What personal characteristics affect a learner's sense of community and satisfaction

in an online program?

Brenda Quintanilla

University of North Texas

Abstract

Participants for this study were selected using a combination of convenience and purposeful sampling. The students were asked if they would like to participate in a research study aimed at uncovering how a sense of community may be formed through personal characteristics as they pertain to satisfaction in an online program. Following the online survey some students were selected for an additional follow-up interview. Specific aspects explored in the survey and interviews were the student's career goals, comfort level with using technology and the student's background and cultural views. Survey and interview participants were students in the Learning Technologies Department of a major university in the southern United States. The study was conducted spring semester of 2013.

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Learning communities, described by Etienne Wenger (1997) as "communities of practice", have been an integral part of the higher education experience for more than 20 years (Drouin & Vartanian, 2010). It is no surprise then that the same concepts that foster interactivity and social learning found in a face-to-face community have moved into the online environment (Drouin & Vartanian, 2010). Etzioni and Etzioni (1999) define the two components of community as "1) a "web" of relationships between individuals and 2) a commitment to common meaning and values." (Drouin & Vartanian, pg 2). According to Haythornthwaite et al. (2000), a learning community emerges when language, collaboration customs, learning practices, and resources in the online setting mature into an ideal state. Do these personal connections and attributes aid in fostering a satisfactory online learning community?

Research thus far indicates that collaboration and group cohesion are an integral part of an online community. One interesting aspect of the online community environment is the personal "ties" that bind these learners and how these ties contribute to their sense of community. Haythornthwaite et al (2000) summarizes that there are a number of positive outcomes derived from creating an online community. One of these outcomes includes these strong interpersonal ties, which increase the willingness to share information and set the stage for a collaborative environment. Haythornthwaite et al (2000) further explain that these communal links foster commitment to group goals, the availability for support, group cooperation, and satisfaction with group efforts.

Despite the increased use of learning communities in online educational environments, there have been few attempts to determine how the personal characteristics of learners affect

their sense of community.   To uncover how a sense of community may be formed through intimate characteristics, this study will survey and question students who are enrolled in a community-focused, online program.   The researchers will evaluate sub-questions that focus on how important the following aspects are to the student's sense of community and satisfaction in an online program: 1) The online student's career goals; 2) The online student's comfort level with using technology; and 3) The online student's background and cultural views.

Responses will be weighed to determine if participants indicate a sense of importance with these characteristics and if this connection has an impact on the participant's satisfaction level with learning communities.

Research Methods

Participants and Setting

Participants for this study were selected using a combination of convenience and purposeful sampling. The students were asked if they would like to participate in a research study aimed at uncovering how a sense of community may be formed through personal characteristics as they pertain to satisfaction in an online program. Following the online survey some students were selected for an additional follow-up interview. Specific aspects explored in the survey and interviews were the student's career goals, comfort level with using technology and the student's background and cultural views. Survey and interview participants were students in the Learning Technologies Department of a major university in the southern United States. The study was conducted spring semester of 2013.

Data Collection Methods

The data for this study was gathered by doctoral level students enrolled in a qualitative research course in the spring 2013. A survey comprised of multiple choice, Likert scale and

open-ended questions was made available to students for one week through an online survey. It took participants approximately 30 minutes to complete the survey. Instructors in the Learning Technologies Department were sent a request from a lead professor asking that they submit the survey to their students. It was suggested that students receive extra credit for completing the survey and/or offering to give an interview. The instructors distributed the survey link via email. After the data collection period had closed, the results were exported into a spreadsheet.

In addition to the online survey, a doctoral student contacted students who indicated they were willing to be interviewed. The interview was advertised as not lasting more than 15 minutes, conducted either over phone or other online communication method, and pertained specifically to the three sub-questions mentioned in the introductory section of this paper (i.e., career goals, comfort level with technology, and cultural views).   The interview responses were then combined with the survey data.

Survey Analysis

The data responses from the survey were obtained from 44 graduate students enrolled in various online courses at a large Texas university. This survey included demographic questions such as age, gender, ethnicity, and degree level as well as questions about the comfort level of the tools/activities and sense of community in an online course.   Survey information was collected in two stages. The first stage was a 40-question survey conducted online through Qualtrics. The second stage asked participants to agree to an interview. The interview would then be used as a secondary data collection instrument. The combination survey and interview data was then evaluated to determine if personal characteristics contributed to a learner's sense of community in an online course.

Of the students who chose to participate in the survey, 22 (50%) were females and 22 (50%) were males. A total of 33 (75%) were of white ethnicity, 6 (13%) African-American, 3 (7%) Hispanic and 2 (5%) Asian. The age of the students ranged from 22 to 58. Fifty-nine percent were over the age of 30. All of the students (100%) listed Texas, USA, as their home state.

The researchers were particularly interested in examining responses that connected to the three sub-questions listed in the Methods section. These sub-questions relate to: 1) career goals, 2) comfort levels with technology, and 3) cultural views and how these personal characteristics pertain to building community and course satisfaction.

When examining questions that related to career goals it was found that all students (100%) indicated they were taking courses because they were pursuing a career goal versus taking courses recreationally. When asked what degree they were pursuing, 25 (56%) indicated that they were pursuing a Bachelor's degree, 16 (37%) a Master's degree, and 3 (7%) a Doctoral degree. The current professional status question revealed the following: 2 (5%) students are college professors, 7 (16%) are teachers, 6 (14%) are full-time students (not working), 3 (7%) are managers, 12 (27%) are professional staff, 4 (8%) are non-management, and 10 (23%) indicated other. When asked how important having similar career goals were to building community (Table 1), 23 (52%) felt that it was somewhat important to building community in their online courses, and 12 (27%) indicated that it was definitely important. The data shows that the students are career oriented and are taking online courses to further career ambitions. From their responses, the data also indicates that having similar career goals did play a role in building their sense of online community.

   Questions relating to comfort levels with technology revealed that 42 (95%) students

were taking at least 3 or more classes during the semester. Thirty-nine (87%) were taking at

least 3 or more online classes during the semester. In addition, 6 (14%) had taught online

courses in the past. Table 2 indicates that 24 (55%) felt very comfortable using video

conferencing technology as a student, 18 (41%) felt comfortable using video conferencing

technology as a moderator, 29 (66%) felt comfortable using instant messaging, and 33 (75%) felt

comfortable with using email in their online classes. The most surprising response from those

listed in Table 1 was that 21 (48%) said the biggest role in building an online community was the

comfort level with being an online student. This indicates that understanding the technology and

how to use it play a large role in building an online community rather than just the other

participants in the course.

   The survey also focused on cultural and background similarities with peers in their online

classes. When asked about the importance of having shared cultural norms with other students

15 (34%) responded that it was somewhat important as an influence in their community building,

11 (25%) responding that it was not important at all. Having similar family obligations was also

somewhat important for 17 (39%) and definitely important for 12 (27%). Regional differences

did not seem to be of great importance; 15 (34%) students responded it was not important and 11

(25%) responded that it was a little important. Only 2 (5%) responded that it was very important.

It appears that shared cultural norms are of somewhat to little importance and family obligations

are somewhat to definitely important to influencing community building online.

Table 1: Factors that influence the building of community in online courses

Question	Not	A little	Somewhat	Definitely	VERY!
Having shared cultural norms	11	10	15	6	2

with other students					
The amount of time spent in online learning system tools	4	4	14	16	6
The speed of response during virtual interactions	1	4	6	19	14
Having similar career goals with other class members	2	4	23	12	3
Having similar family obligations as other class members	6	8	17	12	1
Your comfort level with being an online student	2	3	6	12	21
Regional location differences	15	11	9	7	2

Table 2: Personal levels of comfort with online learning activities

Question	Very Comfortable	Comfortable	Not Comfortable at all
Teaching online (you as the teacher)	9	20	15
Using Video Conferencing technology as a student	24	17	3
Using Video Conferencing technology as a moderator	16	18	10
Using Instant Messaging in an online class	29	13	3
Exchanging emails as part of an	33	10	1

online class			
Working in virtual worlds	15	23	6
Blogging	14	22	8
Using gaming in education	12	23	9

Instrument Analysis

The researchers used two types of instruments to conduct this study. The first instrument was an online survey platform entitled Qualtrics. This platform was used to disseminate the research survey to the research participants. The research questions were entered into Qualtrics by one team member who, in turn, asked the team for feedback, made modifications, and then distributed the survey to the participants. The survey was active for approximately 4 days when two issues arose. A respondent reported through his professor that his ethnicity, Hispanic, was not an available response in the survey. Second, it was realized that the question asking for interview volunteers was inadvertently left from the survey. As soon as this was noticed, the survey was closed, the ethnicity question was corrected, the volunteer question was added, and the survey was reopened. Because the question was omitted from the survey, and participants were needed, the team member in charge of Qualtrics contacted participants who had already completed the survey to ask for interview volunteers. In the same email, students who had already completed the survey were invited to submit a correction for their ethnicity by email to the team member in charge of the survey, and they were also encouraged to let any student they knew of who had abandoned the survey for this reason to restart. In addition, regarding the volunteer pool, any participants who responded after the change were included in the interview volunteer pool. The rate of agreement to interviews was noticeably higher among those

encountering the question in the survey. When the survey ended on the 6th day, a total of 44

participants had responded, of which 12 volunteered to be interviewed. It was then discovered

that because the survey had been opened, closed, and re-opened, the responses were being pulled

into two separate reports. That report data was then combined into one report. Two students

reported ethnicity changes. One survey response was modified to report Hispanic for ethnicity.

A second student reported a mixed ethnicity not supported by the survey design. This student's

ethnicity response was not changed. Data both before and after the survey correction indicate the

population is predominantly white.

   After reviewing the survey data, three additional interview questions emerged. These

questions expanded on the subtopics of career, culture, and technology comfort levels and how

they play a role in community building in online courses and satisfaction with that community

and the course. Once these questions were agreed upon, all three researchers used the same

interview questions.

   The second instrument used in this research study was an interview. The 12 participants

who volunteered to be interviewed were divided into three groups of four. The researchers of

this study (a total of three individuals) took one of those groups and each interviewed one person

from that group. The interview analysis in this paper is based on those three interviews only.

   Volunteers were contacted through email and asked to schedule an interview. The

interviews were performed through a telephone call. To capture the interview, a recording was

made using an audio recording program called Audacity. Audacity captured the interviews and

the recordings were transcribed. The interview transcriptions were then individually coded for

further analysis.

Interview Analysis

The interview portion of this study took about 20 minutes to complete and then was subsequently coded using the value coding method. The coding data was later combined by the researchers and categorized into a value, belief or attitude. Each interview question brought out certain differences as well as similarities between those interviewed. Most importantly, it helped provide information on how a sense of community may be fostered, and also how it is not, in online courses.

All individuals interviewed indicated difficulties with various technology-centered course components. These difficulties ranged from participating in a Second Life or World of Warcraft meeting without any prior experience, needing extensive experience with Adobe Creative Suite, facilitating discussions through the rigid Blackboard forums and also difficulty in locating course resources when they are divided among a Learning Management System and website. Generally speaking, these technology difficulties did not affect their ability to form a sense of community in their online courses, and it was noted in more than one occasion that despite the challenges individuals were still satisfied with the course as a whole.

In common among all individuals interviewed is a high value placed on sharing ideas and conversing with other students that have similar career goals. Specifically, idea sharing and communicating with individuals in similar career paths can often be easier and more satisfactory and also having common ground with other students is preferred. One individual can be quoted as saying "when we are all doing different things it really helps to collaborate that group synthesis that you are building and just for that gain of information".

One individual questioned, however, what happens when there are not others in your courses that have similar career goals? This individual relayed feelings of frustration in not being able to relate to colleagues and their careers in class - although the student's communication

skills seem to accommodate the disconnect between the two career paths. Those interviewed were also generally in agreement that sharing ideas with students in different career paths is also valuable as you get to view different perspectives on the same issue. It was discovered that community building was enhanced with adequate and timely communication among individuals doing team projects in similar or different career goals - especially in regard to team projects.

Background and culture was not found to significantly contribute to how satisfied individuals are in their online community experience. One individual cited communication skills learned through being a 'missionary kid' is responsible for his satisfaction in online community experience. Yet another indicated that yes, their background and culture did contribute to how satisfied they were. When asked to expand upon this point, however, the individual remarked, "I don't really know how to explain it, but yeah I do."

Generally speaking, despite being unfamiliar or uncomfortable using some of the technology in their courses, the students seemed overall satisfied with their online communities and courses in general. Additionally, students were satisfied in working with individuals in similar and in different current and future career paths, though interacting with those in similar careers is generally easier and more satisfying. Finally, from students interviewed, there does not appear to be a strong connection between background and culture and how satisfied students are with their online community experience.

Literature Review

Exploration of previous studies indicates that there is an abundance of research focusing on distance learning communities. Most of the research in these studies focuses on ways to improve learning within the learning community, or building better communities through instructional design and teacher interaction (Shea. 2006). A closer look indicates that there are

limited studies that provide research data specifically focused on the personal characteristics of online learners and how these characteristics relate to building community in online learning communities.

In 2001, Dr. Ruth Brown conducted a qualitative study using grounded data. The purpose of the study was to "develop a theory about the process through which community formed" (Brown. pg. 1). From her study, seven conditions arose as being needed for an online community to form and be successful. Instructor modeled behavior was gauged as the least important needed for success. A feeling of camaraderie was indicated as being the most important condition. Brown's study found that topics like common career goals and cultural backgrounds fell lower on the paradigm of importance (#6).   Those results mirrored what was found in our study. Surprisingly, technology comfort levels, which rated somewhat of importance in our study, fell low on Brown's paradigm of importance (#5). Brown's study indicated that camaraderie, conferment (membership) into the community, and making online friends were the top 3 priorities in online learning communities.

Other studies have shown that a crucial factor for creating online communities is social presence (Burrell, et.al. 2009).   Specifically that social presence and trust is established through "increased levels of comfort, intimacy, self reliance, and self knowledge" (Burrell, et.al. 2009). A student's social presence is an important "precursor to collaboration and fruitful discussion" (Kear. Pg. 3). Kear (2010) found that one way to increase a student's social presence is by helping them feel as if they know each other. Encouraging members to use profiles and introduction tools can do this.   The question is whether these personal characteristics are important when considering learning communities and how to build a sense of belonging. The aim of this study is to contribute to the answer.

Conclusion

In conclusion, the results of this study show that when building a sense of community in an online course, certain personal characteristic play a greater role than others to form community cohesion. Participants indicated that comfort levels with using technology and being an online student contributed greatly to their sense of community. A small percentage of survey respondents felt that similar career goals and family obligations are definitely important. The interviewers, on the other hand, expressed that conversing with students who had similar career aspirations and goals is extremely important when building communities. In turn, they also indicated that communicating with students who have other career goals built community. Interaction and collaboration, in general, seemed to be the key to creating a sense of community. Interestingly, differences in background and cultural were only somewhat important to about a third of the participants in the survey.   The interviews also indicated that different cultural backgrounds did not play a significant role in how satisfied they were in building their online communities.

There are many studies that focus on distance learning communities. There are few, however, that focus specifically on the learner, their personal characteristics, and how they interplay to create these communities. From this study, it is clear that further research would enlighten educators about the significance of personal characteristics and how they might contribute to a learner's sense of community in an online course.

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