

The Importance of Community to Online Students

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Abstract

This case study investigated adult students during their first semester in a distance delivered doctoral program in Agricultural Education. The purpose of the study was to examine the desirability and importance of community to the online students. Data collection methods included a semi-structured telephone interview, containing an adapted Sense of Community Index and postings on a Wiki (editable web page). Findings from this study found that (a) a variety of web-based tools enabled the students to connect with their cohort on a routine basis, (b) the students feel a strong sense of community and it is important to them, (c) use of web-based communication tools are vital as they assist in the student's learning, (d) students felt isolated from their cohort until they participated in a group project even though they had the use of web-based communication tools at their disposal. The results of this study suggest that opportunities for students to engage socially with their peers should be built into the design of online classes and degree programs. Future research is recommended to examine the sustainability and desirability of virtual communities.

Introduction/Theoretical Framework

The World Wide Web (WWW) has increased the ability to communicate with people all over the world. The WWW has also enabled higher education to harness the communication power of the web to deliver online classes and degree programs to place-bound students. The most recent study by the Sloan Consortium (Allen & Seaman, 2006) reported that almost 3.2 million students took at least one online course during the 2005 Fall semester, an increase of 900,000 more students than in 2004. More than 96% of institutions with enrollments of 15,000 or more students offer online courses with doctoral/research institutions delivering the highest rate (greater than 80%) of online offerings in the form of courses or full degree programs. Many academic disciplines offer online classes, certificates, and full degree programs with agriculture being listed as one of the top ten disciplines developing online learning at the post-secondary institutional level (National Center for Education Statistics, 1998).

For over 20 years, social learning theories have held a prominent place in learning research (Nicol, Minty, & Sinclair, 2003). While views of social theorists differ in significant ways, one common thread states that interaction and dialogue are fundamental for productive learning (Cohen, 1994; Qin, Johnson, & Johnson, 1995; Roschelle, 1992; Slavin, 1994). Reisetter and Boris (2004) documented that students highly value virtual teacher availability and peer chats. Rovai and Wighting (2005) report learning occurs most effectively when there is a strong sense of community among the learners. How do online learners develop and maintain a strong sense of community?

The theoretical framework for this study is based on constructivism (Piaget, 1973). The learning theories of Dewey (1938), Piaget (1973), Vygotsky (1978), and Bruner (1996) propose learners will gain new knowledge based on existing experiences and knowledge. Vygotsky (1978) also stressed that learning is dependent on the social context in which learning occurs. His theory called social constructivism stresses the worth of interaction with people other than the instructor, i.e. other students.

Humans have five basic needs, one of which is the need for belonging (Glasser, 1986). Being part of a community supplies an individual with a sense of identity, belonging, emotional connection, and wellbeing (Rovai & Whiting, 2005). The social phenomenon of community might be a useful concept in support of online learning (Brook & Oliver, 2005) and this application of theory is supported by the learning theories of Dewey (1938) and Vygotsky (1978) that state social interaction is important in knowledge construction. Vygotsky (1978) argues learning is not merely the accumulation of new knowledge, learning is a product of social interactions and learning is the process of learners being integrated into a knowledge community. The pedagogical benefits deriving from a learning community are: reduced attrition (Tinto, 1998), promotion of critical thinking skills (Fink, 2003), and making it easier to achieve learning outcomes (Gibbs, Angelides, & Michaleides, 2004).

The concept of community has been examined and discussed by many scholars over the years and there is still no standard definition. After reviewing 94 occurrences of the term community in sociological studies, Hillery (1955) stated that community is characterized by two domains: locality and/or a sharing of common interests. While it is still difficult to define community 50 years later, it is understood that community is a central component in the lives of most individuals (Brook & Oliver, 2002). Emphasizing community as a form of emotional connection that develops through social relationships is consistent with Sarason's (1974) Psychological Sense of Community (PSOC). McMillan and Chavis (1986) built upon Sarason's foundational work and define the PSOC concept as a "feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together" (p. 9). A similar definition suggests that there is no feeling of community until the members experience a sense of trust, safety, and belonging (Furman, 1998). Several authors (Fisher, Sonn, & Bishop, 2002; McMillan, 1996; McMillan & Chavis, 1986) have suggested that common expectations, shared values and beliefs, interactivity, connectedness, mutual interdependence among members, trust, and spirit are the most fundamental aspects of a learning community.

Higher education is changing from a teacher-centered to a learner-centered focus (Dawson, 2006). Feldman foresaw this transition from the "age of the individual to the era of community" (p. xiii) in 2000. Due to this pedagogical transition, communities of practice, in particular the concept of learning communities, are being developed and integrated into higher education (Kilpatrick, Barrett, & Jones, 2003). This shift from a behaviorist to a social constructivist approach is also supported by Gibson (2003) when she argued that a focus on socially constructed networks with student-to-student interaction is more in line with the current perception of effective approaches to learning. Communities of practice and learning communities are terms that have been used interchangeably, as both concepts relate to the impact that socialization has on the process of learning (Dawson, 2006). A more specific definition of a learning community is:

Learning community ... consists of the feelings of community members regarding the degree to which they share group educational norms and values and the extent to which their educational goals and expectations are satisfied by group membership. (Rovai & Whiting, 2005, p. 101)

Learning communities are also defined as “a bounded group of students involved in cooperative learning online” (Misanchuk & Anderson, 2004, ¶ 3).

When connecting to others in new situations, we create a degree of interpersonal contact or simply put, social presence, which is defined as “the degree to which a person is perceived as a ‘real person’ in mediated communication” (Gunawardena & Zittle, 1997, p. 9). In their 1997 study, Gunawardena and Zittle found social presence to be a strong factor in predicting a student’s satisfaction with learning in an online learning environment. A more recent study by Gunawardena, et al. (2001) put forward that social presence in an online learning context facilitates the building of trust. Social presence is one variable that is important and contributes in building a sense of community among online learners (Aragon, 2003; Bibeau, 2001; Garrison, Anderson, & Archer, 2000; Rovai, 2002a; Tu & McIsaac, 2002). Aragon (2003) thinks that social presence should be the first component established to initiate learning online. Rovai’s (2002a) study found that social presence and social quality are two factors that have a positive correlation to a sense of community.

Technology can facilitate the growth of an online learning community by providing a gathering and communication space for its members. An effective and accessible use of technology for online discourse can foster virtual learning communities (Schwier, 2002). It is crucial for a learner to feel that (s)he is a part of a learning community where his or her contributions add to a common knowledge pool and where a feeling of community spirit is fostered through social interactions (Rovai & Whiting, 2005). In the traditional on-campus classroom, students can informally interact with each other before and after class in common spaces such as the classroom and hallways. Those chance encounters encourage informal communication and social connections that enhance the students’ pedagogical experience. Meeting in the common spaces allows for casual discussion about class material, assignments, other courses, school events, and other topics that might not be appropriate during class time. Students taking online classes do not have those common spaces that allow for informal interaction and communication (Nicholson, 2002).

Learners should receive encouragement to communicate with other students outside the formal venue of the online class whenever possible (Bold, 2006). Using a variety of media to facilitate communication and deliver instruction enhances learning (Cain et al., 2003). The Internet has advanced the ability to interactively communicate, blurring the lines between time and distance. Students that participate in online instruction can access a variety of web-based communication tools that enhance the interactivity and the social aspect of the learning process (Parker & Rossner-Merrill, 1998).

In Nicholson’s 2002 study, he reported that online students who used instant messenger (IM) services felt a strong sense of community and IM gave them another venue for informal social communication allowing them to share information about class material, information about school, and their degree program. IM has been shown to support online students emotional well-being, sense of belonging, as well as social presence awareness (Rossade, Heins, & Hampel, 2005).

Purpose

The purpose of the study was to determine if the need exists to help distance learners develop a sense of community. The research objective was to explore and describe whether a sense of community is desired and important with new, adult, online students.

Research Design

This study is classified as expansion research within the qualitative research paradigm using naturalistic inquiry, incorporating quantitative analysis that was descriptive and correlational. The natural setting for this study included all 19 students of the new cohort of a distance delivered doctoral program. The cohort was introduced to the study and the use of a Wiki (a collection of web pages that can be edited with a browser) during their induction, August 2006. The following December, after the cohort had completed their first semester in the program, each student participated in a semi-structured telephone interview assessing the cohort's experience as new online students, their sense of community, and their use of web-based communication tools. A tally was kept of each individual's use of the Wiki and the pages of the Wiki were printed for content analysis.

The constant comparative method of content analysis was used on collected data (postings from the Wiki and the transcribed interviews) to compare across categories and construct meaning. Each interview was transcribed and sent to each participant for verification. Due to the sensitivity of research on human subjects, Institutional Review Board (IRB) approval was acquired prior to conducting the study. IRB approval, #2006-0421, was granted for the study.

The Sense of Community Index (SCI) was administered during the telephone interview. The data collected from the SCI was used as another form of triangulation in support of the findings from the interviews and the content of the Wiki. Scoring on the SCI used True = 1 and False = 0. Descriptive frequencies and responses from the SCI were analyzed using the Statistical Package for Social Sciences (SPSS, 2006).

Findings

Importance of Social Connection

One important ingredient missing in a distance student's experience is the ability to gather in the hallway before or after class and talk about whatever students want to discuss. A distance student cannot go out with other students after the class to study or socialize or make a date to gather with other students to study or work on a group project. The distance student does not have a *place* that will encourage social connections with the other students. They do not have the same opportunity as an on-campus student for informal communication. This important ingredient is supported by theory as Vygotsky (1978) proposed that social interaction is very important in the learning process.

The participants in this study are adults that value the flexibility of the doctoral program they are enrolled in. Do they care that they may not be able to have a social connection? Is that an aspect of learning that isn't important to them and they are willing to forego so they can reap the benefits of their distance delivered education? Some of the students in the cohort strongly

expressed that it was important, while a few students were absolutely certain that a social connection was not important. The students were asked if they thought an informal social connection was important or necessary for them to be successful in their program and if an informal social connection helps them learn.

For some, it was needing to know they were building relationships and a sense of trust with others in the cohort, they responded:

Shannon: I think it [a social connection] is important. Interaction with other people builds relationships. Those relationships are useful for building trust; you learn who you can count on. Can you count on the other person to follow through and do what they said they will do? The relationships are also good for formal teaching and working with the professors. Without the informal connection how are we going to know if people are going to follow up with what they are supposed to do.

Andrew: It is important but not necessary. Relationships are important when doing group work. There has to be a certain level of trust that the other group members will follow through and they need to know that you will follow through. There is an expectation that has to be met for the group work to be a productive activity.

Tammy: Yes, for me I think it is needed. I don't want to feel like it is just me and one professor. Learning informally is definitely important; we are the sum of our experiences.

For others, they thought that the social connection gave them a level of emotional support and added a touch of humanity to their distance delivered program, stating:

David: I don't think it [a social connection] is necessary, but I value it. It adds a human face to the fact that I am doing my coursework online and seeing the teacher on the TV. Having a way to know that one of the students is raising a certain type of cows in Iowa, that helps. Cuz then, when I am expecting him to reply back to me I understand that he is running a cow operation, he is a teacher, he has three kids, it helps to understand what is going on. Yes, through email and through the Wiki when it was active we were learning outside of class. We were doing the same thing on the Centra[®] study sessions. We all came to a greater understanding. Coming off of my notes I would not have made as good a grade if we hadn't shared in those study sessions.

Mike: I would say that it is important but not necessary. I feel that we need an opportunity to bond with these people. We are going through a lot together and I think that sometimes you can share experiences and it helps other people get through.

Max: Yes – it really helps me to know that others face the same problems I face and that our lives are similar. For me personally I think it is necessary. I am a social creature. If I had to sit and get all this information off even MSN[®], I have learned how to read people's personalities in what they type. I like the

voice interaction of Centra[®], and I like the voice interaction of the face-to-face [interactive television] and I love to get together with everybody.

Tim: Since needed is different from necessary I would say yes. I think it allows people to bond more. But if I had to say is it absolutely necessary, I would say no. It is important to me, but not necessary. It allows you to bond with other people, plus it allows you to feel that you know what is going on. Some of these classes are going to have group projects so if you can kind of pick – I'm more like these people – you will more than likely stay with those people.

Many in the cohort valued the time spent outside of class as an avenue to help each other and support their formal learning, with the following thoughts:

Dorothy: Yes, I think it is necessary because people are social butterflies. I think that people that get this far in their education are people that are not good at being by themselves. I think that people pursue such a high degree and expect so much out of themselves to receive this degree, they need the social interaction. They need to know that there are people out there doing what they are doing. Maybe struggling at the same time or being successful at the same time and I think it is necessary. I was able to help on a topic during a Centra[®] session when the instructor couldn't be there. I received emails over the next several days and was able to help. It makes you feel good and strengthens your knowledge of what is happening.

Jim: I think we all need to help each other when we can. Nobody is going to be an expert in every subject. Somebody is gonna slip a little bit and say 'Hey I didn't get that.' We have all had a time when we didn't get a handout or couldn't download something or 'I missed that one, could you send it to me.' I think we are all going to need it at times or with different subjects. I think it would be horrible doing it in a vacuum with no interaction.

George: Hmm, that is difficult. I would say it is important but it is not needed. Even though I do correspond a lot by email, my typing skills leave a lot to be desired. I do very little text chat because I am not a fast or proficient typist. The other cohort, there seems to be a camaraderie where everybody is helping everybody and I really like that. We all have different talents and abilities and it is very helpful and it all works out well.

Veronica: I think it definitely helps. It makes it more enjoyable and probably easier on all of us. It helps my understanding. I think it is important and necessary. Sometimes I could understand things when explained by somebody else [other than the instructor]. I even use people from the previous cohort.

Katie: I think it is important but I don't think it is necessary. Being part of Mission Control [group of four students] enhances the feeling that learning happens in an informal way. There is bound to be one of the group that understands things the way they were presented and they can explain in a way the rest of us understand.

Carl: Absolutely! In fact after we set our group up, we were thinking it would be easier to do our paper and presentation and found out it wasn't so easy. But it did give us the opportunity to connect and make some connection outside of the actual TTVN [ITV Wednesday class session]. I think it is needed and necessary. It allows us to not only draw from our experiences but from the experiences of others.

Not everybody agreed that an informal social connection was important, and expressed their thoughts:

Kyle: No. I think that I can learn informally in specific contexts. The pre-exam study sessions were helpful but I don't need to have a close bond with the people for the session to be good.

Susan: No. A social connection can be helpful to learning. Even with Mission Control, I think everyone in this program is probably overwhelmed with family, work, and other activities. So for us really to be on that level it is kinda adding on another element to that. So I am thinking, my opinion is that we respect one another, we interact with one another only when it is needed. That is because of our commitments.

Learning theorists (Dewey, 1938; Vygotsky, 1978) posit that social interaction enhances learning. Tammy stated, "I have decided that I am a social learner. I like the interaction of classmates, exchanging thoughts, and ideas." Carl said "I am not a loner, I like to communicate with people." These students are expressing a need to communicate with their cohort members. Many of the students agree as they think that a social connection is either necessary or needed. They could not imagine being in their doctoral program without informal social interaction with their cohort.

The need for a social connection is not a universal experience (Levy, 2006). All but three of the students agree that a social connection is important to them and helps them learn in an informal way. Yet those three students scored at least 75% True answers on the Sense of Community Index (SCI) indicating that they feel a sense of community with their cohort. Sarason's (1974) Psychological Sense of Community (PSOC) theory states that a person just knows when they are part of a community, it is a sense they feel. During the interview all of the students responded that they fit in with the cohort, they feel a connection. The entire cohort was in agreement that their three-day face-to-face induction allowed them to develop that bond. Rovai (2002b) found that a sense of community must be consciously supported in an online environment even though that sense of community grew naturally from participation in a face-to-face setting. Several of the students stated that if they hadn't had the face-to-face experience they thought the cohort would have eventually developed a social connection, however, that bond would not have happened so quickly.

Personal Sense of Community

The literature cited illustrates that a basic human need is a sense of belonging (Glasser, 1986). Sarason (1974), who pioneered the seminal work on Personal Sense of Community (PSOC), stated that a person just *knows* when they are part of a community. The Sense of Community Index (SCI) was incorporated into the interview to give credence to the students' feeling of community.

Every student (pseudonyms are used to ensure confidentiality) in the cohort exhibited a strong sense of community selecting at least 75% *True* ($n = 16$, $M = 14.74$, $SD = 1.41$) answers on the SCI as shown in Table 1 (True = 1, False = 0). Eight students showed a very high sense of community by answering True to every statement on the SCI.

Table 1

Participant Responses to the Sense of Community Index (n = 16)

Student	True	False
Carl	14	2
Jeff	15	1
Jason	12	4
Katie	16	0
Veronica	15	1
George	16	0
Tim	16	0
Dorothy	13	3
Kyle	13	3
Max	15	1
Jim	16	0
Mike	16	0
Susan	16	0
Tammy	16	0
Don	12	4
Tony	16	0
Andrew	14	2
Shannon	14	2
David	15	1

Note: True responses indicate a strong feeling of community. False responses indicate a weak feeling of community.

Table 2 illustrates how the cohort collectively answered each statement on the SCI. The area that showed the least agreement was a feeling that not all students wanted the same outcome as a result of being in their distance delivered degree program. A few of the students elaborated on their answers when they returned the transcript of their interview. Jason stated, “Some, like me, want to be teachers and researchers, others have no interest.” Max agreed, “I have a goal to be a college professor – not everybody wants the same thing.” Tammy does think the cohort wants the same thing, she wrote, “A diploma!! And the opportunity to work with and learn from great people.”

Table 2

Collective Responses to the Sense of Community Index (N = 19)

Statement	True	False
I think this program is very helpful in meeting my needs in flexible delivery.	19	0
People in this program seem to share the same values.	16	3
Other students and I want the same things from this program	11	8
I think that this program has an appropriate scope in what it tries to do.	19	0
I can recognize most of the people who participate in this program.	18	1
I feel at home in this program.	18	1
Many of the other people in this program know me.	17	2
Members in this program welcome other members' documents and suggestions for help, etc.	18	1
I care about what other members think of my actions in this program.	19	0
I feel I have influence in what happens when members work together in this program.	17	2
I feel that other people in this program would help me if I requested help.	19	0
I feel my opinions and ideas are welcomed by others in this program.	17	2
It is very important for me to participate in this program.	19	0
People in this program seem generally to get along with each other.	19	0
I expect to continue in this program into the future.	19	0
People in this program seem to have similar understandings and interests.	14	5

Note. Adapted from Brook and Oliver, (2002).

The sixteen statements of the SCI were transformed into one additive index resulting in a Cronbach's alpha of .54 and then correlated with the variables of IM use ($M = .37$, $SD = .50$),

gender ($M = .74$, $SD = .45$), age ($M = 36.74$, $SD = 6.71$), previous online courses ($M = .26$, $SD = .45$), perform class work at home, work, or both ($M = 1.53$, $SD = .84$), and broadband availability at home ($M = .74$, $SD = .45$). Running a bivariate correlation on these variables showed no statistically significant correlations, $\alpha = .05$ set a priori, as seen in Table 3.

Table 3

Correlations between Sense of Community Index and Selected Participant Variables

Variables	<i>r</i>
Use IM to interact with cohort members	.18
Gender	-.20
Age	-.28
Previously took an online class	.03
Perform class work at home, work or both	.41
Broadband access at home	.06

Previous studies have shown a reliability for the SCI across contexts: $\alpha = .71$ (Pretty, 1990), $\alpha = .80$ (Perkins et al., 1990), $\alpha = .69$ (Pretty & McCarthy, 1991) and $\alpha = .80$ (Obst & White, 2004). Combining the 16 statements of the SCI into a single additive index produced a reliability of $\alpha = .54$. This low reliability may be due to the small sample size and the heterogeneous population. The students' sense of community index was correlated with the variables of IM use, gender, age, previous online course, doing class at home, work, or both, and broadband access at home. There were no statistically significant correlations.

Three web-based communication tools were utilized during this study (a Wiki, instant messaging, and web-based conferencing software) allowing the cohort to connect with each other on a social and intellectual level. Many of the students are in contact with each other, using IM or email on a daily basis; others report that they are in contact at least once a week and that web-based communication tools are vital to feeling connected to the other students in the cohort.

Yet, three students expressed that they felt isolated. They did not participate in exchanges with their cohort. It took participation in a group project before they felt connected to at least the students in their group. After participation in the group project they started to feel included on a larger scale and all three started using IM.

Conclusions, Recommendations, and Implications

Connecting to each other is important and necessary to the students. The students in this study are not unusual as a recent study reported that students place a high value on their social connection with their peers (Cain et al., 2003). Using IM and email, many of the students can and do interact on a daily basis. The combination of web-based communication tools allows the

cohort more venues for informal and social communication, as well as the potential to share information about their degree program and their classes. A sense of community is strongest in those who experience the most intensive exchange and the use of real-time communication is a key in strengthening group cohesiveness as well as individual relationships (Levy, 2006).

This cohort of students acknowledges that they experience a strong group connection; all of them feel like they fit in with the group concurring with Glasser (1986) that a strong feeling of community helps with their sense of wellbeing with the program. They have a common goal to earn a doctoral degree. Many communicate on a daily basis using several web-based communication tools, nevertheless three students felt alone and isolated until half way through the semester when they worked on a group project for one of their classes. Attrition is always a concern for both on-campus and online learning, and isolation is a major contributor to attrition (Morgan & Tam, 1998). Misanchuk and Anderson (2004) posit that encouragement of students to support each other and feel part of a community may be one potential strategy in reducing dropout rates. Incorporating group work early in the class schedule and the encouragement of student interaction in informal discussions with their peers may reduce the feeling of isolation with students that are hesitant to engage others outside of class time.

Schwier (2002) cautions that “Virtual learning communities do not just happen; but neither are they created” (p. 3). As educators we can promote the development of learning communities and encourage their use, but ultimately it is the learners who decide if they will use the provided tools and they will determine if a community emerges. If and when a community emerges it takes time for a community of practice to develop (Wenger et al., 2002). While we cannot force the development of a community of practice among new graduate students, a laudable goal would be to help one develop. Distance students should be instructed in the use of web-based communication tools and faculty should encourage their use.

I strongly recommend that group work be incorporated early in a class schedule. It took participation in a group project for three students to engage with their cohort members. Group work is pedagogically sound in that students benefit from student-student interaction, so it may also follow that students benefit from the informal social interaction provided in group work. Future studies should examine the potential of group work as a viable technique in reducing isolation for online learners. Isolation and distance education is not a new concern. A quick library search using only one search engine revealed 962 articles devoted to the topic including articles dating from 1982 to the present. Research from multiple academic disciplines has reported that student isolation is concern and researchers have examined the causes and proposed solutions.

Use of the SCI confirmed the students’ feeling of belonging. This cohort quantitatively feels a strong sense of community. While previous studies showed a reliability of $\alpha = .80$, indicating an acceptable reliability for the SCI, my analysis revealed an $\alpha = .54$. This may be the result of the small sample size used in this study. As such, replicating this study with a larger population would be advisable as a step in re-examining the instrument’s reliability. In addition, it is recommended that a confirmatory factor analysis then be conducted on the instrument to examine the four subscales of: (a) integration and fulfillment of needs, (b) sense of membership, (c) sense of influence, and (d) shared emotional connection. Such a procedure will further refine the instrument

The correlation of the SCI additive index with the variables IM use, gender, age, previous online course, doing class at home, work, or both, and broadband access at home exhibited no statistically significant correlations. This may be due to the small sample size used for the statistical procedure instead of variables that are not correlated. This is an initial investigation of the correlates and future studies need to investigate the variables of this study as well as different variables with a larger population to examine if relationships exist. A 2007 study (Xiojing, Magjuka, Bonk, & Lee, 2007) found evidence that there is a positive relationship between sense of community and perceived learning gains, learner engagement, and student satisfaction. A possible variable to investigate might be personality, using an instrument with proven validity and reliability such as the Myers-Briggs[®] Type Indicator with the results evaluated as to the possible impact personality may have on social engagement and importance of networking with cohort members.

The scholarly discipline of Agricultural Education has been at the forefront of distance education, and is one of the top ten educational disciplines offering online education in the United States (National Center for Education Statistics, 1998). Multiple institutions of higher education offer classes and complete, online, agricultural education graduate programs; their reach is now international. The experiences of the students participating in this study can be used to support student engagement in existing programs and elemental in the design of new programs or the instructional design of new classes. It is recommended to follow up this study with the same cohort to see if the sense of community is important as they complete their program of study.

Another recommendation would be to replicate this study with students working towards an undergraduate degree, or an online certificate program, as well as students that are earning their degree individually and not part of a cohort. As this is a qualitative study and we are not concerned with generalizability in the same manner as a quantitative study, applying the research objective to different groups will do more to advance our understanding of community with online students.

For over 80 years, scholars have studied the importance of community as it applies to knowledge construction. Dewey (1916) an important learning theorist in Agricultural Education, is one of the pioneers. A 2007 study concurs "...the sense of learning community is worth pursuing, as the process of building community itself enhances effective collaboration and communication, learner engagement, and social networking that will eventually benefit both participants as well as the online program" (Xiojing et al., 2007).

As educators we need to expand our educational vision and apply creativity to the use of web-based communication tools to create new educational environments. It is apparent that communicating effectively is a critical skill for online learners in the development of community. Learners should be encouraged to interact with each other often outside the formal classroom. Furthermore, as educators we should be role models in effective online communication, provide examples of community building behavior, exhibit an online presence in student discussions, and remind learners that their role in discussions are important.

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