needs theory, a sense of belonging is a psychological need that must be met to ascend to the next level of needs, such as esteem and self-actualization. Maslow contends students must feel connected to others and valued by those in their learning environment before they are motivated to achieve (Booker, 2021: pp. 65-84). In sum, before students can demonstrate movement towards reaching their full potential, they must feel a sense

of belonging as well as believe they belong (Booker, 2018: pp. 1-15). Conversely, students who feel less connected to school and less engaged in the classroom often exhibit an increase in behavioral, psychological (i.e., anxiety, depression, loneliness, alienation), and academic problems that lead to decreased student motivation and academic performance (Booker, 2007: pp. 301-317; Marchant et al., 2001: pp. 505-519; Murdock, 1999: pp. 62-75; Wentzel, 1998: pp. 411-419; Goodenow, 1993: pp. 21-43; Deci et al., 1991: pp. 325-346). Overall, "belonging and classroom community are regarded as significant predictors of students' psychological well-being and positive adjustment to school" (Booker, 2018: p. 1). Thus, student academic performance flourishes when students experience a sense of belonging but suffer without it. In this pilot study, the following research questions were examined:

1) What are students' perceptions of a sense of belonging in an online asynchronous class?

2) Which instructional practices do students identify as strategies that contribute to a sense of belonging in their asynchronous online course?

3) How can instructors promote a sense of belonging in an asynchronous online course?

3. Methods

3.1. Setting and Participants

Survey data was collected from 33 undergraduate students enrolled in an asynchronous online multicultural education course. This multicultural education course resides in a College of Education at a large Midwestern public university in the United States. Background information gathered from all students' Cultural Autobiographies revealed that study participants' (33) identified as either African American, Caucasian/White or Latino/Hispanic, attended mostly urban or rural schools, Christian beliefs dictated family and social life, and the student or his/her parent is the first to attend college.

3.2. Description of the Multicultural Education Course

The conceptual framework of the course holds a social justice orientation, whereby over a 16-week period, the students participated in a variety of learning experiences (i.e., readings, discussions, videos, and case studies) that addressed various dimensions of cultural diversity and social justice. The learning was designed to encourage students to engage with and unpack academic literature and make sense of this in relation to their own experiences of identity, diversity, and difference (Mills & Ballantyne, 2010: pp. 447-454). Furthermore, the course critically examines the nature of diversity itself, fosters sensitivity and respect for diverse learners, and helps individuals recognize similarities and differences in patterns of development, communication, and learning in a multicultural society. In terms of professional education goals, the course is designed to:

1) Increase self-awareness about one's own cultural background;

2) Learn about the values, beliefs, and behaviors of various ethnic, cultural, and

groups;

3) Identify personal cultural attitudes, values, and beliefs about diverse populations and become aware of their impact on behavior;

4) Assess the impact of culture on individual, family, education, and societal interactions;

5) Develop knowledge, skills, and attitudes that will facilitate one's ability to work and communicate more effectively with individuals who are culturally different from oneself.

3.3. Procedure and Instrumentation

A modified version of the Psychological Sense of School Membership Scale (PSSMS) (Goodenow, 1993: pp. 21-43) was used to survey student perceptions of a sense of belonging in their asynchronous online multicultural education course. The scale measures perceptions of a sense of school belonging in research investigating associations between the relational quality of educational contexts and motivational and achievement outcomes (Goodenow, 1993: pp. 21-43). The scale consists of items on a 5-point Likert scale ranging from "not at all true" (1) to "completely true" (5). The survey also included an open-ended question. This item asked participants, "Which instructional practices adopted by your instructor contribute to a sense of belonging in the course?" The research study was introduced in week 13 of the 16-week semester. The instructor of this class served as the principal investigator of the study. Responses to the PSSMS were delivered via a link to a Qualtrics survey. To ensure anonymity, student submissions offered no information that could be used to identify the respondent. Further, students were informed participation was voluntary and that participation or non-participation had no bearing on the outcome of final grades. This decision was intentional to minimize "socially desirable" responses. Although it cannot be ruled out, the possibility that such responses were represented in the data.

3.4. Data Analysis

For this pilot study, mean scores were calculated for responses to each item on the modified version of the Psychological Sense of School Membership Scale. The constant comparative method was used to identify these emerging themes from open-ended responses. In this process, concrete instances of data were linked together into more general categories (Guba & Lincoln, 1994). The function of this data analysis was to identify specific pedagogy that participants believed contributed to a sense of belonging in the asynchronous online multicultural education course. The following section elaborates on the results of the questionnaire and the major themes that emerged from the open-ended question.

4. Findings

Table 1 shows the mean scores for responses to each survey item on the modified version of the Psychological Sense of School Membership Scale. Mean scores were calculated to determine the overall perceptions of each item described on the scale.

Except for one item, mean scores ranged from 4.40 - 4.90. The range of scores suggests the described instructional practices are more aligned with being "completely true." For the item "I feel like I can talk to the instructor if I am having a non-academic", the mean score was 3.60. This is not surprising, given the distant nature of an online class.

Table 1. Survey findings.

Survey Question	Mean Score
My instructor makes me feel like I am a member of our online learning community.	4.40
I feel like I can talk to the instructor if I am having an academic problem.	4.90
I feel like I can talk to the instructor if I am having a non-academic problem.	3.60
My instructor communicates with me in a friendly and respectful manner.	4.80
My instructor has created an online environment that promotes social interactions with the instructor and peers.	4.85
Course content allows me the opportunity to express my personal interests.	4.60
Personal opinions communicated in coursework are valued and welcomed.	4.60
My instructor provides me with extra support with coursework when needed.	4.75
My instructor cares about me successfully passing the class.	4.90

The open-ended responses offered insights into the pedagogy adopted by the instructor, which contributed to students' perceptions of the sense of belonging in the class. Two themes emerged from this qualitative data: methods of instruction and the online learning environment. Table 2 shows the responses to the open-ended question "Which instructional practices adopted by your instructor contribute to a sense of belonging in the course?" in relationship to the aforementioned identified themes.

Table 2. Selected student responses to survey open-ended question.

Methods of Instruction	Online Learning Environment
Always leaves positive feedback and actively provides proper feedback.	My instructor was always super polite and encouraged a positive virtual classroom during discussion boards.
While I was struggling in the course, my instructor gave me the opportunity to complete late work.	My professor makes sure we're comfortable during the course and that everyone has a civil answer to each other during the assignments.
She makes sure to check in with us and sends weekly reminders of the coursework we should be completing.	Professor XXX has made me feel very included when it comes to learning academically in the way that she interacts with me, and she always seems to be interested in how I am doing.
At the start of the semester, she replied to every Discussion Board "introduction" with an individualized email.	The discussion boards are to be kind and respectful. If I have any issues at all, I know I can email her, and we will come up with a successful plan to address the problem.
She respects my opinions expressed in assignments.	My current instructor has created a wonderful, welcoming learning environment that promotes a "sense of belonging". There is no judgment in this class, and she truly cares about us. As long as we communicate with her, she is very understanding.
My professor was great with getting back to me if I had any questions about the material.	Our discussion boards allow us to communicate with our classmates and share our opinions in a respectful manner.

5. Discussion and Recommendations

This study examined student perceptions of a sense of belonging in their online asynchronous course. Data from the Psychological Sense of School Membership Scale revealed elements that contributed to their sense of belonging in the course. Qualitative data generated from an open-ended question corroborated questionnaire findings. The findings suggest that the instructor facilitated a sense of belonging by implementing instructional practices that provided a clear plan for academic success, created opportunities to express personal interests, valued student opinions, and maintained an online environment that promoted positive and respectful interactions between the instructor and students and peer to peer relationships. As reported by Holt (2021: pp. 1-2), face-to-face courses have an advantage because students associate a physical presence with their class, they know faces and voices, and they may even have their favorite chair. Unfortunately, these factors can not afforded by online instruction. This research study offered insights into strategies that can be used to promote a sense of belonging in an online class. Research is limited in this domain; however, available literature (Northeastern CATLTR, 2024; Booker, 2021: pp. 65-84; Turner & Zepeda 2021: pp. 127-138; Matthews, 2020: pp. 2786-2795, Goodenow, 1993: pp. 21-43) offers numerous strategies. The following approaches are not a comprehensive listing of instructional strategies that promote a sense of belonging. However, it offers a start to endless possibilities.

- Create interactions where students' voices are welcomed and valued by peers and the instructor.
- Build connections with students by extending invitations to communicate.
- Ensure accurate and timely communication via email, Zoom, etc.
- Communicate a commitment to student success.
- Communicate high expectations with a clear path to academic success.
- Provide flexibility in timeframes for assignment completion.
- Design opportunities for peer-to-peer interaction in activities and assignments.
- Design content with cultural inclusion in mind.
- Demonstrate empathy and care for students.
- Help students see you as a "real" person: Share aspects of your personality and background in ways that are comfortable for you and professionally appropriate.
- Correctly pronounce students' names during Zoom meetings or in-person meetings.
- Use students' preferred pronouns in communications.
- Use a warm tone and personal language in communications: Use first-person pronouns like "we" and "our" to emphasize class community.

6. Limitations

This study is not without limitations. First, this study relied on 33 students enrolled in a multicultural education course. Because of the small sample size and the uniqueness of the course, it is not feasible to generalize findings from this

study to other asynchronous online courses. Second, the subjects were enrolled in the principal investigator class. Although subjects were informed that participation was anonymous and participation or non-participation had no bearing on the outcome of final grades, it cannot be ruled out that socially desirable responses were represented in the data. Lastly, in the literature review, "sense of belonging" is often used with different terms and definitions. As such, this may impact the efficacy of the present study in the author's efforts to explain a sense of belonging in an asynchronous virtual classroom.

7. Conclusion

As the popularity of enrolling online increases, the need to create safe spaces within these virtual educational environments also heightens. Feeling isolated is very unsettling for students, whereas feeling included diminishes doubts and fears. Instructors play an integral role in forming a sense of belonging among their community of learners in online classrooms. They are responsible for employing strategies, tools, and techniques to build community within the virtual classroom that increases the engagement of all students. In sum, instructors are the orchestrators of the social contexts for learning, whereby the curriculum and student interactions work in concert to create an environment that promotes a sense of belonging and high academic achievement. The entryway to this cyclical and fluid process begins with an instructor establishing a positive relationship with each student and has no clear end. As teachers' self-awareness and the understanding of students deepen, the concert continues with a different melody along a road of discovery and exploration.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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