Online Community Identity: Best Practices for Today's College Classroom

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Abstract

Despite the increased use and popularity of online education, studies show that distance learners still underperform in several key areas. Numerous scholars have linked this underperformance to a lack of community in the online classroom. The majority of studies on classroom community, however, have been limited to elementary and high school settings. Even less scholarship has focused on best practices in virtual contexts, resulting in repeated calls for research on the topic. This study responds to each of these realities by offering one of the first empirically-based explorations of community in online college classrooms. Drawing from 25 faculty interviews and over 350 student surveys, it also offers the first quantitative assessment of Puddifoot's (1995/2003) community identity, while extending this theoretical framework to online communities. This study concludes with practical implications for instructors of higher education who hope to cultivate their own sense of online community.

Keywords: online learning, online education, online classroom, virtual classroom, classroom community, community identity

Online Community Identity:

Best Practices for Today's College Classroom

As technology continues to improve exponentially, so has the use and popularity of online learning (see Ni & Aust, 2008; Yang, Cho, Mathew, & Worth, 2011). Since 2009, the percentage of college students enrolled in virtual courses has risen nearly 7% per year (Lokken & Mullins, 2015). Consequently, there are over 5,000,000 students currently enrolled in at least one online class – an increase of approximately 200,000 students in 2014 alone (Babson Survey Research Group, 2015). During this same time period, Lokken and Mullins (2015) found that distant learning programs accounted for nearly 100% of all enrollment growth experienced by two-year universities in the United States.

There are several reasons for online education's increased popularity. Foremost, distance learning provides students with greater flexibility and access to certain classes, programs, and universities. This reality is especially salient for nontraditional students who are more likely to be balancing additional career and family obligations (Summers, Waigandt, & Whittaker, 2005). A detachment from physical space also allows the possibility for instructors to explore more innovative pedagogies – including the use of mobile devices as a learning platform – which has resulted in a rethinking of the traditional "ivory tower" model for higher education (Lokken & Mullins, 2015). Additional advantages of online courses include less commute time, lower tuition rates, and increased opportunities for advanced technical training (Open Education Database, 2012). For each of these reasons, more than 70% of college faculty members now view online learning as critical to their institutions' long-term success and development (Babson Survey Research Group, 2015).

Despite the potential benefits of online learning, research still indicates that virtual students underperform in several key areas (Jones & Long, 2013; Ni & Aust, 2008). The retention rate of students in online courses is 10% lower than those in traditional classrooms (Smith, 2015). Meanwhile, 70% of traditional students complete their courses at a higher rate than online students (Jones & Long, 2013), and distance learners are 5% less likely to graduate than their face-to-face counterparts (Haynie, 2015). Educators also report difficulty communicating the full depth and understanding of certain topics via online formats (Chavez, Montaño, & Barrera, 2016), as well as a perceived decline in basic social skills among their virtual students (Kang & Munoz, 2014). As a result, only 28% of academic leaders report that they fully accept the "value and legitimacy of online education" (Babson Survey Research Group, 2015, par. 3)

Many researchers link online students' underperformance to a lack of classroom community (e.g., Kerr, Rynearson, & Kerr, 2006; McInnerney & Roberts, 2004; Rovai, 2002; Rovai & Wighting, 2005, etc.). Young and Bruce (2011) found that students who reported an absence of community in their online courses were also less likely to participate or remain enrolled (see also Morgan, 2011). Song et al. (2004) surveyed graduate students to identify helpful components and perceived challenges based on their online learning experiences. Alongside technical problems, time constraints and a misunderstanding of course objectives, a "perceived lack of sense of community" emerged as one of the students' most commonly cited challenges. Conversely, Ni and Aust (2008) discovered a strong correlation between classroom community and student success, characterizing community as the "most significant predictor for both students' satisfaction and perceived learning" (p. 490). Positive correlations also exist between a sense of online community and student satisfaction (Garrison, 2007), academic success (Shea, Li, & Pickett, 2006), virtual attendance (Young & Bruce, 2011), and higher-level thinking and knowledge building (Engstrom, Santo, & Yost, 2008)

Research on classroom community has a rich and storied history within academe (Halaby, 2000). This is especially true in the field of Education, and to a lesser extent within the fields of Psychology, Sociology, and Communication (Pallof & Pratt, 2007; see also Jenkins, 2014a, 2014b, 2015). The majority of this research, however, has been limited to elementary and high school settings (McKinney, McKinney, Franiuk, & Schweitzer, 2006). Only in more recent years have scholars turned their attention to community building at the university level (e.g., Kay, Summers, & Svinicki's, 2011; Rovai, 2002; Summers, Bush, Turner, Svinicki, & Achacosco, 2003). As Freeman, Anderman, and Jensen (2010) write:

> College students' sense of belonging, especially early in their college careers, may be important for their academic motivation and success in that setting. To date, however, little is known about the importance of the sense of belonging for college-level students or about the conditions that might support the perceptions of belonging. (p. 203)

Even less research and reflection has been devoted to best practices for creating a sense of community in online college classrooms (Ni & Aust, 2008). Scholars and educators alike agree that virtual students benefit from communal connection – perhaps even more so than their traditional, face-to-face counterparts (Morgan, 2011). Yet there is a lack of empirical research on how to actually make those communal connections happen. For each of these reasons, Morgan (2011) has called for more qualitative measures of teaching presence for online instructors. Ni and Aust (2008) have also called for more applied research that offers best practices for online instructors of higher education, and Kahne and Westheimer (1992) have gone as far as to suggest a lack of proper training is the primary obstacle facing community's development in online classrooms.

In this study, we answer the calls from Morgan (2011), Ni and Aust (2008), and Kahne and Westheimer (1992) by offering one of the first empirically-based explorations of community in online college classrooms. We begin this process with a brief literature review on community, classroom community, and Puddifoot's (1995, 2003) theoretical framework for *community identity* (see also 1994, 1996, 1997). Drawing from 25 faculty interviews and over 350 student surveys, we then outline our study's methodology and quantitative results. We conclude by discussing three corresponding implications for how university instructors can foster an increased sense of community within their own online courses: (1) locus via *virtual commons*, (2) distinctiveness via *pedagogical exclusivity*, and (3) orientation via *supportive norms*.

The present study is especially significant if educators and administrators want to capitalize on the potential benefits that online courses have to offer (e.g., increased access and flexibility for nontraditional students, advanced technical training, lower tuition costs, etc.) As today's instructors explore more innovative pedagogies (Lokken & Mullins, 2015), it is also vital that these instructors work from an informed perspective, based on results gleaned from studies such as this one. By doing so, it is our hope that this research will enable universities across the nation and beyond to increase student satisfaction (Garrison, 2007), participation (Morgan, 2011) and involvement (Young & Bruce, 2011), while simultaneously stemming the inferior retention rates (Smith, 2015) and graduation rates (Haynie, 2015) experienced by college students in online learning environments.

1. Community

The term *community* originated during the late 14th century from the Old French word *comuneté* – meaning "commonness or everybody" – and the Latin word *communitatem* – meaning "courtesy or affability" (OED, 2016). In subsequent decades, five distinct connotations for community emerged within the English language:

> 1) A distinction of the common people from those of rank, 2) as a denotation of a state or organized society, 3) the people of a district, 4) as a designation for the community of shared interests, and 5) as a sense of common identity and characteristics. (Sichling, 2008, p. 108)

By the 17th century, community came to be correlated with "more direct, sentimental and parochial sets of relationships," and since the 19th century, this term has come to define "the difficult interaction between the tendencies of direct common concern…and the materialization of various forms of common organization" (p. 108).

In more recent years, the number of differing definitions and connotations applied to community has continued to multiple exponentially. This has especially been the case within academic circles since the 1960's – a result of increased scrutiny by social scientists from a variety of disciplines (Puddifoot, 1995, p. 358). As a result, Hillery (1964) noted as many as 94 differing definitions of community cited in academic literature alone, prompting several scholars to conclude by the 1980's that community was no longer a useful explanatory concept.

1.1. Classroom Community

Despite community's daunting array of contemporary definitions, numerous scholars have attempted to explore this phenomenon within the classroom (see Engstrom, Santo, & Yost, 2008; Garrison, 2007; Halaby, 2000; Kerr, Rynearson, & Kerr, 2006; McInnerney & Roberts, 2004; Morgan, 2011; Rovai, 2002; Rovai & Wighting, 2005; Shea, Li, & Pickett, 2006; Song, Singleton, Hill, & Koh, 2004; Young & Bruce, 2011, to name but a few). Kay, Summers, and Svinicki's (2011), for example, sought to identify the "hallmark traits" of classroom community. Consistent with the aforementioned lack of community research in higher education (see Freeman, Anderman, & Jensen, 2010), Kay and colleagues chose to interview elementary and high school teachers. They revealed five predominant themes in the process: common experience, common goals, structured cohorts, inside groups, and shared intellectual endeavors.

As opposed to educator interviews, McKinney, McKinney, Franiuk and Schweitzer (2006) used student surveys to explore classroom community. McKinney et al. distributed student surveys at the beginning of their semester together. After making mindful efforts to cultivate community throughout the semester, they distributed the same survey again at semester's end. Through this process, McKinney and colleagues confirmed six distinct characteristics of classroom community: connection, participation, safety, support, belonging, and empowerment. They attempted to foster connection by encouraging students from the first day of class to interact with those around them. Participation was encouraged through in-depth class discussions on each homework assignment.

A sense of safety was fostered by exploiting the connection students made with one another during their initial class period together. By the same token, McKinney and colleagues tried to cultivate a supportive environment through peer-to-peer advising and tutoring. To establish belonging, they made conscious efforts to remember details about their students' personal lives, and to promote a sense of empowerment they sought opportunities for students to feel heard and valued within the classroom. By semester's end, students reported an overwhelming satisfaction with their classroom's sense of community, as well as the researchers' role in helping foster it.

In addition to the eleven attributes outlined by Kay et al. (2011) and McKinney et al. (2006), scholars have also characterized classroom community as the presence of cohort bonds (Dibbs, Beach, & Rios, 2018), common goals (Langhout, Rappaport, & Simmons, 2002), personal reflexivity (Alexander & Bach, 2013), peer culture (Lash, 2008), personal autonomy (Ciani et al., 2010), and social networks of intense peer interaction (Webb & Engar, 2016). Others view community's defining characteristic as teacher authenticity (Wilser, 2018), and still others view it as students' ability to "see" one another (Green, 2010). Taken together, these examples highlight the wide range of potential understandings surrounding classroom community. Yet because each of these studies assumed a standard approach to classroom instruction, they also highlight how community research often overlooks realities unique to the online sector.

Only in recent years have scholars begun turning their attention toward online educational contexts, with a specific emphasis on *presence:* social presence, cognitive presence, and teaching presence (Morgan, 2011; see also Anderson, Rourke, Garrison, & Archer, 2001; Garrison, Anderson, & Archer, 2001; Rourke, Anderson, Garrison, & Archer, 1999). Of particular interest for many scholars of online learning is the role of *teaching presence* – defined by Anderson et al. (2001) as "the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes" (p. 1). Teaching presence is portrayed by scholars and practitioners alike as a key element for building community via increased communication by the course instructor: regular announcements, timely feedback, individualized emails, etc.

Morgan (2011) argues, however, that this framework for understanding presence is limited in its inability to explain why online instructors make the interactive decisions they do, as well as scholars' hollow attempts to quantify teaching presence within the classroom. For instance, university instructors in online environments often believe they can cultivate a strong teaching presence (and by extension, a strong sense of classroom community) by sending copious messages to their students. Yet due to the physical distance between professor and student, mass emails alone do little to strengthen a felt sense of teaching presence for college students. Thus, Morgan warns against quantifying faculty-student interactions when attempting to measure teaching presence and its effect on community in online classrooms. He proposes a sociocultural framework instead, which views "teaching presence… as a negotiation and a practice that occurs within a community of inquiry characterized by constraints and affordances" (p. 3). One potential response to Morgan's proposal for a sociocultural framework is Puddifoot's (1995, 2003) theory of *community identity*.

1.2. Community Identity

Although it is difficult to arrive at an operational definition for *community identity,* Puddifoot (1995, 2003) characterizes the concept as encompassing six broad elements: (1) *locus*, (2) *distinctiveness*, (3) *identification*, (4) *orientation*, (5) *quality*, and (6) *functionality* (see also 1994, 1996, 1997). Within these six elements are a total of fourteen dimensions, many of which fall under two categories: territorial and relational. The present section further discusses each of these elements, along with their corresponding categories and dimensions.

Locus. The first element of Puddifoot's (1995) community identity, *locus*, denotes a "perception by residents of the boundaries of their community" (p. 365). These boundaries are designated by the previously mentioned territorial and relational categories. Territorially, locus focuses on the key physical features of a communal area – whether natural (e.g., vegetation, water sources, topographical terrain) or manmade (e.g., parks, roads, seating arrangements). Relationally, locus focuses on the "residents' own perceptions of key social/cultural characteristics of their community" (p. 367). Taken together, the element of locus recognizes both physical and social boundaries of community identity.

Distinctiveness. As the second element of community identity, *distinctiveness* characterizes community identity as one in which residents see their community as being uniquely distinct from other communities. Distinctiveness also encompasses dimensions within the territorial and relational categories, as well as a third sub-dimension that resides outside of both. Territorially, distinctiveness focuses on the "residents' own perceptions of the degree of physical distinctiveness of their community" (Puddifoot, 1995, p. 367). Under the category of social/cultural relations, distinctiveness focuses on key social/cultural characteristics of the community. Finally, a third dimension which does not necessarily fall under the territorial or relational category focuses on perceptions of special characteristics of the community.

Identification. Puddifoot (1995, 2003) characterizes *identification* as a significant aspect of community identity, in that each resident personally identifies as having a connection with her/his community. Additionally, residents must hold a perception that others also identify with their shared community in a similar way. Puddifoot's element of identification is divided into five distinct dimensions, four of which correspond to the territorial and relational categories. Territorially, identification focuses on both the community members' feelings of affiliation, belonging, and emotional connectedness to a particular locale, as well as the perception they have of other community members' feelings toward the same. Relationally, identification focuses on the resident's perception of affiliation, belonging, and emotional connectedness – for both themselves and others – in relation to "social/cultural groupings/forms." The fifth dimension that does not necessarily fall under either of community identity's two primary categories, refers to the "residents' own reasons for identification (or not) with the community," (Puddifoot, 1995, p. 367). In this sense, community identity is characterized by the degree to which a community member can identify with her/his community.

Orientation. The fourth element of *orientation* refers to one's view of her/his own "positionality" within a given community (see also Alcoff, 1988). This is specifically the case in regard to community members' (a) personal investment, (b) attraction to the community, (c) future in the community, (d) emotional safety, (e) personal involvement, and (f) sense of alienation (Puddifoot, 1995, 2003). Consequently, community identity is characterized by the position a community member feels s/he holds or can eventually hold within the shared community. Orientation's sub-dimensions of personal investment and emotional safety are of particular interest to the present study, as we explore the way(s) in which online classrooms foster a personal investment by/among students and an emotionally safe environment.

Quality. The fifth element of Puddifoot's (1995, 2003) community identity addresses *quality of community life*. Not unlike that of identification, this element speaks to both the communal members' quality of life, as well as their perception of others' quality of communal living. In each instance, this quality is measured in regard to (a) community spirit, (b) friendliness, (c) sense of mutuality, (d) cooperativeness, (e) extent of social interaction, (f) commitment to community, and (g) extent of neighboring. Puddifoot (1995) notes that "the opportunity [in evaluation] arises to focus specifically upon the acknowledged concerns of individuals, i.e., the evaluation of the quality of community life" (p. 368). Thus, community identity is characterized by identification with a community, based upon that community's ability to fulfill the lives of its members.

Functionality. Puddifoot's (1995, 2003) final element – *functionality* – seeks to evaluate how proficiently community members operate together as a functional whole. Puddifoot (1995) notes that functionality, "Concerns aspects of community life that are to some degree rational in their purpose, and provided to the community by decisions removed from the immediate power of individuals acting as members of the community" (p. 368). Nine specific measures of communal functionality include, (a) community services, (b) leisure services, (c) health services, (d) commercial services, (e) opportunities, (f) material quality of life, (g) quality of environment, (i) quality of community decision-making, and (j) ability to influence decisions. Functionality's fifth measure of *opportunities* is particularly relevant for this study. Certain opportunities afforded by online courses – such as the ability to attend college from home – are a common reason cited by students for enrolling in these classes. For this reason, community identity within higher education can be characterized as one that depends upon its own practical utility.

Taken together, Puddifoot's (1995, 2003) six elements of community identity serve as the theoretical framework for this study by informing its methods, results, and corresponding implications. In return, this study offers the first quantitative assessment of community identity, while extending this theoretical framework to an online context.

The present research also responds to Morgan's (2011) aforementioned call for more qualitative measures of teaching presence, and answers multiple calls for applied communication research via semi-structured faculty interviews and undergraduate student surveys (see Ni & Aust, 2008; Kahne & Westheimer, 1992). The following section outlines these semi-structured interviews and student surveys in more detail.

2. Research Methodology

In order to develop empirically-based implications for building community in online college classrooms, this study interviewed 25 faculty members and surveyed 357 undergraduate students at a public, four-year university in southern California. Our study's specific (1) participants, (2) instrumentation, and (3) analysis are outlined below.

2.1. Participants

Faculty Interviews. Following IRB approval, this study began by recruiting faculty members who were currently teaching at least one online course. Each author contacted a portion of potential participants via email, asking if s/he would participate until 25 instructors agreed to do so. (For a complete copy of the recruitment script used, please see Appendix A). Our subsequent interviews were completed on campus, and at a time and location of each interviewee's choosing. Interviews lasted between 30-75 minutes, equaling over 19 hours in total. Each interview was recorded using a digital recorder and handwritten notes, which were later transcribed.

Of the 25 faculty members interviewed, fourteen self-identified as female and eleven as male. Seventeen participants identified as white, six as Hispanic/Latinx, one as Asian, and one as African American. Faculty ages ranged from 30 to 61 (M = 44). Six Lecturers were interviewed, seven Assistant Professors, seven Associate Professors, and five Full Professors. Faculty participants also represented a total of ten academic programs across campus: Education (5), English (4), Business (4), Communication (4), Art (2), Math (2), Nursing (1), Sociology (1), Psychology (1), and Liberal Studies (1). On average, faculty members had been employed by the university for 5.4 years.

Student Surveys. At the conclusion of each faculty interview, participants were asked if they would allow us to distribute an anonymous survey to their online students. We subsequently shared a Google Forms link with each willing instructors' students, explaining that participation was entirely voluntary and anonymous. Students were given a minimum of one week to reply, resulting in a total of 357 unique survey responses.

Of the 357 students surveyed, 235 self-identified as female, 120 as male, and two participants declined to respond. One hundred and eighty-six (186) participants self-identified as White, 117 as Hispanic/Latinx, twenty as Multicultural, eight as Black, seven as Asian, five as Middle Eastern, two as American Indian or Alaska Native, and twelve participants declined to respond. Participant ages ranged from 18 to 48 (M = 23.59). Grade point averages ranged from 2.0 to 4.0, with an average GPA of 3.2. Students also represented a total of nineteen majors, with Communication (83), Business (33), Psychology (33), Education (27), English (19), Liberal Studies (17), and Early Childhood Studies (10) being most common. Students from all grade levels were included, with a slight majority identifying as seniors (N = 191).

2.2. Instrumentation

Faculty Interviews. In addition to asking for basic demographic information, our semi-structured interview guide included twelve open-ended questions. The first six questions addressed community building in online classrooms. Sample questions included "What does it mean for you to build a sense of community in the classroom?," "What are some successful strategies or techniques you've used in the past to build a greater sense of community in your online classrooms?," and "What are some challenges you've experienced when attempting to build a greater sense of community in your online classroom?" (For a complete copy of the interview guide used, please see Appendix B). The interview guide's subsequent six questions explored community identity within online classrooms – one question for each of Puddifoot's (1995, 2003) six elements:

1. Locus: What physical elements have served to aid or hinder the sense of community felt by members of your online classrooms?
2. Distinctiveness: What elements have served to aid or hinder the sense of distinctiveness felt by members of your online classrooms?

3. Identification: What elements have served to aid or hinder the sense of belonging and personal connectedness felt by members of your online classroom?
4. Orientation: What elements have served to aid or hinder the sense of personal investment and emotional safety felt by members of your online classrooms?
5. Quality: What elements have served to aid or hinder the sense of comradery and cooperativeness felt by members of your online classrooms?
6. Functionality: What elements have served to aid or hinder the sense of functionality felt by members of your online classrooms?

Student Surveys. Following a reminder about informed consent, our student surveys also began by asking for basic demographic information. In order to ensure the survey's validity, it then supplied each participant with the university's official definitions for "online" and "standard" course delivery. Next, the anonymous questionnaires instructed students to reflect on the online course they were currently enrolled in. With this specific course in mind, participants were asked to indicate on a scale from 1-10 whether they strongly disagreed (1) or strongly agreed (10) with thirteen specific statements.

The survey's first statement sought to measure the level of classroom community each student felt within her/his current online course: "I would describe the current online class I'm enrolled in as having a strong sense of community." The twelve ensuing statements sought to quantify student responses to this first question via two inversely phrased assertions – one for each of Puddifoot's (1995, 2003) six elements of community identity. Puddifoot's first element of locus, for example, was explored with the positively correlated statement, "A creative use of classroom space helps foster interaction among students in this course," and the negatively correlated statement, "I've experienced physical limitations that keep me from fully engaging with my classmates in this course." Similarly, distinctiveness was explored with the positively correlated statement, "The relationships I feel in this class are unique from those I've felt in other courses," as well as the negatively correlated statement, "This class lacks a strong sense of culture that distinguishes it from the other courses I've taken." (For a complete copy of the survey used, please see Appendix C).

2.3. Analysis

Once our data was collected, individual group members coded the faculty interviews in search of dominant themes. After several intensive readings of our separate findings, we clumped and re-coding our data together as a group. We repeated this process multiple times until a clear tree of large-order and small-order themes emerged from the qualitative data (Lindlof & Taylor, 2011). In effort to further validate our findings, each author also worked together to sensemake our preliminary data, and to recontextualize our results for the purpose of developing best practices. Meanwhile, quantitative data from our student questionnaires was analyzed using SPSS. Students' perceptions of Puddifoot's (1995, 2003) six elements of community identity were crosstabulated with their perceived sense of community. Two statistical tests were also run: chi-quare for statistical significance and phi coefficient for relational significance.

3. Quantitative Results

In review, this research offered one of the first empirically-based assessments of Puddifoot's (1995, 2003) community identity in order to develop implications for cultivating a sense of community in online college courses. Our findings from over 350 undergraduate student surveys revealed that more than half of participants (55.7%) reported feeling a sense of community in their online course. Furthermore, a majority of students agreed that each of Puddifoot's six elements were present within their course, albeit to varying degrees. In total, 80% of students (285) perceived a sense of locus within their online course, 66% (235) perceived a sense of distinctiveness, and 64% (228) perceived a sense of orientation. Meanwhile, 58% of students (199) perceived a sense of identification, 69% (246) perceived a sense of quality, and 85% (303) perceived a sense of functionality.

After finding each independent variable for this study, we used crosstabulations to determine their statistical and relational significance via chi-square and phi coefficient tests respectively. In brief, each of Puddifoot's (1995, 2003) six elements was found to have a statistically significant relationship with the students' perceived sense of community in online classrooms – albeit to differing degrees. This was especially evident for locus: 82% of participants (123) who perceived a sense of locus, perceived a sense of community; 7% (10) who perceived a sense of locus did not perceive a sense of community.

Conversely, 93% of participants (140) who did not perceive a sense of locus, did not perceive a sense of community; 18% (27) who did perceive a sense of locus, did not perceive a sense of community. The chi-square test between these two variables yielded $X^2_{(2)} = 30.375$, $p < 0.001$, a significant relationship between students' perceived sense of locus and their perceived sense of community. The phi coefficient test also yielded a positive relationship of $\phi = .636$, $p < 0.001$, as well as a proportional reduction of error (PRE) of 63.6% – a relationship greater than the 95% confidence interval.

Although still offering a statistical correlation of significance, the five remaining elements were weaker predictors of variance. The chi-square test yielded a result of $X^2_{(2)} = 11.672$, $p < 0.001$ for students' perceived sense of distinctiveness and their perceived sense of community. For orientation, the chi-square test yielded a result of $X^2_{(2)} = 11.045$, $p < 0.001$, for identification $X^2_{(2)} = 25.896$, $p < 0.001$, for quality $X^2_{(2)} = 20.332$, $p < 0.001$, and for functionality $X^2_{(2)} = 9.130$, $p < 0.003$. Similarly, a positive relationship was found between community and each of the five remaining elements. For distinctiveness, the phi coefficient test yielded a result of $\phi = .408$, $p < 0.001$, for orientation $\phi = .398$, $p < 0.001$, for identification $\phi = .576$, $p < 0.001$, for quality $\phi = .564$, $p < 0.001$, and for functionality $\phi = .304$, $p < 0.003$.

By revealing a statistically and relationally significant correlation between community and each element of community identity, this study's quantitative results offer the first empirical support for Puddifoot's (1995, 2003) theoretical framework, while simultaneously extending that theoretical framework to an online context. Results of this study also serve to highlight the interrelated significance of all six elements, while still revealing a subtle hierarchy of importance. In light of these findings – combined with multiple calls for empirically-based practices on community building in online classrooms – the following section outlines three practical implications for educators in higher education.

4. Practical Implications

We conclude this study by detailing three practical implications for building community in online college classrooms: (1) locus via *virtual commons*, (2) distinctiveness via *pedagogical exclusivity*, and (3) orientation via *supportive norms*. These implications correlate to the three most statistically significant elements of community identity, while drawing directly from our interview data with 25 faculty members.

4.1. Locus via *Virtual Commons*

Puddifoot's (1995, 2003) six elements of community identity were each found to correlate with students' felt sense of community; however, locus was found to be the strongest predictor of community in online classrooms. One faculty participant echoed this reality by commenting: "[Canvas] is where we come together, it's the space we have in common… It's all we have" (Associate Professor of English). Another interviewee described Google Hangouts as being the course's "virtual coffeehouse" (Lecturer of Education), and yet another participant took her course's Homepage literally by labeling its subsequent links "Den," "Kitchen," and "Front Porch" (Lecturer of Art).

Because of locus' significance in creating online classroom community, instructors must seek to establish a *virtual commons* within each of their online courses. To accomplish this, they first need to recognize the importance that place plays in community building – even in distant learning courses that lack their own physical space in the literal sense. Just as one's physical space can serve to hinder or promote human interaction, the layout and organization of an online course should be seen as having the ability to hinder or promote classroom community. Thus, the aesthetic design of an online course's LMS, homepage, or website should be seen as equivalent to the lighting, seating, or room arrangement of a traditional classroom.

In effort to create a virtual commons, instructors might also consider the use of avatars and/or massively multiplayer online worlds (MMOWs). Avatars' potential for online community building is especially evident when students design their own version. As Swayne (2013) writes: "Your identity mixes in with the identity of that avatar and, as a result, your visual perception of the virtual environment is colored by the physical resources of your avatar" (par. 3). Taken one step further, avatars within a MMOW like *Second Life, The Sims,* or *Minecraft* can offer students an entire virtual world in which to interact. MMOWs offer classmates a sense of digital place (e.g., virtual commons), by allowing them to meet together in a cyber coffee shop, pub, park, etc.

Finally, instructors must also learn how to best leverage different online environments in order to successfully offer their students a virtual commons. Just as differing physical spaces offer their own unique ambiance, differing online spaces offer their own set of design intentions. These intentions often result in certain limitations and opportunities, allowing them to be used in different ways and for different purposes (see Aragon, 2003). Instead of using a chat feature within a class's LMS, for example, instructors might utilize a third-party platform designed specifically for this purpose: Paltalk, IMVU, Badoo, etc. The same is also true for aligning pedagogical goals with technologies that best meet those goals. As an Assistant Professor of Business commented, "You wouldn't got to a rock concert to study, and you wouldn't go to a library to rock out… [in the same way] you have to use different online spaces appropriately, for what they're best suited for."

4.2. Distinctiveness via *Pedagogical Exclusivity*

Puddifoot (1995, 2003) defines distinctiveness as the extent to which members see their community as offering unique characteristics. Distinctiveness also had a statistical and relational correlation to the students' sense of classroom community – second only to locus in its significance. Thus, it is vital for instructors to create a particular class culture that differentiates each of their courses from one another (a.k.a., *pedagogical exclusivity*).

A Lecturer of Communication described the way s/he accomplished pedagogical exclusivity by using a different theme in each online course: "I organize each class around a particular theme. That makes it different and keeps it fresh – for me and the students both." Themes s/he mentioned using from recent semesters included the television show *Survivor*, the film series *Hunger Games*, and even the cooperative board game *Pandemic*. This instructor created a custom logo for each course that corresponded to its chosen theme. S/he also began each online discussion with a corresponding meme or graphic.

In order to avoid the temptation of reusing old course assignments and class structures year after year, participants also spoke about the benefit of integrating current events (e.g, the US President election), fads or trends (e.g., Pokemon Go), as well as the students' unique perspectives (e.g., shared interests and hobbies mentioned on the class's discussion boards). Additional ideas for cultivating a distinct course culture included the creation of exclusive class traditions (e.g., nicknames), unique pedagogical approaches (e.g., service-learning), or even signature course assignments (e.g., engaged journaling). An Assistant Professor of Sociology elaborated on the effort s/he took to individualize each course with a signature assignment:

> Each class has a semester-long assignment that's unique to that section. Even if I'm teaching multiple sections of a course, they each have their own semester-long assignment – an ongoing competition or a service-learning project… It's taken on a lot of different forms over the years.

The faculty member described this approach as creating a distinct environment for the students, as well as her/himself, "It helps me to keep things straight too! I often think of the classes in this way: the 'service-learning section' or the 'group challenge section.' They become distinct in that way." In the end, each of these ideas – from themes to current events to signature assignments – result in a stronger sense of classroom community for both students and instructors via pedagogical exclusivity.

4.3. Orientation via *Supportive Norms*

The final implication to emerge from this study is orientation via *supportive norms*. Puddifoot's (1995, 2003) notion of orientation refers to the position a community member feels s/he holds within a community, with particular emphasis on emotional safety. Like locus and distinctiveness, orientation also had one of the strongest statistical and relational correlations to online classroom community. For this reason, it is vital for university instructors to create a safe, secure, and supportive classroom environment by modeling encouragement through her/his daily demeanor, classroom policies, etc.

Interview participants described several ways in which they modeled supportive norms, including the use mindful use of virtual/student hours, regular announcements, and positive feedback. A majority of instructors offered virtual hours by making themselves available online during regularly scheduled intervals for synchronous interaction with students. The most common software programs used for doing so were Zoom, Skype, and Voicethread; however, some faculty relied on simple email. Arguing that students were more familiar with email and, therefore, more likely to use it, these faculty members responded in real-time to student messages during their virtual hours like their own instant messaging system. As one interviewee put it, "Email is easier, I think. A student who's unsure or uncomfortable isn't going to jump on Skype to talk, but they'll send me an email…

It's an opening for further dialogue" (Assistant Professor of Math). Other participants elaborated even further on this idea by replacing the term "virtual hours" with "student hours" – a simple linguistic term they felt offered a more supportive connotation for online students.

Faculty members' use of regular announcements and positive feedback are a common practice in traditional classrooms, yet they were found to play an even more critical role in online courses. Morgan's (2011) warns against quantifying faculty-student interactions in attempt to build online community, and none of our interviewees advocated for a copious amount of mass emails. Yet regular course announcements were seen to help alleviate confusion and build consistency – each of which are particularly important sans regularly scheduled physical meetings: "Online courses aren't on students' minds as much as [standard] classes are, you know, 'out of sight, out of mind'… So announcements aren't just a nice reminder, but a way for faculty to connect in the first place" (Assistant Professor of Sociology). Similarly, student feedback in online classrooms typically lack the personal connection that accompanies face-to-face interaction. Not being able to perceive nonverbal cues – body language, facial expressions, etc. – makes it even more difficult for trusting relationships to form in virtual contexts (see Berry, 2011; Cohen & Gibson, 2003). For this reason, supportive feedback and positive reinforcement are needed more regularly to form a sense of online classroom community. According to an Associate Professor of Business:

> It's hard enough just to give [individual] feedback to 20-30 students, so it's easy to only offer critical feedback and ways to improve, to focus on the negative without realizing it, which can be discouraging or taken the wrong the way [by students]… So I've learned to go out of my way to be positive online – even more so than in the [traditional] classroom. It makes up for not being able to look them in the eye and to buid rapport that way.

In addition to modeling supportive norms themselves, faculty participants also created a framework in which their virtual students were encouraged to do the same. This final implication was accomplished through course contracts, academic cohorts, and even communal "plussing" (see Lehrer, 2012). Course contracts that are co-constructed alongside students not only helped outline supportive norms, but were also seen as garnering additional buy-in from the students. Meanwhile, academic cohorts fostered supportive norms by creating an in-group among peers, and communal "plussing" helped to curb overly critical students during class discussions and peer critiques. An Assistant Professor of Art spoke at length about "plussing" and its positive impact on community building:

> I think I first heard the idea from Steve Jobs… Instead of only critiquing someone, you're required to add a suggestion too… It creates a very supportive and creative environment where everyone's in on together, but where we aren't – on one hand – being overly critical of one another or – on the other hand – just patronizing everyone, as if everything everyone says is right.

5. Conclusion

As the popularity of online courses continue to increase exponentially, physical classrooms will eventually become a thing of the past. Despite this future reality – or rather because of it – educators must learn how to address the lower retention and graduation rates among distance learners. Studies have repeatedly drawn correlations between the underperformance by online students and an absence of classroom community; however, a limited number of studies have focused on best practices for community building in online classrooms at the university level.

Through the theoretical lens of *community identity*, this study addressed the pressing need for empirical research that informs community building in online college classrooms. Results revealed a statistical significance between students' felt sense of community and each of Puddifoot's (1995, 2003) six elements: locus, distinctiveness, identification, orientation, quality, and functionality (see also Puddifoot, 1994, 1996, 1997, 2003). Locus was found to offer the strongest predictor of the variance ($x^2_{(2)} = 30.375$, $p = .001$), and functionality was found to offer the weakest ($x^2_{(2)} = 9.130$, $p = .003$); each of the remaining elements were found to be intermediate predictors, ranging from $x^2_{(2)} = 11.405$ for identification, to $x^2_{(2)} = 25.896$ for orientation. Building upon these quantitative results, we drew from our qualitative interviews with 25 faculty members to inform three practical implications: (1) locus via *virtual commons*, (2) distinctiveness via *pedagogical exclusivity*, and (3) orientation via *supportive norms*.

Despite the unusual breadth of this study's results and implications, it is inherently limited by its sample size, geographic location, and so on. For this reason, future scholars should consider replicating this study in additional contexts: private universities, two-year universities and community colleges, as well as other four-year public universities beyond southern California. Similarly, this study could be replicated for hybrid/blended classroom settings (i.e., courses offering a combination of both online and in-person meetings). Although online and hybrid/blended courses share certain obstacles to building a sense of classroom community, this distinction would almost assuredly result in more nuanced implications for hybrid/blended students and educators.

Future scholars might also disaggregate their quantitative data to reveal potential implications based upon student differences: age, gender, race/ethnicity, nationality, able-bodiedness, etc. (see Jenkins, 2014a, 2014b). The same could also be done across differing majors, grade levels, etc. – not unlike Young and Bruce's (2011) research of classroom community across five distinct colleges. Finally, future work should also be taken to critically assess the implications resulting from this study's data set. Akin to the scholarship of McKinney, McKinney, Franiuk, and Schweitzer (2006), this could be accomplished by distributing student surveys at the start of a semester to gauge their initial sense of community. Calculated efforts to build community could then be taken by implementing this study's implications, before distributing the same survey again at semester's end.

Ultimately, by continuing to explore best practices for the creation of online classroom community, it is our hope that educators will learn how to capitalize on the potential benefits that distance learning has to offer, while simultaneously stemming the inferior retention and graduation rates among today's virtual college students.

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Appendix A:

Recruitment Script

Dear [faculty member's name]:

My name is [name of Co-PI], and I'm currently working on a study alongside [Co-PI and Co-PI] to explore "community" in online classrooms. The aim of our research is to develop best practices for how educators in higher education can cultivate an increased sense of community among their own online students.

As someone who's currently teaching online, could I interview you as part of our research study sometime during the next 2-3 weeks?

Our interview should last approximately 30-40 minutes, and we can meet at a campus location of your choice. Your potential participation in this study is completely voluntary. Any identifying information will be removed from all transcripts and subsequent manuscripts. If any point you feel uncomfortable or change your mind about participating, you can end our interview at any time.

If you are interested taking part, please let me know at your convenience so that we can schedule a time to discuss more details.

Thank you for your time.

Sincerely,

[Name of Co-PI]

Appendix B:

Faculty Interview Guide

I. Demographic Questions

1. Age?
2. Gender?
3. Race/ethnicity?
4. Official job title?
5. Academic discipline?
6. How long have you worked at CI?
7. How many online courses have you taught?
8. What's the name of the current online course you're teaching?

II. Online Classroom Community

1. How would you describe the experience of teaching an online course, as opposed to teaching a standard course?
2. How would you describe the culture of online classrooms, as opposed to standard classrooms? Can you offer an example to explain what you mean?
3. What does "community" mean to you? What does it mean for you to build a sense of community in the classroom?
4. Would you say you've experienced a sense of community within your online courses? If so, how would you describe that community?
5. What are some successful strategies or techniques you use to build a greater sense of community in your online classroom?
6. Conversely, what are some challenges you've experienced when attempting to build a greater sense of community in your online classroom?

III. Puddifoot's (1995, 2003) Six Elements of *Community Identity*

1. Locus: What physical elements have helped or hindered a sense of community in your online classrooms?
2. Distinctiveness: What elements have helped or hindered a sense of unique learning in your online classrooms?
3. Identification: What elements have helped or hindered a sense of belonging and personal connectedness in your online classrooms?
4. Orientation: What elements have helped or hindered a sense of personal investment and emotional safety in your online classrooms?
5. Quality of Community Life: What elements have helped or hindered a sense of comradery and cooperativeness in your online classrooms?
6. Community Functioning: What elements have helped or hindered a sense of functionality in your online classrooms?

Appendix C:

Anonymous Student Survey

Consent: This study is voluntary; its results are anonymous. You are indicating your desire to take part by completing the following survey, and you are free to end your participation at any time.

Age: _____ Gender: _____ Race/ethnicity: _____

Major: _____ Cumulative GPA: _____ Grade level: _____

Definitions: Per university policy, and for the purpose of this study, an "online" course refers to one in which more than 70% of class sessions occur exclusively online; a "standard" course refers to one in which less than 30% of class sessions occur exclusively online.

Online course currently enrolled in (e.g., BUS 220: Economics): _____

**If you are currently enrolled in more than one online course, please choose one to be the focus of this survey.*

Directions: In order to complete this questionnaire, please take a moment to reflect on the online course identified above, that you're currently enrolled in. With this specific course in mind, indicate on a scale from 1-10 whether you "strongly disagree" or "strongly agree" with each of the statements below.

1. The online course I'm currently enrolled in has a strong sense of classroom community.
(strongly disagree) 1 2 3 4 5 6 7 8 9 10 (strongly agree)

2. A creative use of classroom space helps foster interaction among students in this course.
(strongly disagree) 1 2 3 4 5 6 7 8 9 10 (strongly agree)

3. I've experienced physical limitations that keep me from fully engaging with my classmates in this course.
(strongly disagree) 1 2 3 4 5 6 7 8 9 10 (strongly agree)

4. The relationships I feel in this class are unique from those I've felt in other courses
(strongly disagree) 1 2 3 4 5 6 7 8 9 10 (strongly agree)

5. This class lacks a strong sense of culture that distinguishes it from the other courses I've taken.
(strongly disagree) 1 2 3 4 5 6 7 8 9 10 (strongly agree)

6. I feel connected with the other students in this course.
(strongly disagree) 1 2 3 4 5 6 7 8 9 10 (strongly agree)

7. I don't feel as if I truly "belong" in this class.
(strongly disagree) 1 2 3 4 5 6 7 8 9 10 (strongly agree)

8. I feel comfortable discussing personal details about myself with classroom peers.
(strongly disagree) 1 2 3 4 5 6 7 8 9 10 (strongly agree)

9. I am not fully invested in this course on an emotional level.
(strongly disagree) 1 2 3 4 5 6 7 8 9 10 (strongly agree)

10. Students seem to work especially well together in this course.
(strongly disagree) 1 2 3 4 5 6 7 8 9 10 (strongly agree)

11. There is a lack of unity and comradery among classmates in this course.
(strongly disagree) 1 2 3 4 5 6 7 8 9 10 (strongly agree)

12. The design of this class works well, without causing any undue frustration or unnecessary confusion.
(strongly disagree) 1 2 3 4 5 6 7 8 9 10 (strongly agree)

13. Overall, I would describe this class as being dysfunctional.
(strongly disagree) 1 2 3 4 5 6 7 8 9 10 (strongly agree)