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Online Facilitators and Sense of Community in K-12 Online Learning

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Doctor of Philosophy

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ABSTRACT

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Despite the continued growth of K-12 online learning, there remains a need for additional research addressing roles of online facilitators and how they can improve the sense of community at K-12 online schools. The first article of this dissertation presents a case study illustrating how online facilitators can provide the same level of support for their students that on-site facilitators provide students in blended environments. Data was gathered from teachers at Mountain Heights Academy (MHA), a fully online high school. MHA implemented a "Shepherding Program" to provide student with online facilitators. Each teacher, or shepherd, was responsible for 20 to 25 students. Teacher focus groups and one-on-one interviews were used to examine the perceived effects of a shepherding program on shepherd-student relationships. Additionally, the teacher roles in the shepherding program were compared to the roles of on-site facilitators. Teachers were largely satisfied with the perceived impact of the shepherding program on their relationships with their students. Findings also highlighted strong similarities between the support the shepherding program provided online students and the support on-site facilitators provide blended learning students.

The second article was a continuation of the case study from the first article. A key addition to the case study for the second article was the inclusion of student interviews. This article examined how teachers and students perceived that the shepherding program influenced instructor-student relationships. The analysis exposing similarities and differences between teacher and student perspectives of the shepherding program was conducted based on the four dimensions of Rovai's online sense of community: spirit, trust, interaction, and learning. Findings illustrated shepherd-student relationships consisting of all four elements of community in some degree.

ACKNOWLEDGEMENTS

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DESCRIPTION OF STRUCTURE AND CONTENT

Structure

This dissertation is presented in the article format based on requirements set forth by Brigham Young University's McKay School of Education. Two journal-ready articles are presented, titled *An Online High School "Shepherding" Program: Teacher roles and experiences mentoring online students* and *Teacher and Student Perspectives on Facilitating a Sense of Community Through an Online High School's "Shepherding" Program*. Following the two articles an extended literature review is presented in the Appendix A. Finally, the Dissertation References section provides a list of references from the following sections: Description of Structure and Content, Dissertation Conclusion, and Appendix A.

Content

Millions of K-12 students enroll in online learning courses each year (Watson, Murin, Vashaw, Gemin, & Rapp, 2012; Wicks, 2010). Opportunities for K-12 online learning are now available in all 50 states, with 31 states allowing fully online programs for the 2012-2013 school years (Watson et al., 2012). Some state legislations have even started requiring students to participate in online courses before graduating high school (Watson, Gemin, & Ryan, 2008) and others have allocated funds to encourage the growth of K-12 online learning (Davis & Ferdig, 2009).

Despite the growing enrollment and promising future of online K-12 schools, attrition rates continue to be a serious concern (Barbour & Reeves, 2009; Berge & Clark, 2005). Studies have shown dropout rates associated with online courses and programs ranging from 50 to 70% (Carr, 2000; Roblyer, 2006; Rovai & Wighting, 2005; Simpson, 2004). Some of the most consistent problems associated with online learning include lack of student motivation (Murphy

& Rodriguez-Manzanares, 2009), low levels of student support services (Ludwig-Hardman & Dunlap, 2003; Moore & Kearsley, 1996), sense of isolation (Fulton, 2002, Rovai, 2003), feelings of disconnectedness (Hawkins, Barbour, & Graham, 2012; Vonderwell, 2003), and impersonal interaction (Frank, Reich, & Humphreys, 2003). Researchers have frequently referred to some, or all, of these problems as evidence of a low sense of community (Conrad, 2005; Ludwig-Hardman & Dunlap, 2003; Rovai, 2002a; Rovai, 2002b; Rovai & Jordan, 2004; Song, Singleton, Hill, & Koh, 2004). McMillan and Chavis (1986) defined sense of community 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). When applying sense of community to online learning, Rovai (2002a) identified four key dimensions: spirit, trust, interaction, and commonality of expectation and goals.

Several online programs have looked to on-site facilitators as a way to improve students' sense of community and lower attrition rates (Barbour & Mulcahy, 2004; Hannum, Irvin, Lei, & Farmer, 2008; Ludwig-Hardman & Dunlap, 2003). A typical teacher-facilitator instructional model involves an online teacher and an on-site facilitator (Davis & Ferdig, 2009; Harms, Niederhauser, Davis, Roblyer, & Gilbert, 2006). For example, Odyssey Charter High School, a blended program, offers the majority of classes online and requires students to be on campus once a week (Barbour & Plough, 2012). Communication with their online teacher is carried out over the internet. When the students are on campus, they have an opportunity to meet face-to-face with their on-site facilitator. These meetings are used to discuss student progress, organize their course work, and address student needs.

However, the equivalent of on-site facilitators is not always available for students in fully online programs. In contrast to a blended or supplemental program, where students are required

to attend a brick and mortar facility during part of their educational experience, students enrolled in fully online programs may never step foot in a brick and mortar school. The problem is that while student needs remain the same, there is very little evidence that fully online programs have figured out how to provide this kind of support for their students (Ferdig, Cavanaugh, DiPietro, Black, & Dawson, 2009). In addition, the context of K-12 online learning is changing and the demand for fully online programs is growing (Watson et al., 2012), thus emphasizing the need for fully online programs to offer increased student support.

Mountain Heights Academy (MHA), formerly known as Open High School of Utah, a successful full-time online charter school, implemented a "Shepherding Program" to provide a similar kind of student support as on-site facilitators. Each teacher is responsible for "shepherding" 20 to 25 students. According to MHA administrators, "The goal is for the student to make a connection with an anchor adult at the school and provide them with someone they feel comfortable with so they can ask questions and solicit advice" (OHSU, 2012, p. 23).

The first article, entitled *An Online High School "Shepherding" Program: Teacher roles and experiences mentoring online students*, presents a qualitative analysis of how the shepherding program influences teacher-student relationships at MHA. In addition, a comparison of how the shepherding program fulfills the roles of on-site facilitators in an online environment is presented. Thick, rich description is used to illustrate the teachers' experiences and highlight the similarities and differences between the roles of shepherds and the roles of on-site facilitators.

The second article, entitled *Teacher and Student Perspectives on Facilitating a Sense of Community Through an Online High School's "Shepherding" Program*, presents a qualitative analysis of how teachers and students perceive that the shepherding program has influenced

shepherd-student relationships as seen through the "sense of community" lens. Rovia's four dimensions of online community constituted the lens for our analysis: spirit, trust, interaction, and learning (Rovai, 2002a). A thematic unit of analysis is used to identify evidence of Rovai's community across five teacher focus groups, five teacher interviews, and 10 student interviews.

Both journal manuscripts seek to fill research gaps in the roles K-12 online facilitators and how online facilitators can improve K-12 online sense of community.

ARTICLE 1: An Online High School "Shepherding" Program: Teacher roles and experiences mentoring online students

Drysdale, J.S., Graham, C.R., Borup, J. (in press). An online high school "shepherding" program: Teacher roles and experiences mentoring online students. *Journal of Technology and Teacher Education*.

Abstract

Several online programs use on-site facilitators to create a stronger sense of community and reduce student dropout. However, very little research addresses how programs that are fully online can provide their students with comparable support. Using K-12 online research, this case study analyzed a "shepherding program" at Mountain Heights Academy, a fully online high school. We found that the shepherding program enabled fully online teachers to provide their students with many of the services typical of on-site facilitators. The roles of the shepherding program included building caring relationships, facilitating content interaction, and providing students with the communication links they needed to be successful. In addition, the shepherding program increased teachers' job satisfaction, responsibility, motivation, and mental peace. Demands on teachers who acted as shepherds included investments of time and emotion. This case study provides fully online schools with one approach for improving student support.

Introduction

Millions of K-12 students enroll in online learning courses each year (Watson, Murin, Vashaw, Gemin, & Rapp, 2012). Opportunities for K-12 online learning are now available in all 50 states, with 31 states allowing fully online programs for the 2012-2013 school year (Watson et al., 2012). Some state legislatures require students to participate in online courses before graduating from high school (Watson, Gemin, & Ryan, 2008), and others allocate funds to encourage the growth of K-12 online learning (Davis & Ferdig, 2009).

Despite the increasing enrollment and promising future of online K-12 schools, attrition continues to be a serious concern (Barbour & Reeves, 2009; Berge & Clark, 2005). Studies have shown dropout rates in online courses and programs ranging from 50 to 70% (Carr, 2000; Roblyer, 2006; Rovai & Wighting, 2005; Simpson, 2004). Some of the most consistent problems associated with online learning include lack of student motivation (Murphy & Rodriguez-Manzanares, 2009), low levels of student support (Ludwig-Hardman & Dunlap, 2003; Moore & Kearsley, 1996), sense of isolation (Fulton, 2002; Rovai, 2003), feelings of disconnectedness (Hawkins, Barbour, & Graham, 2012; Vonderwell, 2003), and impression of impersonal interaction (Frank, Reich, & Humphreys, 2003). Researchers have frequently referred to some or all of these problems as evidence of a low sense of community (Conrad, 2005; Ludwig-Hardman & Dunlap, 2003; Rovai, 2002a, 2002b; Rovai & Jordan, 2004; Song, Singleton, Hill, & Koh, 2004). McMillan and Chavis (1986) define sense of community 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).

Several online programs use on-site facilitators to improve students' sense of community and to lower attrition rates (Barbour & Mulcahy, 2004; Hannum, Irvin, Lei, & Farmer, 2008; Ludwig-Hardman & Dunlap, 2003). A typical instructional model involves an online teacher and an on-site facilitator (Davis & Ferdig, 2009; Harms, Niederhauser, Davis, Roblyer, & Gilbert, 2006). For example, Odyssey Charter High School, a blended program, offers the majority of classes online and requires students to be on campus once a week (Barbour & Plough, 2012). Students' communication with their online teacher takes place over the Internet. When on campus, students may meet face-to-face with their on-site facilitator to discuss their progress, organize their course work, and address other needs.

Full-time online students may not have the equivalent of on-site facilitators, as they are not required to attend a brick and mortar facility as those in a blended or supplemental program must do. Their needs remain the same as those of peers not fully online, and very little evidence shows that fully online programs have learned to provide this kind of student support (Ferdig, Cavanaugh, DiPietro, Black, & Dawson, 2009). As the context of K-12 online learning is changing and the demand for fully online programs is increasing (Watson et al., 2012), the need for student support in these programs becomes more apparent.

Mountain Heights Academy (MHA), formerly known as Open High School of Utah, a successful full-time online charter school, implemented a "shepherding program" to provide student support similar to that of on-site facilitators in programs with a brick-and-mortar component. Each teacher is responsible for 20 to 25 students. According to MHA administrators, "The goal is for the student to make a connection with an anchor adult at the school [who] . . . they feel comfortable with so they can ask questions and solicit advice" (OHSU, 2012, p. 23).

This case study, which focused on the shepherding program at MHA, addressed the following research questions:

- How do MHA teachers perceive their roles in the shepherding program?

- How do MHA teachers perceive the impact of the shepherding program on their teaching experience?

Literature Review

In order to provide online students with the support they need, Harms et al. (2006) proposed a conceptual framework identifying three complementary roles essential for online school success: teachers, facilitators, and designers. These authors suggested that when online educators fulfill these roles, student performance will improve, turnover will decrease, student satisfaction will increase, and sense of community will improve. Ferdig et al. (2009) expanded the list to nine roles for online educators: teacher, instructional designer, course facilitator, local key contact, administrator, mentor, technology coordinator, and guidance counselor. When these roles are fulfilled, results include improvement in teacher-student communication, academic advisement, student support, and sense of community. Both of these articles emphasized the need for facilitators to fulfill many of these roles and suggested a greater sense of community as students receive this kind of support.

Harms et al. (2006) described the following responsibilities as part of the on-site facilitator role:

- Get to know students and understand their learning needs

- Advise students in course selection

- Encourage students in developing study and organizational skills

- Communicate with teachers and parents regarding individual students

- Promote co-presence and a sense of community

- Monitor individual student progress and mentor students as needed

- Provide an "immediate, personal, face-to-face communication option who can act as a problem-solver, mentor and friend."

While the individual responsibilities of a facilitator may vary by program, little variation is found in the nature of their roles. In a review of literature, de la Varre, Keane, and Irvin (2011) noted some facilitator roles such as assisting with technology issues, answering student questions, communicating with parents, and ensuring the honesty and integrity of student work. In addition, facilitators monitor student progress so remedial help can be provided before students disengage from the course (Ferdig, 2010). Facilitators are often asked to encourage students, help students work through their fears, and teach them how to organize their studies (Hannum et al., 2008). In summary, "the basic role of facilitators [is] to support and guide students" (Hannum et al, 2008, p. 217). While online teachers are charged with the task of teaching content, facilitator responsibilities are centered on the holistic development of the students they help.

This pattern worked especially well at Michigan Virtual School, which partnered with St. Clair County Regional Educational Service Agency to offer high school courses to students who had dropped out of school or had been expelled (Ferdig, 2010) for reasons such as possessing and selling drugs, being bored or anxious, having mental health issues, fighting, or being a threat to a teacher. Students enrolling in the online courses were required to meet with an on-site mentor twice a week to receive extra help, support, and encouragement. At the end of the study, 19 out of 26 students completed a survey. Despite some very negative backgrounds, when asked about the mentoring provided, "100% of the students felt accepted by their face-to-face mentor"

(p. 18). Ferdig noted the significance of this claim and recommended online schools look for ways to provide more support for at-risk students.

In a qualitative analysis involving five online high school instructors and 58 on-site facilitators, de la Varre, et al. (2011) identified common successful practices and activities. One facilitator maintained, "One thing I believe helps most is maintaining a good relationship with the students. I listen, very carefully, and try to remain calm, cool, collected, and offer a sense of humor." She continued, "When time allows, I pull out my 'college war stories' as an anecdotal learning experience. That helps them get into a positive frame of mind." Another facilitator said she would "listen, be supportive and accessible, but not stand in the way of what the instructor does." An on-site facilitator may be a classroom teacher or a non-content expert such as a guidance counselor, principal, secretary, librarian, coach, or other staff member in the school (de la Varre et al., 2011; Hannum et al., 2008; Harms et al, 2006).

Research supports that the role of the on-site facilitator as a major contributor to student success in online learning (de la Varre et al., 2011; Roblyer, Freeman, Stabler, & Schneidmiller, 2007). Hannum et al. (2008) provided empirical support to this claim. In a cluster-randomized control trial including 36 matched pairs of schools and 246 students, Hannum et al. tested whether having trained on-site facilitators would improve student persistence in K-12 online learning. Results indicated that students who received support from a trained on-site facilitator had higher scores that were statistically significant in the number of weeks they remained enrolled in the course, as well as in overall course completion, compared to those who did not receive this help.

Unfortunately, on-site facilitators are not available for students enrolled in fully online programs. Davis and Ferdig (2009) recognized that the variety of organizational strategies in

online learning, some being blended or supplemental and others being fully online. While there is considerable research on how on-site facilitators provide meaningful student support, Ferdig (2010) called for "more research to help practitioners understand the role of . . . online mentoring" (p. 20).

Online mentors may face some of the same challenges teachers have experienced when transitioning from traditional to online teaching. Just as good classroom teachers do not necessarily become good online teachers (Wood, 2005), good on-site facilitators do not necessarily make for good online facilitators. For example, many new online teachers express frustration in learning how to communicate and develop close relationships with students they never meet face-to-face (Murphy & Rodriguez-Manzanares, 2009). Teachers must work harder to achieve the level of social interaction easily achieved in traditional K-12 classrooms (Harms et al., 2006; Hawkins et al., 2012). Absence of verbal and visual cues can lead to feelings of isolation (Kerka, 1996) for teachers and students. Online facilitators will likely experience the same frustrations if they base their practices exclusively on on-site facilitator instruction. Thus this study responds to numerous calls for more research in K-12 online learning (Barbour & Plough, 2012; Cavanaugh, Barbour, & Clark, 2009; Davis & Ferdig, 2009; de la Varre et al., 2011; Ferdig et al., 2009; Hawkins, Barbour, & Graham, 2011; Watson et al., 2012) specifically to assist practitioners in addressing the roles of online facilitators (Ferdig, 2010).

Methods

A case study approach (Yin, 2003) was used for this study. Case studies are deemed appropriate for understanding a specific phenomenon (Stake, 2010) that has received limited research attention (Moore, 2004) within a natural context that cannot be influenced or controlled by researchers (Yin, 2003). A case study can use a variety of data collection and analysis

approaches. Focus group interviews and one-on-one interviews were used to gain an in-depth description of the shepherding program phenomenon. Constant comparative coding methods (Glaser, 1965) were then used to understand the perceived impact of the shepherding program. The data collection and data analysis procedures used in this study fit a case study approach as they allowed researchers to gain a deeper understanding of a single phenomenon, within its natural context, and contribute to an under-research area of K-12 online learning.

Context

MHA is a tuition-free online public charter school for Grades 7-12. At the time of the study MHA employed 21 teachers and enrolled 381 students in Grades 9-12. Understanding the importance of providing facilitators to reach out, encourage, and support the students, the school organized a shepherding program to provide each student with an anchor adult who would check in regularly to see how they were doing. During the first couple of months each semester, "shepherds" contacted their students weekly, then every other week thereafter. Most contacts were through video conferences, text messages, instant messages, phone calls, emails, blogs, and twitter accounts. Shepherds were to make sure their students felt comfortable, encouraged, understood, and cared for. Similar to on-site facilitators, shepherds did not teach content, but focused on fostering relationships to build a sense of belonging and providing students with an adult they felt comfortable with to ask questions and solicit advice.

Typically, full-time teachers shepherded 20 to 25 students and part-time teachers shepherded 10. As each semester began, each teacher selected five students a day until every student had an assigned shepherd. This "draft" allowed teachers to select students who were enrolled that semester in one of their classes or with whom they had a prior relationship.

Data Collection

All of the 22 MHA teachers were invited to participate in small focus group interviews lasting 75 minutes; 18 teachers accepted. Focus group interviews were used to explore teachers' experiences with the shepherding program (Flores & Alonso, 1995; Kreuger, 1988). Morgan (1988) and Hoppe, Wells, Morrison, Gilmore, and Wildson (1995) suggested usefulness of focus groups in early stages of research for developing questions for one-on-one interview protocols. In addition, the focus group interactions informed our decisions in selecting interviewees.

Focus group questions invited teachers to share their experiences and ideas about what worked and what did not work in their shepherding efforts. To maximize the amount of information gathered and minimize levels of discomfort in answering questions, teachers were divided into five smaller groups of three or four according to subject area of instruction, each meeting in a 75-minute session. Focus groups were conducted at MHA West Jordan offices to minimize travel and inconvenience for the teachers. With the consent of the director, focus groups were conducted in conjunction with teachers' in-service so those who chose to participate would already be on site. Sessions were audio recorded and transcribed to preserve the richness of the information (Stake, 2010).

For more in-depth understanding, five teachers were invited to participate in one-hour semi-structured interviews. Selection was based on two criteria. First, stratified purposeful sampling across subject domains was used to obtain maximum variation in teachers' perspectives and practices associated with the shepherding program (Patton, 1990). Variation was sought by domain, hypothesizing that students would respond differently to a relationship with a teacher if the course was required vs. elective. It was also evident during the focus group sessions, and in a previous study (Borup, Graham, & Drysdale, 2013), that teachers of different subjects used

different strategies to build a sense of community with their students. For example, English teachers were able to learn more about their students by reading and replying to student writing than teachers in other subject domains. The final sample of teachers for the one-on-one interviews included one teacher from each of the following subject domains: English, math, science, social studies, and electives. Within the subject domain strata, intensity sampling was used as our second selection criterion (Patton, 1990). Focus group sessions were used to determine which teachers were the most active shepherds and would therefore be able to share rich descriptive experiences.

Data Analysis

Focus group and interview transcripts were analyzed using elements of constant comparison coding methods (Glaser, 1965). The primary author coded all five focus group and all five interview transcripts using a thematic unit of analysis (Rourke, Anderson, Garrison, & Archer, 2001). Each unit was identified at the meaning level—based on thoughts or ideas conveying a single item of information. During the initial coding, themes were sought related to the roles of online facilitators and the ways shepherds filled those roles. Each theme consisted of a collection of thematic units. New thematic units (meaningful thoughts or ideas) were compared to previously coded units and organized into themes. New thematic units that matched a group of coded units were included in the same overarching theme. A new unit that did not match previously coded units became a new theme (Glaser, 1965). This same pattern continued until all transcripts were coded. Periodically during the coding process, emerging themes and corresponding data were reviewed with other members of the research team as part of the peer debriefing process to increase the credibility of the findings (Guba & Lincoln, 1989).

To increase the validity and reliability of our analysis, interviewed teachers were asked to member check their transcripts to ensure their experiences were accurately described. In addition, the primary author met with each member of the research team at different stages during the coding process to discuss item categorization and major theme identification occurring during the analysis. When coding was complete, each theme was qualitatively analyzed for patterns.

Results

This section of the article will first present how MHA teachers perceived and fulfilled their primary roles as shepherds. Then we will address the perceived impact of the shepherding program on the teachers' experience at MHA.

Shepherding Roles

The three most prevalent shepherding roles identified by MHA teachers were building caring relationships, facilitating content interaction, and providing communication links.

Building caring relationships. In all of the focus groups and interviews, teachers stated that their primary role in the shepherding program was to establish "caring" and "personal relationships" with students. One teacher noted, "I think this program really helps kids realize that their teachers care about them as an entire person and not just their academic record." A teacher supported this mentality by saying that the student experience at MHA was more than just "doing your homework;" it included having "someone who wants to know how you are and cares about you succeeding." Another teacher elaborated:

I think the shepherding program is to be a point of contact for the students where if they're having some sort of issue or crisis, they know that there's one adult they've got a personal connection with they can come to [who] can help them or refer them to people

who will help them. It's not necessarily their friend, but somebody who's a very kind,

trusted, and caring adult.

Shepherds hoped this personal connection would help students feel safe and know that they had a

teacher who was "not going to judge, who strictly cared about them."

One of the initial challenges for shepherds was learning to reach out and develop this

kind of relationship with students. MHA administrators provided shepherds with objectives for

the program, but they did not specify in detail how to accomplish those objectives. Thus

teachers would "go about things in different ways" according to their "different personalities."

Despite individual differences, our analysis identified several patterns indicating what teachers

considered important in building caring relationships: engaging in social interaction and self-

disclosure, understanding student background, and determining preferred modes of

communication.

Engaging in social interaction and self-disclosure. A primary difference between

shepherd-student and teacher-student relationships was the emphasis on non-course-specific or

social interaction with students. These social interactions were intended to promote "that extra

level of connection" between teachers and students. Early semester shepherding efforts typically

focused on what interested students and what was going on in their lives, giving teacher and

student "something to talk about" later in the semester. During the focus groups and interviews,

teachers shared experiences of positive conversations with their students on topics such as

biking, holiday celebrations, video games, pets, drivers' ed., and dancing. By conversations

unrelated to course subject matter, teachers felt they were "getting to know their students and

having those relationships that they would have in a regular [bricks-and-mortar] setting, if not

even more."

This social interaction seemed especially important when shepherding low-performing students. For instance, one teacher was shepherding a student who "never turned his work in." One day she started g-chatting[1] him, "trying to get to know him" and seeing if she "could get him to open up." During the conversation they found a common interest in showing chickens at the fair and "talked about his chickens that whole semester." Although the student still struggled academically, the teacher noticed an academic improvement. She concluded that such relationships were "really was what shepherding was about."

Several teachers noticed the importance of self-disclosure in helping students feel comfortable with these social interactions. One teacher said when "students have a little extra knowledge of who we are [it takes their relationships to] a whole new level," and students "will disclose something about themselves because they feel more comfortable." She continued, "I can't even imagine if [students] didn't know me at all, how they would ever even consider the idea of sharing their life with me, or something that is going on in their day-to-day with me." Teachers would typically share personal information about hobbies, holiday plans, interests, or their own experiences with schooling—all with the goal or finding common ground that would help the students feel more comfortable in the conversations.

Understanding student background. As one shepherd expressed, "Once I hear [students'] backgrounds, I'm more sympathetic and more willing to go out of my way to change things and make them feel comfortable in the class." Some mentioned understanding the context of students' home life, health issues, and needs requiring pedagogical adaptation. For example, a teacher learned that a student's anxiety levels made her eligible for a plan providing appropriate instructional services. So a plan was set up to assist this student with her anxiety and help her be successful.

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[1] Instant messaging through Google Chat's service

Some teachers were unable to make a difference in students' learning, but they could change their own attitudes and offer more appropriate emotional support. Over several interactions a teacher found that one of her students was not completing his course assignments because he was working two jobs as "the breadwinner for his family." Although the teacher could not change his failing status in the course, she felt that because she had "a better picture of who the kid was," she could be more compassionate and understanding of his situation. Another teacher learned that one of her students had been severely bullied before transferring to MHA. "So of course he didn't feel comfortable sharing his opinions on the forum!" Being familiar with this student's background helped her to "understand him in a completely different way and want to help him a lot more."

Determining preferred modes of communication. Shepherds also considered it important to learn how their students preferred to be contacted from the variety of resources available, including g-chat, email, phone calls, twitter, video chat, e-cards, blog posts, and text messages. Individual student communication preferences often became apparent during teacher-student interchanges. One teacher left a phone message for a student who texted her back indicating that he preferred text.

However, some teachers struggled to identify students' preferred communication mode. One teacher who persisted shared the importance of finding it:

> I texted her once and she texted me right back, and I thought, "Yay, I have a way of contacting her!" So Amy and I texted all the time about "Here's your assignment. If you just do this little bit, you can do it." And we just would work every day, and I knew about her work schedule as far as like "All right, if you can just spend two hours tonight, you should be able to get everything done." We were able to create that relationship

where she knew that I was cheering her on. Eventually she passed both quarters and was able to graduate. . . . It was a really rewarding experience as [I realized] that all these kids have different issues and [I'm] there to help them along the way.

While a variety of communication options can enable teachers to find the way most comfortable for individuals, several teachers indicated that some media with high levels of social interaction had a tendency to blur the outlines of a professional teacher-student relationship. One explained, "The way you have to build a relationship in a virtual world is very different [from a traditional school environment]." She "would never have g-chatted" her students when she taught at a brick-and-mortar school. Some modes of communication such as g-chatting, texting, video conferencing, and tweeting created "less teacher-student" relationships. Students began calling one teacher by her first name as it was displayed in her g-chat conversations. She had to explain, "You can't call me [Jill]. You have to call me Ms. [Jones]," and the matter was resolved.

Facilitating content interaction. Facilitating content interaction, the second most frequently referenced role of the shepherding program, centered on helping students succeed academically. Our data analysis identified the themes monitor, motivate, teach study skills, and provide technology assistance.

The role of monitoring student academic progress was frequently mentioned by teachers in describing their shepherding responsibilities. Shepherds carefully followed their students' grades in all classes so they could "notice when [students] were doing well" and when "their grades were low." When students were doing well, teachers considered it important to "celebrate successes." When a student's grades were low, the shepherd would commonly check in and say, "Hey, I noticed that your grades dropped a little bit this week. Is everything going ok? Do you want to talk about anything?" One teacher experienced the importance of this monitoring when

one of her *A* students' grade dropped slightly. Though she did not typically worry about this student, she called to discuss the academic decline. "Slowly I watched her grade go down and down, but the more I talked to her, the more I understood." Through these conversations, the shepherd learned that the student "was being abused" and was able to get the student the help she really needed.

As they monitored their students' progress shepherds reacted to what they learned by becoming "motivators" and "cheerleaders." As one teacher said, "Just being that cheerleader, being that extra person in that corner, you know, motivating them and cheering them on—I think that's a huge part of being the shepherd." One teacher enjoyed sending out tweets like "Oh good job [Chris]. You got an *A* on this test!" Another teacher would challenge her students who were struggling in other classes: "I noticed you are at 58% in math. I bet if you could just turn in one more assignment, you could get that up to a passing grade." Whether shepherds provided praise for succeeding students or encouragement for struggling students, they felt like their students appreciated their "extra effort" and level of awareness.

Another way shepherds facilitated content interaction was by teaching students the skills needed "to succeed" in an online learning environment. One teacher explained that "one of the roles of the shepherd [was] to help [struggling students] pinpoint what the issue was and then give them suggestions and ideas" about how to resolve their issue. Many times this involved teaching "best practices" for online learning. These practices included lessons on "time management," "how to make a schedule," and "whatever was needed to help them."

A final area in which shepherds helped their students engage with content was by providing assistance with the technology required in the school's program. As one teacher noted, they helped by "making sure that [their] students felt confident and secure in their abilities

to navigate through the school and do well in their classes." Teachers helped their students with technology issues such as "logging in and passwords," "submitting assignments," "video chatting," and "setting up email accounts." Several teachers mentioned that the majority of technology assistance they provided was at the beginning of the school year and to new students who were getting accustomed to the expectations.

Communication link. A final primary role of the shepherds was providing communication links for their students. The most common of these links were between the students and their other teachers. One teacher described her experience:

> Toward the end of the semester or quarter, I feel like I am the liaison for their other teachers. I have a lot of kids who call me and say, "I am so stressed about this class. I don't know what to do." I almost become the counselor and say, "Okay, well let's go talk to your teacher." Sometimes I have even gone with [the student] to talk with this other teacher and say, "Okay, this is what we need to do"—just to be that ally they need to be successful.

A different shepherd had a student call her one day and say, "I am failing a math class. I don't know what to do." So the shepherd g-chatted the student's math teacher and arranged for a meeting at which the three of them "joined together and worked out a plan to help [the student] be a little more successful." When the shepherd was asked why her student came to her rather than the math teacher, she said:

> I think because we had made that relationship from shepherding. I had called her so many times . . . trying to get to know her and I knew her struggles . . . we had that friendship and sense of unity. So when she needed help . . . she felt a little less intimidated to come to me.

In this situation the student was comfortable expressing concerns to her shepherd, and the shepherd was able to serve as a communication link between the student and the teacher who could help her directly.

Another way shepherds provided communication to benefit their students was by engaging in a teacher-teacher link—sharing important information they learned while shepherding with the student's other teachers. Teacher-teacher communication tended to be more frequent at the beginnings of semesters when all teachers were getting to know his/her students. Teacher-teacher communication most often addressed issues related to health, family, moving, and poor performance. When needed, teachers would counsel together to share ideas on how to help their students. One teacher said:

> I've had students where I've shepherded them and I find out something crazy is going on at home, and then I'm able to tell all the other teachers. And then we're all able to . . . come up with an action plan of how to help that student.

Impact of Shepherding on Teachers

The teachers at MHA viewed shepherding as an important responsibility in which they invested a lot of time, thought, and energy. The following section addresses our second research question: How do MHA teachers perceive the impact of the shepherding program on their teaching experience? We will first discuss the benefits to teachers, then the demands teachers experienced while shepherding.

Benefits to teachers. In addition to improving the students' online experience, the shepherding program benefited teachers as well. Our analysis identified four positive impacts for teachers: (1) job satisfaction, (2) responsibility, (3) motivation, and (4) mental peace.

The positive impact of shepherding most commonly noted by MHA teachers was increased job satisfaction. Frequent comments included, "I really enjoy shepherding," and "I loved it. . . . It was so much fun getting to know [the students]." Teachers at MHA indicated they "wanted to have personal interactions and personal relationships with students." One teacher explained, "It is almost like the shepherding program works in reverse . . . that positive interaction makes the job happier." Several indicated that shepherding was important to their job satisfaction teaching online because "it really reminded [them] of why [they] went into teaching." One teacher extended this sentiment by saying that if there had not been a shepherding program she would still have personally contacted students because she did not want to be a teacher who only "put lessons on and grade[d] papers." Another agreed, "If I just made my lectures and graded papers, I would feel more like a glorified data entry person than I would a teacher . . . it is the kids that make the difference." One acknowledged the reciprocity:

> If anything, [the shepherding program] has helped me way more than it probably has helped [my students]. When I'm feeling frustrated with teaching, I know I can call my shepherd students and they'll encourage me and make me want to continue teaching and [loving] these students.

Second, the shepherding program appeared to increase teachers' sense of responsibility towards students. Teachers acknowledged that the online setting made it easy to view their students as "just a name" and to consider their job as something to "get done." However, when shepherding, they felt "responsible for" real people: to "make sure that they are okay and know what is going on in their lives." Teacher still wanted relationships with all their students," but felt "more responsibility towards [the students I shepherd] and . . . they're usually my first ones

that I create those relationships with." Another teacher added that having such a responsibility for her shepherded students "makes teaching real and important."

Third, teachers found that the responsibility and resulting accountability inherent in the program were motivational. A teacher referred to shepherding as a "nice little motivator" with a "written goal" that prevented personal relationships from "getting slid to the back burner" during busy parts of the school year. Some teachers found shepherding motivated them to reach out to their students in ways that they might not have done otherwise. One elaborated, "It forced me to call kids I didn't want to call. They were the kids who were struggling . . . but it forced me to work harder with those kids." Similarly, teachers indicated shepherding responsibilities made them less likely to "give up" on students and more likely to "focus their efforts" on their assigned students. One teacher added that shepherding made her a better teacher because she "needed to worry about [her shepherded students] and . . . care about them."

A fourth positive impact on teachers was the mental peace associated with knowing that every student had a shepherd. A teacher explained:

> There are some students who you can't get a hold of . . . I guess it is kind of relieving . . . to know that they do have a shepherd . . . [who] is being successful with contacting [them] . . . or at least trying more consistently.

Several teachers also mentioned that it can be "overwhelming" for secondary teachers to make sure their 160 students all feel cared for. One teacher said that she cared about all of her students, but the shepherding program allowed her "to hone in" on a smaller number. Teachers expressed comfort in knowing that "everyone in the school was taken care of" by a shepherd.

Demands on teachers. The important benefits of the shepherding program did not come without sacrifice. Most commonly teacher-shepherds referred to emotional investment and time.

Teachers experienced discouragement and frustration over students who refused to respond to their shepherding efforts. Depending on the group of students they were shepherding, as many as "9 out of 10" or as few as "3 out of 20" students would respond when contacted. A teacher with particularly unresponsive students stated that "it was frustrating to put a lot of time in when you got so little back," and another teacher added that getting some students to respond was "like pulling teeth!" Teachers found that some of the most unresponsive students were also unresponsive to contact from their other teachers. Reasons for unresponsiveness were unclear.

When response rates were particularly low, shepherding felt "like a chore or like one more thing on our list." Thus some teachers turned to easier types of contact such as sending "happy holiday e-cards." One teacher expressed that sometimes she felt more like a "herder" than a "shepherd." She continued, "A shepherd is supposed to walk and they follow, and I feel like I am pushing and it makes me frustrated." In nearly every instance teachers identified the most challenging part of shepherding as "non-responders," commenting that their experience shepherding was "very dependent on the students" being willing to reciprocate communication.

A second teacher sacrifice associated with shepherding was the time required. As one teacher noted, "It's a constant balance of what effort you put where. Shepherding is something that is a consistent effort, and that means something else is getting pushed back." Most teachers felt that the time required was "still worth it," though "sometimes inconvenient" when conversations would "last up to an hour." However, typical shepherding interactions tended to range from two to fifteen minutes. Other demands on time included "looking for a really good e-card," figuring out a "good conversation starter," and identifying ways to "engage them." At busy times, shepherding "sometimes added more stress" to teachers' lives. One described arriving at the end of the week and suddenly realizing, "Oh my gosh. I didn't contact my sheep!"

She would feel stressed because she wanted to show her students that she cared about them, but lacked the time to find something meaningful to do last minute. Many teachers qualified their thoughts with something like "so yes, it gets very frustrating, but it's definitely worth it."

Discussion

Currently little research focuses on ways full-time online programs are providing the kind of support students need and receive from on-site facilitators in blended programs. This research found strong similarities between the roles of teachers in the shepherding program and the roles of on-site facilitators. The case study provides one example of a single phenomenon, the shepherding program, with findings that can be adapted to meet the needs of other fully online programs in a variety of contexts.

Similar to the work of Harms et al. (2006) and the description of on-site facilitators by de la Varre et al. (2011), one of the most important roles of the shepherding program was to build a caring relationship between teachers and students. Establishing these relationships involved a high level of social interaction as teachers learned about their students' interests, backgrounds, and learning needs. Unlike face-to-face environments where social interactions can occur naturally, online experiences do not facilitate interactions unless they are planned (Murphy & Rodriguez-Manzanarez, 2008). Thus MHA teachers were more likely to interact socially with students in the formal shepherding program. However, teachers also found several obstacles to these social interactions, such as student preferences for different modes of communication. Teachers needed to learn which modes encourage interaction, as research shows that interaction-rich environments facilitate caring relationships (Velasquez, Graham, & Osguthorpe, 2013).

Once formed, these relationships appeared to have academic benefits for students. First, teachers were better able to diagnose weaknesses in study skills and personalize instruction when

they knew their students' backgrounds and needs. Just as online teaching requires different techniques than face-to-face teaching (Davis, Roblyer, Charania, Ferdig, Harms, Compton, & Cho, 2007), online learning requires a different set of skills than traditional face-to-face learning (Ludwig-Hardman & Dunlap, 2003). In addition, shepherds assisted students with their technology issues to prevent technological difficulties from limiting students' ability to engage in the course (Hillman, Willis, & Gunawardena, 1994). Teaching effective study skills and resolving technology problems parallel the services that on-site facilitators provide their students (de la Varre et al., 2011; Harms et al., 2006).

Consistent with the roles of on-site facilitators (Ferdig, 2010; Hannum et al., 2008; Harms et al., 2006), shepherds monitored their students' work and grades in all classes and provided timely motivation and encouragement. When their students' grades went down, shepherds were able to offer remedial help. Most shepherds also seized opportunities to praise students who were performing well.

Students frequently relied on their shepherds to help them communicate with others who could provide extra support. One teacher felt like the "liaison" between her students and their other teachers, and she tried to "be that ally [her students] needed to be successful." Additionally, shepherds contacted other teachers to share important information about a student or to counsel together about how to help a particular student. This role aligns with the roles of on-site facilitators to communicate with other teachers, as identified by Harms et al. (2006).

The shepherding program resulted in many perceived benefits for the teachers at MHA. Most notable was an increase in job satisfaction, as teachers found that the caring social relationships with their students reminded them of why they had become teachers. This finding is consistent with Bolliger and Wasilik (2009), who identified teacher-student interaction as an

important element to online teacher job satisfaction. Noddings (1984) had earlier pointed out that joy in teaching is a byproduct of two-way caring, and the reciprocity of caring brings it full circle. This was reflected in the shepherds' experiences. Even if the student did not pass or perform well, they felt satisfied if the caring was acknowledged and reciprocated. In addition to increased job satisfaction, shepherding teachers felt more motivated to reach out to their students because they had a sense of responsibility.

Primary sacrifices involved with shepherding included the time and emotional investment teachers put into building caring relationships with their students. Research indicates that developing personal relationships in an online environment has been a challenge for many institutions (Hawkins et al., 2011, 2012; Murphy & Rodriguez-Manzanares, 2008). Despite some difficulties in developing online caring relationships, teachers felt the shepherding program benefitted MHA and increased teacher-student social and content interaction—a necessity in online schooling according to DiPietro, Ferdig, Black, & Preston (2008).

Conclusion and Implications

This case study on the shepherding program at MHA, a fully online program, examined online teachers' attempts to provide a level of student support similar to what on-site facilitators provide in blended settings. Despite their physical separation, teachers were successful at building caring relationships with students, facilitating content interaction, and providing students with necessary communication links for their online success. Although the program was originally designed for the benefit of students, teachers found that it increased their job satisfaction and motivation to reach out to their students.

Bawane and Spector (2009) claimed that 'preparing teachers for online education involves preparing them for a wide variety of roles and developing related competencies' (p.

383). However, according to a study conducted by Kennedy and Archambault (2012), only 1.3% of teacher education programs were preparing teachers to teach in an online environment. Perhaps this is one reason why teachers have struggled when transitioning from face-to-face to online teaching (Hawkins et al., 2012). Our findings with the shepherding program underscore the claim that online teachers may be asked to fulfill a variety of roles. Teacher education programs can use the shepherding program as an example of how one online high school expanded the roles of their teachers and provided each student with an online facilitator. Additionally, this case study emphasizes the importance of strong teacher-student relationships in an online environment. Teacher education programs can use examples from the shepherding program to facilitate discussion on how to build these relationships.

We see several opportunities for future research. First, this research is limited to teacher perspectives. Similarly, much of the research on on-site facilitators has focused on teacher roles and experiences (de la Varre et al., 2011; Hannum et al., 2008; Harms et al., 2006). We believe an understanding of student experiences with online facilitators would help schools that are fully online to determine how to provide greater support for their students. Another opportunity for research is looking at whether these facilitator roles are better fulfilled by a teacher or by another individual like a counselor or full-time mentor (Harms et al., 2006). Our research was limited to teachers fulfilling this role. The shepherding program is an example of how a fully online program can provide the kind of support students need and receive from on-site facilitators in blended programs. While we understand the shepherding program illustrates a single phenomenon, we believe other fully online K-12 programs can adopt and adapt the underlying principles involved with providing students with an anchor adult who cares about them and whom they can trust.

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ARTICLE 2: Teacher and Student Perspectives on Facilitating a Sense of Community

Through an Online High School's "Shepherding" Program

Abstract

Student disconnectedness remains a serious concern in K-12 online learning. One online high school, Mountain Heights Academy, created a "shepherding program" to encourage a sense of community among teachers and students. Every teacher is a "shepherd" and is responsible for 20 to 25 students. This article presents a qualitative analysis of how teachers and students perceive that the shepherding program has influenced shepherd-student relationships as seen through the "sense of community" lens. The analysis exposing similarities and differences between teacher and student perspectives of the shepherding program was conducted based on the four dimensions of Rovai's online sense of community: spirit, trust, interaction, and learning. Findings illustrated shepherd-student relationships consisting of all four elements of community in some degree.

Introduction

Research consistently confirms steady growth in demand for K-12 online learning each year (Watson, Murin, Vashaw, Gemin, & Rapp, 2012; Wicks, 2010).   While enthusiasm remains high for K-12 online learning, attrition rates continue to cause serious concern (Hawkins, Barbour, & Graham, 2012; Mosier, 2010). Research points to several factors contributing to high drop-out rates, including lack of student support (Ludwig-Hardman & Dunlap, 2003), feelings of disconnectedness (Hawkins et al., 2012), isolation (Rovai & Jordan, 2004), and impersonal interaction (Frank, Reich, & Humphreys, 2003). Hannum, Irvin, Lei, & Farmer claim that many online programs "ignore the human element" of educational experiences (2008). Scholars have referred to these concerns collectively as symptoms of a low sense of community (Conrad, 2005; Ludwig-Hardman & Dunlap, 2003; Rovai, 2002a; Rovai, 2002b; Rovai & Jordan, 2004; Song, Singleton, Hill, & Koh, 2004). McMillan and Chavis (1986) defined sense of community 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).

Several institutions have turned to facilitators, also known as mentors, in an effort to establish a sense of community and reduce attrition rates in online settings (Barbour & Mulcahy, 2004; Drysdale, Graham, & Borup, in press; Hannum et al., 2008; Mosier, 2010). While the specific roles of facilitators vary based on institutional needs, the roles generally include monitoring student progress, answering questions, providing encouragement, communicating with teacher and parents, and being the students' primary point of contact (de la Varre, Keane, & Irvin, 2011; Ferdig, 2010; Harms, Niederhauser, Davis, Roblyer, & Gilbert, 2006). A limitation of the majority of facilitator research is that it is focused on blended learning environments,

where facilitators are able to meet "on-site" with their students (Barbour & Plough, 2012). This limitation is compounded when considering that 31 states have fully online K-12 programs (Watson et al., 2012). There is very little research indicating that fully online programs have figured out a way to provide facilitator support for their students at a distance (Ferdig, Cavanaugh, DiPietro, Black, & Dawson, 2009). In addition, since research has linked many of the problems associated with online learning to a missing sense of community (Rovai, 2002a), and facilitators have been identified as a potential way of building feelings associated with community (Ludwig-Hardman & Dunlap, 2003), it makes sense for fully online programs to explore the use of facilitators to this end.

Mountain Heights Academy (MHA), a fully online charter school, has implemented a "Shepherding Program" to provide students with an online facilitator. Each facilitator is responsible for 20 to 25 students. MHA administrators view the purpose of the shepherding program is to enable students to "make a connection with an anchor adult" and to provide students with "someone they feel comfortable with so they can ask questions and solicit advice" (OHSU, p. 23). A case study focused on the shepherding program addresses the following questions:

1. How do purposefully sampled MHA students perceive that the shepherding program has influenced shepherd-student relationships as seen through a "sense of community" lens?

2. How do purposefully sampled MHA student responses compare with how purposefully sampled MHA teachers perceived the impact of the shepherding program on shepherd-student relationships?

Literature Review

Before using a sense of community lens to look at the perceived effects of the shepherding program on the facilitator-student relationship we review the definitions of sense of community as a lens for our study.

Researchers have claimed that a strong sense of community leads to increased student satisfaction (Liu, Magjuka, Bonk, & Lee, 2007; Song et al., 2004), higher levels of persistence (Rovai, 2002b; Tinto, 1993), lower attrition rates (Wehlage, Rutter, & Smith, 1989), and an increased cohesion, trust, interdependence, and affective support (Harms et al., 2006; Rovai, 2002a; Rovai & Jordan, 2004). Conversely, a low sense of community leads to feelings of student isolation (Rovai, 2002a; Song et al., 2004), disconnectedness (Hawkins et al., 2012; Kerka, 1996), a lack of personal attention (Twigg, 1997), and dropping out (DeVries & Wheeler, 1996). A strong sense of community attracts and retains learners (Rovai, 2002b) and is an important factor for student success (Conrad, 2005). Spruce and Lucking claimed "online learning is most effective when students share a sense of community" (2012, p. 1576). Shea, Swan, Li, and Pickett (2005) stated that sense of community "is an essential element in the development of quality online learning environments" (p. 70). Barnard-Brak and Shiu (2010) further supported these claims when he noted that a sense of community may be a necessity for student success in online learning.

Despite the apparent benefits, sense of community has proven difficult to define. McMillian and Chavis (1986) identified and defined four elements of sense of community:

1. Membership – "the feeling of belonging or of sharing a sense of personal relatedness" (p. 9)

2. Influence – "a sense of mattering, of making a difference to a group and of the group mattering to its members" (p. 9)

3. Integration and fulfillment of needs – "the feeling that members' needs will be met by the resources received through their membership in the group" (p. 9)

4. Shared emotional connection – "the commitment and belief that members have shared and will share history, common places, time together, and similar experiences" (p. 9)

In a summary of their work, McMillian and Chavis defined sense of community 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).

While the work of McMillian and Chavis (1986) focused on face-to-face communities, such as neighborhoods, Rovai proposed that a sense of community could also be established at comparable levels in online learning environments (2002a). However, Rovai acknowledged that the change in context would require educators to re-conceptualize how social bonds, an essential part of community, are stimulated in a virtual environment. After a review of literature, Rovai (2002a) identified four key constructs to building a sense of community in online learning: spirit, trust, interaction, and commonality of expectation and goals (see Table 1). Rovai's framework constitutes the lens for our study.

Table 1

Rovai's Key Dimensions of Online Classroom Community

Key Constructs	Description
Spirit	Recognition of membership in a community
	Feelings of friendship, cohesion, and bonding
	Enjoyment of time spent together
	Ability to challenge and nurture each other
Trust	Willingness to rely on and exercise confidence in others
	Credibility – word of others can be relied on
	Benevolence – genuine interest in the welfare of others
	Feelings of safety
	Ability to speak with candor
Interaction	Quantity vs. quality
	Mitigates task-driven interaction
	Fosters socio-emotional interaction which includes
	Empathetic messages and self-disclosure
Common Expectation: Learning	Commitment to a common educational purpose
	Shared value of learning
	Mutual satisfaction of educational needs

Spirit described the overall sense of belonging members of a community felt as they developed friendships and enjoyed their time together (Rovai, 2002a). One evidence of spirit in a community was the ability of members to challenge one another. In the process of challenging each other, their friendships promoted a desire to care for and nurture other members. Rovai pointed out that feelings of isolation, loneliness, low motivation to learn, and low self-esteem were associated with communities that lacked spirit.

Trust was the second dimension of community (Rovai, 2002a). Community members exhibited trust when they exercised confidence in one another and demonstrated a willingness to rely on other members. Rovai highlighted credibility and benevolence as essential elements of trust. Credibility was the "expectation that the word of other learners in the community [could] be relied on" (p. 5). Benevolence was "the extent to which learners [were] genuinely interested in the welfare of other members of the community and [were] motivated to assist others in their learning" (p. 5). Communities filled with credibility and benevolence fostered an atmosphere of safety and the ability to speak with candor to help one another in the learning process. Rovai believed communities would "become formal and stiff" without relationships of trust (p. 5).

The third dimension of Rovai's classroom community was interaction (Rovai, 2002a). Rovai emphasized the need for quality interaction over sheer quantity interaction. Quality interaction included empathetic messages directed towards building relationships among learners. Additionally, Rovai believed interaction needed to include self-disclosure in order for community members to become familiar with one another. Rovai quoted Cutler (1995), when he said: "the more one discloses personal information, the more others will reciprocate, and the more individuals know about each other, the more likely they are to establish trust, seek support, and thus find satisfaction" (p. 17).

Learning, the final component, unified community members to a common educational purpose (Rovai, 2002a). Rovai believed community members were responsible for helping each other achieve educational goals and that members had an obligation to ensure the learning expectations of the community were being met. Active participation in the learning community helped members to value and gain a deeper understanding of the content being studied.

While there is little dispute regarding the benefits associated with sense of community, a lack of community is not a new criticism directed towards online learning. In a study that surveyed 76 online students, 71% of the learners identified lack of community as a weakness in online learning (Song et al., 2004). Students are not the only ones to recognize this concern. In Hawkins, et al. (2012), teachers articulated a missing sense of community by describing the disconnectedness that existed between teacher and students at Utah's Electronic High School (EHS). At the time of the study (2009) EHS was the largest online high school in Utah with over 50,000 course enrollments and 76 licensed teachers. Hawkins' et al. case study illustrated what it looked like to have a low sense of community between teachers and students. In summary, researchers concluded, "The major theme that emerged from the teacher interviews was a sense of disconnection the teachers felt with their students" (p. 132). Upon further review, their findings provided clear evidence that all four dimensions of classroom community—spirit, trust, interaction, and common expectations (Rovai, 2002a)—were lacking in the teacher-student relationships at EHS.

A major barrier to creating a sense of community in online learning arises when teachers believe students want to be left alone (Hawkins et al., 2012). McCombs and Vakili (2005) urged teachers to "avoid the assumption that online learners are those who prefer less personal contact with instructors, are independent learners, have high motivation to learn, are self-disciplined and

have high personal self-efficacy" (p. 1592). Zweig (2003) pointed out that students are less likely to drop out and more likely to be engaged when they experience consistent, positive relationships with their teachers. Murphy and Rodriguez-Manzanares (2009) suggested that less autonomous young adults rely on their teachers to help them become motivated, a quality critical for student success in any educational context (Maeher, 1984), including distance education (Choi & Johnson, 2005; Eom, Wen, & Ashill, 2006; Liao, 2006; Lim & Kim, 2003). While students are more likely to succeed in online learning if they are mature and self-disciplined, having established effective study habits and organization skills, numerous studies remind us that young learners struggle and need help knowing how to develop skills such as self-regulation, self-discipline, and intrinsic motivation (Barbour & Reeves, 2009; Cavanaugh, Barbour, & Clark, 2009; Rice, 2006). Ferdig et al. (2009) summarized that online educators need to provide their students, particularly young K-12 learners, with both instructional and personal support.

Context

Mountain Heights Academy (MHA) is a tuition free, online public charter school for grades 7-12. At the time of the study, MHA had 21 teachers and 381 students in grades 9-12. In an effort to help students feel comfortable, understood, encouraged, and a sense of belonging, MHA started a shepherding program. The goal of the shepherding program was to provide each student with an anchor adult that would help them to "feel comfortable" so that they would "ask questions and solicit advice" (OHSU, p. 23). Each teacher, referred to as "shepherds," was responsible for 20 to 25 students.

Methods

In this section we first describe our process for collecting data. Then we explain how we analyzed our data.

Data Collection

We selected a case study approach (Yin, 2003) for our study. We viewed this as the most appropriate method for our study because we wanted to understand a specific phenomenon (Stake, 2010) that has received limited research attention (Moore, 2004) within the natural context where we had no influence or control (Yin, 2003). All MHA teachers (N=22) were invited to participate in small focus group interviews lasting 75 minutes; 18 teachers accepted the invitation. Focus group interviews were used as a preliminary and exploratory approach to learning about teachers' experiences with the shepherding program (Flores & Alonso, 1995; Kreuger, 1988). Morgan (1988) and Hoppe, Wells, Morrison, Gilmore, and Wildson (1995) suggested that focus groups are helpful in the early stages of research for developing questions to be used in subsequent one-on-one interview protocols. In addition, the focus group interactions informed our sampling decisions when selecting potential teachers to participate in one-on-one interviews. Our focus group questions invited teachers to share their experiences and ideas about what worked and what did not work in their shepherding efforts. In order to maximize the amount of information we could gather from the focus groups, and minimize levels of discomfort in answering questions, we divided the teachers into five smaller groups. Groups consisted of 3-4 teachers per group, according to subject area of instruction, each with their own 75-minute session. Focus groups were conducted at OHSU West Jordan offices to minimize travel and inconvenience for the teachers. We also arranged with the director of OHSU to conduct the focus groups in conjunction with teacher in-service so that teachers would already be on-site if they wished to participate. In accordance with Stake (2010), focus group sessions were audio recorded and transcribed to preserve the richness of the information.

To deepen our understanding of the shepherding phenomenon, we invited five teachers to participate in one-hour semi-structured interviews. We selected teachers to participate based on two criteria. First, we used stratified purposeful sampling across subject domains to promote maximum variation in teachers' perspectives and practices associated with the shepherding program (Patton, 1990). We sought variation by domain because we hypothesized that students would respond to teacher-student relationships differently depending on whether the course was required or an elective taken by choice. We also noticed during the focus group sessions, and from a former study conducted by the authors (Drysdale, Graham, & Borup, in press), that teachers used different strategies to build a sense of community with their students depending on the subject domain they taught. For example, English teachers were able to learn more about their students by reading and replying to writing assignments than teachers in other subject domains. Our final sample of teachers for the one-on-one interviews included one teacher from each of the following subject domains: English, math, science, social studies, and electives. Within the subject domain strata, we used intensity sampling as our second criteria for selecting teachers (Patton, 1990). We reviewed our focus group sessions to determine which teachers were the most active shepherds and would therefore be able to share rich descriptive experiences based their shepherding efforts.

In order to gain the students' perspective, we invited 10 students to participate in one-hour, semi-structured interviews. Student selection was based on three criteria. First, we used stratified purposeful sampling by asking each teacher we interviewed to recommend six of their shepherded students for interviewing (Patton, 1990). As with our teacher interviews, we hypothesized having students from a variety of domains would promote maximum variation because students would react to teachers differently based on whether the course was required or

taken as an elective. We used intensity sampling for our second criteria. We asked each teacher to recommend three students who were most impacted by the shepherding program. Even though this criteria was deliberately left to teacher interpretation, teachers generally selected students who they perceived had a notable increase in engagement, performance, or sense of belonging. These students will be referred to as extreme impact students. While we knew we would only interview one of the three students, we wanted to ensure if the first student declined to be interviewed we had other options for our intensity sampling. Our third criteria focused on typical case sampling. We wanted to balance our intensity sampling with a student's perspective that would reflect a typical experience with the shepherding program. Similar to the intensity sampling, we asked each teacher to recommend three students that fit a typical case so that if the first declined to be interviewed we could ask a different student.

Data Analysis

Focus group and interview transcripts were analyzed for evidence of Rovai's online community using elements of constant comparison coding methods (Lincoln & Guba, 1985) and applied thematic analysis (Guest, MacQueen, & Namey, 2012). During the initial analysis, the primary author used a thematic unit of analysis for analyzing all focus group and interview transcripts: 5 focus groups and 15 one-on-one interviews (Rourke, Anderson, Garrison, & Archer, 2001). Each thematic unit was compared to Rovai's (2002a) definitions of spirit, trust, interaction, and common expectation. While our analysis was guided by Rovai's definition on online community, we remained open to discovering additional themes. The thematic units were identified at the meaning level, or in other words, were based on thoughts or ideas that conveyed a single meaning. New thematic units were compared to previously coded units and organized into themes. If the new thematic unit matched a group of coded units, then it was included in the

same overarching theme. If the new unit did not match previously coded units, a new theme was formed (Lincoln & Guba, 1985). This same pattern continued for all transcripts. Extensive peer debriefing was used to verify the themes and patterns identified by the primary author and to increase the credibility of the findings (Guba & Lincoln, 1989). Any disagreements were resolved during these meetings. In addition, to increase the credibility and dependability of our analysis, we asked the teachers and students we interviewed to member check their transcripts to ensure their experiences with the shepherding program were accurately described.

Results

This section of the article presents how MHA teachers and students perceived the effects of the shepherding program on shepherd-student relationships. Our findings are organized according to Rovai's online community framework (2002a, 2004): interaction, spirit, trust, and learning.

Interaction

During our data analysis, encouragement and self-disclosure emerged as the primary themes of interaction. The students' perspective will be presented first, followed by the teachers' perspective for each theme.

Encouragement—students' perspective. Every interviewed student indicated that they benefited from their shepherds' encouraging words. One student recounted a time when she "had a really bad day" and she was "really bummed" because she did not perform well on an assignment she put a lot of time into. She turned to her shepherd for some encouragement "and it all vanished, and I would go back to thinking, 'I have this,' which would really help me." Another student reiterated throughout her interview that her shepherd was "always supportive." The student further described, "She was curious as to what my dreams were, and she was just

always motivational and supportive for me to accomplish them." Several students commented that the continual simple expressions of encouragement, such as "I know you can do it," and "Don't give up," helped them to stay motivated and try their best throughout the semester.

Sometimes words of encouragement came in the form of helping students to keep things in perspective. For example, one student turned to her shepherd when she thought she was not going to get an "A" in chemistry despite putting forth her best effort. She shared the following experience:

> And so I emailed Ms. Jones. I was freaking out to her, and so she said, "Ok, even if you lose your "A" average in chemistry, it's not a big deal because chemistry is a really hard class! So even 87% as an average in chemistry is an impressive grade. So if you end up with a "B" average, don't beat yourself up because that's what the majority of the really smart people get in Chemistry. Trust me, I've taught it." And so I calmed down a little bit. Like, "Ok, if that's what most smart people get in Chemistry, then I guess it won't be the end of the world." It was very heartwarming and a major confidence boost.

Similarly, a different student described turning to her teacher for "pep talks" when she was "feeling discouraged about a project or something." The student exclaimed to her shepherd "I don't know how the heck I'm going to pull this off! It makes no sense!" Her shepherd responded "No, you can do it! I've seen your work. You pull off amazing things, and I know you can do it, and you're going to end up with a fantastic grade like you always do."

On a different occasion, a student discovered he wanted to be a school teacher after he graduated, but he was not confident he would be a "good teacher" and that he would be able to "have as big of an effect on people" as his shepherd did on him. "I asked [my shepherd] if he thought I would be a good teacher, and he said definitely. He listed a whole bunch of my traits

that would make me a good teacher, and I realized that it was true." This experience motivated the student to pursue his goals and gave him confidence that he could be successful.

Encouragement—teachers' perspective. Shepherds felt that "constant calling and emailing and being encouraging" was a fundamental part of building good shepherd-student relationships. Teachers said that "a huge part of being a shepherd" was "being that cheerleader, being that extra person in the corner, you know, motivating students and cheering them on." Shepherds monitored their students' progress and encouraged their students to do well in every class. For example, an English teacher contacted a student she was shepherding and said, "I noticed you are at 58% I math. I bet if you could just turn in one more assignment, you could get that up to a passing grade!" Similarly, a different shepherd had a student call him to talk about another class. The student said, "I am so stressed about this class. I don't know what to do." The shepherd encouraged the student to talk with his teacher about his concerns, and then "went with the student to talk with the other teacher." The shepherd concluded that "students just need their shepherds to be that ally they need to be successful."

One teacher shared the following experience that illustrated how she was able to help a struggling student through persistent encouraging messages:

> I texted all the time about, "Here's your assignment. If you just do this little bit, you can do it." And we would work every day and I knew about her work schedule as far as like, "All right, if you can just spend two hours tonight, you should be able to get everything done." We were able to create that relationship where she knew that I was cheering her on. Eventually she passed both quarters and was able to graduate. . . . It was a really rewarding experience as you realize that all these kids have different issues and you're there to help them along the way.

Many shepherds felt that encouraging messages were equally important for both low-performing and high-performing students. One shepherd explained, "In this online setting, it's so easy to feel alone. Even though they're getting A's and they're doing awesome, they need someone that's calling them to check-up on them and to tell them 'good job.' It's very important." Shepherds frequently sent messages to their students with phrases such as, "You can do it!" and "You're almost at the end of the quarter. Finish off strong!" One shepherd summarized the sentiment of her focus group when she said, "We see where they need to improve and we encourage them to keep going."

Self-disclosure—students' perspective. Most students felt encouraged to self-disclose when their shepherds wanted to know about their lives outside of school. One student spoke of his shepherd when he said, "she knew me more personally than the majority of my other teachers because she seemed to be the most interested in my personal life." He appreciated that she would ask questions like, "'How's your brother doing, the one that you're babysitting for?' Or, 'How's your one sister doing? Did the surgery help at all?' Or 'How's your dad doing? Are his diabetes any better?' She actually cared about my family."

Students were also encouraged to self-disclose when conversations with their shepherds would "go off on different kinds of subjects" and they had opportunities to "get to know [their shepherds] a little better." A particularly shy student said that when teachers "tell you something about themselves, like their interests or hobbies, it helps me to open up a lot more." A different student said, "It was actually really cool that she let us know how into exercising she was. It motivated me to tell her more about myself." In contrast, some students found that their shepherds struggled to self-disclose and learn about their students. One student noted that she wished her shepherd would have been "more open" and that her shepherd would have tried

harder to "get to know her." As a result, this student did not feel comfortable interacting with this teacher and "hesitated" to ask questions because she thought her teacher "would get annoyed" with her.

Other benefits of teacher self-disclosure included students feeling like their courses "were much less stressful." One student explained that when he got to know his shepherd it helped him to "feel comfortable around him and comfortable talking with him." A different student said that when she found out that her shepherd "actually had kids around my age," she realized, "Oh, she's got kids that are going through the same thing that I'm going through right now. I can talk to her." In every interview students indicated that they like learning more about their shepherds.

Self-disclosure—teachers' perspective. One teacher described self-disclosure as an essential ingredient to establishing "two-way communication" with her assigned students. She continued, "I'll give them little pieces of information about me, which I've noticed helps them to give me little bits about them." Another teacher noted, "As long as I'm an open book, they will be as well." Shepherds strived to be "really open, but professional" in their communication. Discussion topics included favorite books, hobbies, movies, foods, weekend plans, and other interests not necessarily related to the subject being studied. In general, shepherds felt that their personal self-disclosure helped their students to "feel more comfortable disclosing things about themselves." One shepherd emphasized this when he stated, "I can't even imagine if a student didn't know me at all, how they would ever even consider the idea of sharing their life with me, or something that's going on in their day-to-day with me."

Shepherds also encouraged their students to self-disclose by inviting them to share "something fun and interesting about themselves," or by asking their students to fill out "getting

to know you" questionnaires. Higher levels of self-disclosure lead shepherds to feel like they had "better relationships" with their students. One shepherd noted:

It's just really nice when you're talking to the student, and you find out what they're into. Then it gives life to them, in a sense, because you see their work, but there's a difference between seeing a student's work and then talking with them one-on-one. Sometimes you understand a kid a little bit better when you know what they're into, or what their home life is like. It gives you another level of understanding for your students, which is nice.

Even though shepherds endorsed self-disclosure as a necessary part of shepherd-student relationships, some shepherds were more comfortable self-disclosing than others. One shepherd commented, "Some teachers are a lot more personal and let their students know everything about their personal lives. That's just not my style." She explained that while she valued self-disclosure, she preferred to "wait until the conversations guide to a point where I feel like I can give some personal information that pertains to a given situation."

Spirit

The second element of Rovai's online community was spirit. Belonging and friendship emerged as the primary themes of spirit during our data analysis. The students' perspective will be presented first, followed by the teachers' perspective for each theme.

Belonging—students' perspective. Student described a variety of ways that their shepherds helped them to feel a sense of belonging at MHA. Most students spoke in general terms about how their shepherds always made them "feel welcome" through "frequent" and "friendly" communication. More specifically, one student's sense of belonging was increased when her shepherd spotlighted her "good work" by "putting it on our homepage for the class to see." She said, "That helped me to fit in because it helped me feel that I was good enough to be

on the board." On a larger scale, MHA tried to create a sense of community and belonging by organizing school activities, such as school dances and service projects. These school activities were not required for course completion or graduation, but were meant to provide opportunities for students and teachers to interact in person. Multiple students mentioned their shepherds would encourage them to attend these activities. One student said "If [my shepherd] went to a school activity and I didn't, she would email me like, "Oh, I missed you at this activity. How come you couldn't come?" She said these interactions "made me feel missed, and like my company was wanted."

A different student said her shepherd helped her feel like she belonged at MHA by valuing her opinions. On multiple occasions he asked for her feedback "about previous activities." Additionally, she felt "needed" when he asked her to "talk with her classmates to see how they were doing" because he thought she "would relate to them better" as a student. While the experiences varied among students, every student felt like it was important for their teachers to help them feel "valued," "wanted," and "welcome."

Belonging—teachers' perspective. Shepherds generally agreed that in order for students to feel like they belonged at MHA, they needed to "know that someone cared about them" and that they were not "alone" in their schooling. Most shepherds used "weekly communication" to "check in" with their students and make sure their needs were being met. These communications were meant to "show interest in students beyond a letter grade" so that a "natural connection" could be made.

Several shepherds used school activities as opportunities to invite students to participate and interact with others. One teacher shared the following experience:

If an event was coming up, like the fall dance, I went to my list of students I shepherd, and I personally invited them to the dance. I opened a chat with anybody that was online, and I sent an email to anybody that wasn't online. I said, "I'm going to be there. I'm going to be a chaperone. You should really come to this! It would be a ton of fun!" And a couple of students at the dance came up to me and said, "I wasn't going to come until you invited me, and now I'm really glad I'm here." I think that that definitely fosters that sense of community. Because then it's not just a post on the general course page. It's like, "Hey, I want to see you there," and then I can see them there and say hello.

Another shepherd sought to increase student sense of belonging by "connecting students with each other." For example, he knew that one of his shepherded students was "good at design," so he "pushed him a little bit to convince him" to join "yearbook." Initially, this student was "very quiet" during their yearbook meetings. However, as the student "felt more comfortable," he started "preparing jokes to bring" and "totally became a part of the group." This shepherd believed these "relationships between students are very important" and they distinguish MHA from "the average virtual high school, where students are online doing things but they don't have that connection between each other."

Friendship—students' perspective. Nearly every interviewed student referred to their shepherd as a "friend." One student said, "I don't know what I would do without Mrs. Smith. She's a dear friend to me." Several students indicated that they "started forming a friendship" with their shepherds when their shepherds "cared about them" and displayed an "interest" in their lives. As one student stated, "He really cared about us as people and not just students." A common theme that emerged as students described forming these relationships was the need for social interaction. "The first time the ice broke" between one student and his shepherd was when

"she contacted me and started actually talking about regular things other than school." While one student admitted it was "weird" the first time her shepherd asked her about "non-school related stuff," she said that quickly went away and she enjoyed the social interaction. Another student said, "I think [social interactions] made us come together as, not only a teacher and student relationship, but also on a friendly relationship too."

All but one student felt that establishing personal relationships with their shepherds was an important part of their experience at MHA. As one student explained, "It's important for my teachers to be more than just some acquaintance because I feel like I can communicate with them better if we're more on the level of a friend instead of on the level of an acquaintance." Students were more likely to develop friendships with their teachers when their teachers were "fun, easy to talk to, interested in my interests," and when they were willing to "joke around" with their students. Most students appreciated when their teachers were "more of a friend" than "just a teacher."

Friendship—teachers' perspective. Teachers typically referred to strong caring relationships with their students rather than describing their relationships as friendships. One teacher noted, "I think this program really helps kids realize that their teachers care about them as an entire person and not just their academic record." Shepherds focused on building "caring" and "personal relationship" with their students. One teacher summarized well how many shepherds felt when she said, "I feel like I have a very good relationship with all my students, but I have a more in-depth relationship with the students I shepherd." At the beginning of the semester one shepherd tried to set the tone for the relationships she would develop with her students by sending a message that said, "I'm your teacher but I also want to be your friend. I'm here for you if you need anything." Developing close relationships with students helped

shepherds to relax and enjoy their jobs more. One teacher said, "When I work with Emily, I can make a mistake, and we can both laugh because we know each other pretty well, and it's fine." Conversely, she said, "Whereas the student who rarely contacts me, I feel like I need to be 100% on my game and very professional, and I can't joke around with them." Shepherds-student relationships often continued beyond the end of a semester when the student no longer had that shepherd as a teacher. Students contacted their former shepherds to socialize and to seek advice. One teacher explained, "I think that it's because there was a rapport and a relationship that was focused on more than just the essence of school. She felt comfortable to ask me questions" and visiting about life.

Trust

The third element of Rovai's online community was trust. During our data analysis, safety and the ability to speak with candor emerged as the primary themes of trust. These themes were classified under trust to be consistent with Rovai's definition of online community. The students' perspective will be presented first, followed by the teachers' perspective for each theme.

Safety—students' perspective. Most students said if they needed advice they would go to their shepherds before their other teachers. One student said "I would mostly go to her because I felt like she understood me the best." Another student commented "I felt like he was a trustworthy adult that I could confide in if anything was going on." Students said they felt comfortable going to their shepherds for advice because their shepherds "listened," "gave their full attention," and "actually cared" about their students. Additionally, one student noted, "I felt like she wasn't going to judge me and I could contact her with whatever I needed." During the interviews students mentioned going to their shepherds for advice about college, relationships,

siblings, other classes, or when they were "feeling down and depressed and needed someone to talk to." One student said "If I was just having a bad day at home, talking to Mrs. Pearce would turn that over and I would forget why I was angry in the first place." Another student indicated that she felt comfortable going to all of her teachers to discuss school related matters, but when it came to needing "non-course specific advice, personal advice," she would go to her shepherd.

Safety—teachers' perspective. Shepherds generally strived to help students feel safe by being "that anchor adult, that person that if students are having a hard time or something is going on in their home life, or whatever is happening, they know that there's someone who cares about them, whose objective and not going to judge, who strictly cares about them…and their success." Shepherds have had students seek advice in regards to "family issues," "what they should do with their future," college, "letters of recommendation," and other "non-school related things." For example, one shepherd spent over an hour discussing college questions with her student. She said, "It was one of those good conversations that when I closed my computer that day I was like, 'If she didn't learn anything about math that's ok, because I made a difference in helping her feel comfortable about going to college in a year.'" Another example of safety was illustrated when a shepherd described a student who would "send me links to assignments she's done in other classes. She sent me a video that she did for her World Civ class, and she was like, 'I knew you'd enjoy it, so you have to watch it!'" On a more serious note, a different teacher described an experience where "because of the relationship we had, I was the very first one [my student] opened up to when we found out that she was being abused at home." This teacher was then able to get her student the help she needed.

Speak with candor—students' perspective. Students indicated that they have responded, and would respond, in a variety of ways to candid words from their shepherds. One

student said she would be "hurt, just thinking that maybe I let her down." A second student said

he would be "shocked at first, just because it's not like her. She is a really, really sweet, kind

person." A third student said she would feel "a little embarrassed and frustrated, but then I'd

probably thank her for it." However, the majority of students said they would "work harder" or

"try harder" to fix the problem. A common theme that determined how students responded was

how well they knew the shepherd. Students responded more positively to shepherds who

established better relationships with them. For example, one student described a time he "had

this wonderful idea to start doing abstract photography, which is basically not very good pictures

that I could write off as a new genre that I created." When he turned in his assignment, his

shepherd said it "was pretty funny" and it would "work for one week," but explained that he

would need to do something different in the weeks to come. The student said that if he didn't

have a good relationship with his shepherd, the feedback "definitely would have felt harsher"

because he was excited about his idea. However, since he knew his shepherd well, the feedback

motivated him to "take risks by trying new things without cutting corners."

     Another student said "I wouldn't take it too hard because she's a friend." Many students

commented that they trusted their shepherds and that their shepherds only wanted the best for

them. For example, "Ms. Ramirez can give me pretty hard, buckle down, straight forward

feedback. I can take it from her because I know she wants me to succeed and she doesn't want

me to fail." Similarly, a different student noted that she "felt encouraged because she picked me

out of the other people in the course, and I knew she was just trying to help me and I didn't want

to let her down."

     Speak with candor—teachers' perspective. One teacher commented that because of

her "shepherding relationships" with certain students, she was able to have "a different tone to

her tutoring sessions" compared to the students that she "didn't have that personal relationship with." For example, when one of the students she shepherded asked for help on an assignment, she was able to say, "You know what Ryan, I know you know how to do this problem, so I'm not going to spoon feed you the answer. Try to come up with the answer on our own." She continued, "I wouldn't do that with a student that I don't have a personal relationship with as much, because they might just think that I'm not helping them." Shepherds shared several experiences of speaking with candor to their students, including statements like, "What the heck? Get online and get to work!" and "Stop playing video games and do your homework!" In every instance, shepherds ended their experiences with a statement like this teacher, who said, "I couldn't do that with someone that I wasn't as close with." One shepherd clearly illustrated the sentiment of the other teachers when he said:

I think in a lot of ways if you have more rapport with someone, you can kind of speak to them in a different way, rather than slowly jumping into it, you can just say it straight up. So I would say that with the students I shepherd, I feel more comfortable throwing it out there. Like, "What was going on with last week when I saw that you weren't really doing your school work?" With the other students, I'd enter the conversation in a little different way, because they don't have such a rapport with me. Where I usually have more of a rapport with the students I shepherd, I can be up front with them and get to the point more because they won't feel so attacked, because they know me and they know that most of the time I'm just checking in to see what's up or complimenting them.

Learning

The final element of Rovai's online community was learning. During our data analysis, encouragement to ask questions or seek help emerged as a primary theme for learning. An

additional theme that was not specifically identified by Rovai (2002, 2004) as a learning benefit also emerged: the motivation to work harder. The students' perspective will be presented first for each theme, followed by the teachers' perspective.

Encouraged to ask questions or seek help—students' perspective. The educational benefit of the shepherding program most frequently mentioned by students was how comfortable students felt asking their teachers for help. "If you have a relationship, it makes you feel so much better going and asking them any question, doesn't matter what." Another student recalled, "I felt like she cared about me and she was willing to help me with whatever I needed, even if she had something else going on." Students particularly recognized the sacrifice their shepherds made when they provide help outside of school hours. For example, a student shared, "I would email her, thinking, 'Oh, she can read this on Monday morning.' And she would reply, saying, 'Hey, I'm online right now. Do you need help?'" And I thought, 'Oh my gosh! I matter!'" Students also felt encouraged to ask questions when their shepherds contacted them and said, "Hey, is there anything you're not understanding about this assignment?" One student noticed that if her shepherd "was on the computer at the same time as me, she would send IM's just to make sure that I didn't need anything." This type on interaction made school "relaxing" and "enjoyable" for students because they knew their shepherds were "always willing to help." Conversely, when teachers were "harder to approach" and "not very willing to help" students "would be a lot more worried about getting help" and "wouldn't go to them as much."

Encouraged to ask questions or seek help—teachers' perspective. One shepherd stated, "I think the best effects of the shepherding program are just having personal interaction with a teacher and knowing that there's someone who they can approach with questions." Shepherds wanted their students to know that their teachers were "on their side" and if they were

not performing well, they should ask questions so "we can work on it" together. One shepherd encouraged her students to seek help by "checking in" with them frequently so that "they knew I was thinking about them." She felt this was important because when students do have questions, "maybe they'll figure it's not a big enough question that they'll seek me out and ask. But if I initiate conversation, they might be like, "Well, yeah, I actually do have a question" and then they'll ask it!" One teacher explained why he felt like the shepherding program motivated students to ask questions:

> The students that I'm more comfortable with, or that are more comfortable with me, are more likely to ask a follow-up question that's maybe not what we're covering in the class, but it's something that they're thinking about, like, "Does this relate to this field of math," or "This makes me think of this situation. Can you help me solve this problem?" So I think it's the same type of thing. They're more comfortable so they're more likely to ask something that they wouldn't ask otherwise.

Motivated to work harder—students' perspective. All but one of the interviewed students said their relationships with their shepherds positively influenced their motivation to work hard in class. One student recalled, "Her classes were interesting, but I never loved them. I really only worked hard to make her proud." She continued by saying that she was motivated to "work harder" when her shepherd took the time to offer advice and answer questions about college because then "I respected [my shepherd] more" and "I knew she cared about me." Similarly, a different student said that "When the teacher was encouraging me, helping me, and taking extra time to get to know me, it really made me want to work a lot harder in that class." A student who felt particularly close to his shepherd said the following:

It influenced me in a really positive way. At the time I couldn't see this, but looking back

I can see that because we had a good relationship and I was comfortable with him and

looked up to him as a good person, I really wanted to impress him. It made me want to

work hard and do better and take his advice. It made it a more fulfilling experience.

While one student said that his relationship with his shepherd did not cause him to work harder,

he did say their relationship made him "want to get the assignments turned in to her class" before

his other classes.

Motivated to work harder—teachers' perspective. Several teachers felt that their

shepherding efforts encouraged both students and teachers to work harder. Students were

perceived to work harder because, as one teacher noted, "They'll go a little further when they

know that someone cares about them." Similarly, another teacher said "students are more

willing to work" when "they feel comfortable" with the teacher and they know their teacher is

"watching" and planning to "check up on them." One teacher described how she was able to

track student activity in her Moodle based course and commented "usually my shepherd students

are the ones that do better in my classes and are the ones that put more time into my classes."

Some teachers indicated that shepherding tended to "make the biggest difference" for how hard

"C and D students" were willing to work. "If they knew that someone was cheering for them

and believed that they could pass the class, then they were going to put forth that extra effort."

Teachers also felt like their responsibilities in the shepherding program motivated them to

be more diligent in their interactions with students. One teacher explained, "It forced me to call

kids I didn't want to call. They were the kids who were struggling…but it forced me to work

harder with those kids." Shepherding encouraged teachers to "focus their efforts" on meeting the

needs of their assigned students. One teacher commended that shepherding made her a better

teacher because she knew she "needed to worry about [the students she shepherded] and care for them." The added responsibility the shepherding program placed on teachers to care for specific students motivated teachers to be diligent in those relationships.

Negative case analysis

While teachers and students generally perceived an increase in community through shepherding efforts, individual experiences with shepherd-student relationships provide several negative cases as well. For example, one student said she did not feel comfortable going to her shepherd for advice because she "didn't have a relationship" with her shepherd and she thought her shepherd "probably wouldn't care." In a different interview, a student explained that even though he had a better relationship with his shepherd than he did his other teachers, he did not feel motivated to work harder for his shepherd. The amount of effort he put into his classes was solely determined by grades. Finally, another student did not feel social interaction with his teachers was an important part of online learning. He preferred to keep his school life and his personal life separate. These negative cases emphasize that while there were many positive shepherd-student experiences associated with the shepherding program, it is not a perfect program and it will not solve every desire for building an online sense of community.

<center>**Discussion**</center>

This research found strong evidence of Rovai's online community in shepherd-student relationships (Rovai, 2002a). We care about these findings because there is limited research on how fully online programs are using facilitators to encourage an online sense of community. While this case study focuses on a single phenomenon, and is therefore limited in how it can be generalized, Merriam (1998) stated, "Insights gleaned from case studies can directly influence policy, practice, and future research" (p. 19).

Although other studies have focused on the limitations of creating online sense of community (Song et al. 2004; Hawkins et. al, 2012), this case study focused on showing how MHA facilitated an online community through their shepherding program.   For example, a study conducted by Hawkins et al. (2012) found that teachers at an online high school felt disconnected from their students, and from other teachers, because they lacked the ability to create collaborative online relationships. Conversely, teachers and students at MHA described feelings of friendship and enjoyed interacting online. When comparing how teachers and students perceived the impact of the shepherding program, it appeared that both teachers and students valued relationships of spirit, trust, interaction, and learning (Rovai, 2002a). Several students commented that they appreciated their shepherds' encouraging words and enjoyed learning about their shepherds' personal lives. In some instances, students "didn't know what they would have done" without their shepherds. Similarly, many shepherds noted that teaching was more enjoyable for them when they developed personal relationships with their students. Shepherds indicated they felt more connected with their students as they engaged in a balance of social and content-related conversations. When asked if they thought a sense of community was important in online learning, shepherds and students all responded affirmatively, thus emphasizing that establishing a sense of community is "an essential element in the development on quality online learning environments" (Shea et al., 2005, p. 70). This case study also supports Rovai's claim that sense of community can be established in online environments at levels comparable to traditional school settings (2002a).

Despite the strengths of the shepherding program in facilitating a sense of community in shepherd-student relationships, shepherds and students sometimes differed in opinion about the best approaches to building this community. For example, the duration and kind of self-

disclosure that students and teachers perceived would help with relationships. Some students perceived a concerted effort from their shepherds at the beginning of a semester to self-disclose, but then less effort the remainder of the semester. These students desired more self-disclosure throughout the semester because, as one student noted, "relationships take time to build." This perspective reinforced the position of Bellah, Madsen, Sullivan, Swidler, and Tipton (1985) that close, socially interdependent communities are "not quickly formed." While every teacher in our focus groups and interviews indicated self-disclosure was an important part of building personal relationships with their students, their responses frequently described making introductory videos and asking students to fill out "getting to know you" forms at the beginning of the semester, with varying emphasis on self-disclosure later in the semester. Another example was illustrated when we asked students what they thought about their shepherds sending e-cards for birthdays, holidays, and other occasions. Most students viewed e-cards as "impersonal" and did not feel like they strengthened shepherd-student relationships. Conversely, a few of the shepherds looked forward to sending e-cards and believed that e-cards were an effective way of reaching out to students. Both of these examples illustrate that while teachers and students shared common desires for community, shepherds could have benefitted from understanding how their efforts were being perceived by their students. We find these differences important because Hawkins et al. (2012) noted how a sense of disconnectedness resulted when teachers at an online high school misunderstood the needs and desires of their students. McCombs and Vakili (2005) also warned online teachers about making assumptions regarding what their students need and want. Therefore, even when a sense of community has been established, online programs could benefit from seeking opportunities to understand how students perceive the strengths and weaknesses of a community.

We discovered another interesting pattern when comparing the typical case students' responses to the extreme impact case responses. The typical case students commented more frequently about themes related to spirit and trust than the extreme impact students, while extreme impact students commented more frequently about the dimension learning and other educational benefits. This is consistent with how teachers described their shepherding experiences. Several teachers noted that the students who benefitted most from the shepherding program were the "C" and "D" students. Shepherds spent significant time helping these students to improve their grades and pass their courses. These students recognized their own need for academic support and were typically willing to receive their shepherds' assistance. They were comfortable asking questions, felt motivated to work harder to pass their classes, and needed timely feedback on their assignments. Therefore, the dimensions of classroom community most meaningful to these students included learning and other educational benefits. On the other hand, typical case students appeared to value feelings of spirit and trust more than the other dimensions of community. These students commented most frequently about their experiences developing personal relationships with their shepherds, including feelings of friendship, safety, and trust. One explanation could be that these students were the "A" and "B" students who were more independent academically, yet still desired a social dimension to their educational experiences. Finally, we observed that student sentiment regarding the final dimension of community, interaction, was similar regardless of whether they were extreme impact or typical case students. These patterns lead us to believe individual needs determine which dimensions of community members will value most. With facilitators acting as problem-solvers, mentors, and friends, providing students with support and guidance based on individual needs, it makes sense that

students will draw upon different dimensions of community throughout their education (Harms et al., 2006; Hannum et al., 2008)

While our study focused on the perceived impact of the shepherding program on teacher-student relationships, it is interesting to note that the division between "teacher responsibilities" and "shepherd responsibilities" was not always clear. This is consistent with Ferdig et al. (2009) who observed that online teachers "often play multiple roles," including the role of facilitator. The shepherding program provides one example of how online teachers can simultaneously facilitate and teach. This means relationships were not being developed exclusively from "facilitating," but also from every interaction the teacher had with their students by virtue of teaching the course. Shepherds sometimes mentioned in their interviews that it was difficult to distinguish between what they did because they were "shepherding" and what they did because they were a teacher. We believe the role of the facilitator can be strengthened in these situations because as a teacher, the facilitator has more opportunities to interact with their student in a variety of contexts.

The limitations of these articles point to several opportunities for future research. One of the primary limitations results from our data collection. After conducting teacher focus groups, intensity sampling was used to invite teachers who were the most active shepherds and would therefore be able to share rich descriptive experiences based their shepherding efforts. The purpose of this research was to provide an initial rich description of the potential of the shepherding program. However, this approach limited the breadth of our data collection to teachers who were active shepherds and who were more likely to have had positive feelings about the shepherding program. Future research should look at the experiences of less-active shepherds to provide a more complete picture of the shepherding program.

Similarly, student data collection was limited to extreme impact sampling and typical case sampling. With the purpose of this research focused on the potential of the shepherding program, negative case sampling was not included. Additional research could analyze students that did not like, or resisted, their teachers' shepherding efforts.

Another limitation of this research comes from the inability to provide data on how the sense of community between shepherds and students influenced attrition. While teachers and students shared experiences that illustrated the four dimensions of Rovai's online community framework (2002a), which appeared to improve levels of connectedness and increase student determination to work harder, a direct correlation between attrition and the shepherding program was not made in these studies. Future research could provide data showing the how improving online community impacts attrition.

Conclusion

We see several opportunities for future research. First, there is a need for research to explore whether it makes sense for teachers to take on the role of facilitator in addition to their other roles in the online context (Drysdale et al., in press), or whether it would be more effective to follow the example of some universities who have a separate person exclusively fill the role of facilitator to create a better sense of community (Ludwig-Hardman & Dunlap, 2003). We also see a need for research to explore how fully online K-12 programs are building community in a variety of contexts. This research is limited to how one online high school, MHA, used the shepherding program to establish a sense of community. More research needs to be done in a variety of contexts will allow for more generalizable findings. Finally, the findings of this case study are limited to the sense of community found in facilitator-student relationships. However, Rovai emphasized that a community is strongest when learners feel connected to both instructors

and other students (2002b). More research needs to be conducted on how online facilitators can increase community by facilitating learner-learner interaction.

This case study examined the perceived impact of the shepherding program on facilitator-student relationships at Mountain Heights Academy. Student and teacher responses demonstrated that despite the physical separation of a fully online environment, MHA was successful in establishing a sense of community between facilitators and students. Students and teachers shared experiences highlighting feelings of spirit, trust, interaction, and learning (Rovai, 2002a). Although the findings of this case study cannot be generalized beyond the context of MHA, this study provides practitioners with one school's experience utilizing online facilitators to build a sense of community.

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DISSERTATION CONCLUSION

Two journal-ready articles were presented in this dissertation. The context for both studies was MHA's shepherding program. In this section I will present an overview of the findings from each article and implications for future research.

The first article, titled *An Online High School "Shepherding" Program: Teacher roles and experiences mentoring online students,* focused on the following research questions:

1. How do MHA teachers perceive their roles in the shepherding program?

2. How do MHA teachers perceive the impact of the shepherding program on their teaching experience?

Similar to the work of Harms et al. (2006) and the description of on-site facilitators by de la Varre et al. (2011), one of the most important roles of the shepherding program was to build a caring relationship between teachers and students. Establishing these relationships involved a high level of social interaction as teachers learned about their students' interests, backgrounds, and learning needs. However, teachers also found several obstacles to these social interactions, such as student preferences for different modes of communication. Teachers needed to learn which modes encourage interaction, as research shows that interaction-rich environments facilitate caring relationships (Velasquez, Graham, & Osguthorpe, 2013).

Once formed, these relationships appeared to have academic benefits for students. First, teachers were better able to diagnose weaknesses in study skills and personalize instruction when they knew their students' backgrounds and needs. Second, shepherds assisted students with their technology issues to prevent technological difficulties from limiting students' ability to engage in the course (Hillman, Willis, & Gunawardena, 1994). Shepherds also monitored their students' work and grades in all classes, providing timely motivation and encouragement. Finally,

shepherds served as a communication link between students and their teachers. All of these roles

parallel the services that on-site facilitators provide their students (de la Varre et al., 2011;

Ferdig, 2010; Hannum et al., 2008; Harms et al., 2006).

The shepherding program resulted in many perceived benefits for the teachers at MHA.

Most notable was an increase in job satisfaction, as teachers found that the caring social

relationships with their students reminded them of why they had become teachers. Even if the

student did not pass or perform well, they felt satisfied if the caring was acknowledged and

reciprocated.   Additionally, shepherding teachers felt more motivated to reach out to their

students because they had a sense of responsibility.

Primary sacrifices involved with shepherding included the time and emotional investment

teachers put into building caring relationships with their students. Despite some difficulties in

developing online caring relationships, teachers felt the shepherding program benefitted MHA

and increased teacher-student social and content interaction—a necessity in online schooling

according to DiPietro et al. (2008).

The second article, titled *Teacher and Student Perspectives on Facilitating a Sense of
Community Through an Online High School's "Shepherding" Program,* addressed the

following:

1. How do MHA students believe the shepherding program has influenced shepherd-
   student relationships as seen through a "sense of community" lens?

2. How do MHA student responses compare with what MHA teachers believe about the
   impact of the shepherding program on shepherd-student relationships?

This research found strong evidence of Rovai's online community in shepherd-student

relationships (Rovai, 2002a). Teachers and students at MHA described feelings of friendship

and enjoyed interacting online. When comparing how teachers and students perceived the impact of the shepherding program, it appeared that both teachers and students valued relationships of spirit, trust, interaction, and learning (Rovai, 2002a). Several students commented that they appreciated their shepherds' encouraging words and enjoyed learning about their shepherds' personal lives. In some instances, students "didn't know what they would have done" without their shepherds. Similarly, many shepherds noted that teaching was more enjoyable for them when they developed personal relationships with their students. Shepherds indicated they felt more connected with their students as they engaged in a balance of social and content-related conversations. When asked if they thought a sense of community was important in online learning, shepherds and students all responded affirmatively, thus emphasizing that establishing a sense of community is "an essential element in the development on quality online learning environments" (Shea et al., 2005, p. 70). This case study also supports Rovai's claim that sense of community can be established in online environments at levels comparable to traditional school settings (2002a).

Despite the strengths of the shepherding program in facilitating a sense of community in shepherd-student relationships, shepherds and students sometimes differed in opinion about the best approaches to building this community. One example was related to the duration and kind of self-disclosure that students and teachers perceived would help with relationships. Another example illustrated how teachers and students differed in preferred modes of communication. While teachers and students shared common desires for community, shepherds could have benefitted from understanding how their efforts were being perceived by their students.

An interesting pattern emerged when typical case students' responses were compared to the extreme impact case responses. The typical case students commented more frequently about

themes related to spirit and trust than the extreme impact students, while extreme impact students

commented more frequently about the dimension learning and other educational benefits.

Student sentiment regarding the final dimension of community, interaction, was similar

regardless of whether they were extreme impact or typical case students. These patterns seem to

indicate individual needs determine which dimensions of community members will value most.

With facilitators acting as problem-solvers, mentors, and friends, providing students with support

and guidance based on individual needs, it makes sense that students will draw upon different

dimensions of community throughout their education (Harms et al., 2006; Hannum et al., 2008)

 While this study focused on the perceived impact of the shepherding program on teacher-

student relationships, it is interesting to note that the division between "teacher responsibilities"

and "shepherd responsibilities" was not always clear. This is consistent with Ferdig et al. (2009)

who observed that online teachers "often play multiple roles," including the role of facilitator.

The shepherding program provides one example of how online teachers can simultaneously

facilitate and teach. This means relationships were not being developed exclusively from

"facilitating," but also from every interaction the teacher had with their students by virtue of

teaching the course. Shepherds sometimes mentioned in their interviews that it was difficult to

distinguish between what they did because they were "shepherding" and what they did because

they were a teacher. Perhaps the facilitator can be strengthened in these situations because as a

teacher, the facilitator has more opportunities to interact with their student in a variety of

contexts.

 The limitations of these articles point to several opportunities for future research. One of

the primary limitations results from our data collection. After conducting teacher focus groups,

intensity sampling was used to invite teachers who were the most active shepherds and would

therefore be able to share rich descriptive experiences based their shepherding efforts. The purpose of this research was to provide an initial rich description of the potential of the shepherding program. However, this approach limited the breadth of our data collection to teachers who were active shepherds and who were more likely to have had positive feelings about the shepherding program. Future research should look at the experiences of less-active shepherds to provide a more complete picture of the shepherding program.

Similarly, student data collection was limited to extreme impact sampling and typical case sampling. With the purpose of this research focused on the potential of the shepherding program, negative case sampling was not included. Additional research could analyze students that did not like, or resisted, their teachers' shepherding efforts.

Another limitation of this research comes from the inability to provide data on how the sense of community between shepherds and students influenced attrition. While teachers and students shared experiences that illustrated the four dimensions of Rovai's online community framework (2002a), which appeared to improve levels of connectedness and increase student determination to work harder, a direct correlation between attrition and the shepherding program was not made in these studies. Future research could provide data showing the how improving online community impacts attrition.

These case studies focused on a single phenomenon, the shepherding program at MHA. Merriam (1998) stated, "Insights gleaned from case studies can directly influence policy, practice, and future research" (p. 19). Several implications are worth summarizing here.

First, strong similarities existed between the roles of shepherds and the roles of on-site facilitators. The shepherding program offers one example of how a fully-online program can provide their students with support similar to what on-site facilitators provide students in blended

programs. Despite their physical separation, shepherds were successful at building caring relationships with students, facilitating content interaction, and providing students with necessary communication links for their online success. Fully online programs can look to the shepherding program for ideas on online facilitation that can be transferred and adapted according to individual contexts.

Second, training in online facilitation could strengthen teacher education programs. Bawane and Spector (2009) claimed that 'preparing teachers for online education involves preparing them for a wide variety of roles and developing related competencies' (p. 383). However, according to a study conducted by Kennedy and Archambault (2012), only 1.3% of teacher education programs were preparing teachers to teach in an online environment. Perhaps this is one reason why teachers have struggled when transitioning from face-to-face to online teaching (Hawkins et al., 2012). Findings with the shepherding program underscore the claim that online teachers may be asked to fulfill a variety of roles. Teacher education programs can use the shepherding program as an example of how one online high school expanded the roles of their teachers and provided each student with an online facilitator. Additionally, this case study emphasizes the importance of strong teacher-student relationships in an online environment. Teacher education programs can use examples from the shepherding program to facilitate discussion on how to build these relationships.

Finally, this research serves as an example of how one fully online high school developed a sense of community between teachers and students through relationships of spirit, trust, interaction, and learning. Significant amounts of research have highlighted the association between low sense of community and online learning (Conrad, 2005; Ludwig-Hardman & Dunlap, 2003; Rovai, 2002a; Rovai, 2002b; Rovai & Jordan, 2004; Song, Singleton, Hill, &

Koh, 2004) or have focused on the limitations of creating online sense of community (Song et al.

2004; Hawkins et. al, 2012). Conversely, this research provides a positive example of building

an online sense of community through the shepherding program at MHA.

APPENDIX A: REVIEW OF LITERATURE

There are two topics that are insightful when examining online facilitating. First, we will review the definitions of sense of community as a lens for our study. Then we will look at the roles of on-site facilitators and implications for fully online programs.

Sense of Community

Researchers have claimed that a strong sense of community leads to increased student satisfaction (Liu, Magjuka, Bonk, & Lee, 2007; Song, Singleton, Hill, & Koh, 2004), higher levels of persistence (Rovai, 2002a; Rovai, 2002b; Tinto, 1993), lower attrition rates (Wehlage, Rutter, & Smith, 1989), and an increased cohesion, trust, interdependence, and affective support (Harms, Niederhauser, Davis, Roblyer, & Gilbert, 2006; Rovai, 2002a; Rovai & Jordan, 2004). Conversely, a low sense of community leads to feelings of student isolation (Rovai, 2002a; Song et al., 2004), disconnectedness (Hawkins, Barbour, & Graham, 2012; Kerka, 1996), a lack of personal attention (Twigg, 1997), and dropping out (DeVries & Wheeler, 1996). A strong sense of community attracts and retains learners (Rovai, 2002b) and is an important factor for student success (Conrad, 2005). Spruce and Lucking claimed "online learning is most effective when students share a sense of community" (2012, p. 1576). Shea, Swan, Li, and Pickett (2005) stated that sense of community "is an essential element in the development of quality online learning environments" (p. 70). Barnard-Brak and Shiu (2010) further supported these claims when he noted that a sense of community may be a necessity for student success in online learning.

Despite the apparent benefits, sense of community has proven difficult to define. McMillian and Chavis (1986) identified and defined four elements of sense of community:

1. Membership – "the feeling of belonging or of sharing a sense of personal relatedness" (p. 9)

2. Influence – "a sense of mattering, of making a difference to a group and of the group mattering to its members" (p. 9)

3. Integration and fulfillment of needs – "the feeling that members' needs will be met by the resources received through their membership in the group" (p. 9)

4. Shared emotional connection – "the commitment and belief that members have shared and will share history, common places, time together, and similar experiences" (p. 9)

In a summary of their work, McMillian and Chavis (1986) defined sense of community 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).

While the work of McMillian and Chavis (1986) focused on face-to-face communities, such as neighborhoods, Rovai proposed that a sense of community could be also established at comparable levels in online learning environments (2002a). However, Rovai also acknowledged that the change in context, going from traditional to online settings, would require educators to re-conceptualize how social bonds, an essential part of community, are stimulated in a virtual environment.

After conducting a review of literature, Rovai (2002a) observed several themes in how researchers defined community:

Drawing on the definitions of community…one can expect that members of classroom communities will have feelings of belonging and trust. They will believe that they matter to one another and to the group; that they have duties and obligations to each other and to

the school; and that they possess a shared faith that members' educational needs will be

met through their commitment to shared goals. (p. 4)

Based on these themes, Rovai (2002a) identified four key constructs to building a sense of

community in online learning environments: spirit, trust, interaction, and commonality of

expectation and goals, in this case, learning (see Table 1). Rovai referred to this online

community as "classroom community."

Table 1

Rovai's Key Dimensions of Online Classroom Community

Key Constructs	Description
Spirit	Recognition of membership in a community
	Feelings of friendship, cohesion, and bonding
	Enjoyment of time spent together
	Ability to challenge and nurture each other
Trust	Willingness to rely on and exercise confidence in others
	Credibility – word of others can be relied on
	Benevolence – genuine interest in the welfare of others
	Feelings of safety
	Ability to speak with candor
Interaction	Quantity vs. quality
	Mitigates "task-driven" interaction
	Fosters "socio-emotional" interaction which includes
	Empathetic messages and self-disclosure
Common Expectations	Commitment to a common educational purpose
	Shared value of learning
	Mutual satisfaction of educational needs

Spirit described the overall sense of belonging members of a classroom community felt as they developed friendships and enjoyed their time together (Rovai, 2002a). One evidence of spirit in a community was the ability of members to challenge one another. In the process of challenging each other, their friendships promoted a desire to care for and nurture other members. Rovai pointed out that feelings of isolation, loneliness, low motivation to learn, and low self-esteem were associated with communities that lacked spirit.

Trust was the second dimension of community (Rovai, 2002a). Community members exhibited trust when they exercised confidence in one another and demonstrated a willingness to rely on other members. Rovai highlighted credibility and benevolence as essential elements of trust. Credibility was the "expectation that the word of other learners in the community [could] be relied on" (p. 5). Benevolence was "the extent to which learners [were] genuinely interested in the welfare of other members of the community and [were] motivated to assist others in their learning" (p. 5). Communities filled with credibility and benevolence fostered an atmosphere of safety and the ability to speak with candor to help one another in the learning process. Rovai believed communities would "become formal and stiff" without relationships of trust (p. 5).

The third dimension of Rovai's classroom community was interaction (Rovai, 2002a). Rovai emphasized the need for quality interaction over sheer quantity interaction. Quality interaction included empathetic messages directed towards building relationships among learners. Additionally, Rovai believed interaction needed to include self-disclosure in order for community members to become familiar with one another. Rovai quoted Cutler (1995), when he said: "the more one discloses personal information, the more others will reciprocate, and the more individuals know about each other, the more likely they are to establish trust, seek support, and thus find satisfaction" (p. 17).

Learning, the final component, unified community members to a common educational purpose (Rovai, 2002a). Rovai believed community members were responsible for helping each other achieve educational goals and that members had an obligation to ensure the learning expectations of the community were being met. Active participation in the learning community helped members to value and gain a deeper understanding of the content being studied.

Shortly after Rovai (2002a) presented spirit, trust, interaction, and learning as the four dimensions of classroom community, he developed an instrument to measure these dimensions (Rovai, 2002b). Rovai referred to this instrument as the Classroom Community Scale (CCS). Drawing on the four dimensions his classroom community framework, Rovai created the CCS to measure two components: connectedness and learning.

Rovai defined connectedness as "the feeling of belonging and acceptance and the creation of bonding relationships" (2002c, p. 322) Connected communities share feelings of friendship and members desire to care for one another. Once close relationships were developed, feelings of safety and trust created an environment where members were willing to self-disclose and to speak openly. It is interesting to note that Rovai's definition of connectedness included the first three elements of his original framework: spirit, trust, and interaction. While each element focuses on a key feature of communities, it is clear that these elements are interdependent and have a synergistic effect on a community.

Learning was the second component of the CCS. Rovai defined learning as "the feeling that knowledge and meaning are actively constructed within the community, that the community enhances the acquisition of knowledge and understanding, and that the learning needs of its members are being satisfied" (2002c, p. 322). He further stated that it was not enough for classroom communities to be based solely on close relationships, but they must also be united on

a common goal. Evidence of the common goal of learning could be seen as students felt encouraged to ask questions, teachers provided timely feedback, and students were comfortable having their teachers expose gaps in their understanding. Rovai and Jordan (2004) summarized the learning sub-scale as a collection of educational benefits members experienced as they interacted in the course.

The CCS consisted of 20 questions divided evenly between the two sub-scales connectedness and learning (Rovai, 2002b) (see Table 2). Only half the questions were worded positively and all questions were answered using a five-point Likert-type scale: strongly agree, agree, neutral, disagree, and strongly disagree. Rovai (2002b) collected data from 374 students enrolled in 28 different Blackboard e-learning graduate courses. The study concluded that the CSS was a valid and reliable measure of connectedness and learning in online classroom communities.

Table 2

Rovai's Classroom Community Scale

Connectedness items (n=10)	Learning items (n=10)
1. I feel that students in this course care about each other	2. I feel that I am encouraged to ask questions
3. I feel connected to others in this course	4. I feel that it is hard to get help when I have a question
5. I do not feel a spirit of community	6. I feel that I receive timely feedback
7. I feel that this course is like a family	8. I feel uneasy exposing gaps in my understanding
9. I feel isolated in this course	10. I feel reluctant to speak openly
11. I trust others in this course	12. I feel that this course results in only modest learning
13. I feel that I can rely on others in this course	14. I feel that other students do not help me learn
15. I feel that members of this course depend on me	16. I feel that I am given ample opportunities to learn
17. I feel uncertain about others in this course	18. I feel that my educational needs are not being met
19. I feel confident that others will support me	20. I feel that this course does not promote a desire to learn

As Rovai's work continued, he typically referred to classroom community as consisting of two components, either connectedness and learning (2002b, 2002c, 2004) or social community and learning community (Rovai & Wighting, 2005). However, even when Rovai simplified classroom community into two dimensions, his initial definition of spirit, trust, interaction, and learning proved foundational for his research. In every instance, "connectedness" and "social community" included the dimensions of spirit, trust, and interaction.

While there is little dispute regarding the benefits associated with sense of community, a lack of community is not a new criticism directed towards online learning. In a study that surveyed 76 online students, 71% of the learners identified lack of community as a weakness in online learning (Song et al., 2004). Students are not the only ones to recognize this concern. In Hawkins, et al. (2012), teachers articulated a missing sense of community by describing the disconnectedness that existed between teacher and students at Utah's Electronic High School. At the time of the study (2009) EHS was the largest online high school in Utah with over 50,000 course enrollments and 76 licensed teachers. Hawkins' et al. case study illustrated what it looked like to have a low sense of community between teachers and students. In summary, the researchers concluded, "The major theme that emerged from the teacher interviews was a sense of disconnection the teachers felt with their students" (p. 132). Upon further review, their findings provided clear evidence that all four dimensions of classroom community—spirit, trust, interaction, and common expectations (Rovai, 2002a)—were lacking in the teacher-student relationships at EHS.

A major barrier to creating a sense of community in online learning arises when teachers believe students want to be left alone (Hawkins et al., 2012). McCombs and Vakili (2005) urged teachers to "avoid the assumption that online learners are those who prefer less personal contact

with instructors, are independent learners, have high motivation to learn, are self-disciplined and have high personal self-efficacy" (p. 1592). Zweig (2003) pointed out that students are less likely to drop out and more likely to be engaged when they experience consistent, positive relationships with their teachers. Murphy and Rodriguez-Manzanares (2009) suggested that less autonomous young adults rely on their teachers to help them become motivated, a quality critical for student success in any educational context (Maeher, 1984), including distance education (Choi & Johnson, 2005; Eom, Wen, & Ashill, 2006; Liao, 2006; Lim & Kim, 2003). While students are more likely to succeed in online learning if they are mature and self-disciplined, having established effective study habits and organization skills, numerous studies remind us that young learners struggle and need help knowing how to develop skills such as self-regulation, self-discipline, and intrinsic motivation (Barbour & Reeves, 2009; Cavanaugh, Barbour, & Clark, 2009; Rice, 2006). Ferdig et al. summarized that online educators need to provide their students, particularly young K-12 learners, with both instructional and personal support.

Facilitators in K-12 Online Learning

In order to provide online students with the support they need, Harms et al. (2006) proposed a conceptual framework identifying three complementary roles essential for online school success: teachers, facilitators, and designers. Harms et al., suggested that when online educators fulfill these roles, student performance will improve, turnover will decrease, student satisfaction will increase, and a better sense of community will be established. Similarly, Ferdig et al. (2009) outlined nine roles for online educators: teacher, instructional designer, course facilitator, local key contact, administrator, mentor, technology coordinator, and guidance counselor. The fulfillment of these roles would provide, among other things, increased communication with students, opportunity for academic advising, a greater level of student

support, and a fostered sense of community. Both of these articles emphasize the need for facilitators and suggest a greater sense of community as students receive this kind of support.

Harms et al. (2006) described the following responsibilities as part of the on-site facilitator role:

- Get to know students and understand their learning needs

- Advise students in course selection

- Encourage students in developing study and organizational skills

- Communicate with teachers and parents regarding individual students

- Promote co-presence and a sense of community

- Monitor individual student progress and mentor students as needed

- Provide an "immediate, personal, face-to-face communication option who can act as a problem-solver, mentor and friend."

While the individual responsibilities of a facilitator may vary from one institution to another, there is little variation in the nature of their roles. In a review of literature, de la Varre, Keane, and Irvin (2011) noted some roles of facilitators such as assisting with technology issues, answering student questions, communicating with parents, and ensuring the honesty and integrity of student work. In addition, facilitators monitor student progress so remedial help can be provided before students disengage from the course (Ferdig, 2010). Facilitators are often asked to encourage students, help students work through their fears, and teach them how to organize their studies (Hannum, Irvin, Lei, & Farmer, 2008). In summary, "the basic role of facilitators was to support and guide students" (Hannum et al, 2008, p. 217). While online teachers are charged with the task of teaching content, facilitator responsibilities are more centered on the holistic development of the students they help.

Many K12 online learning providers have relied on a teacher-facilitator model where students interact with their teachers online and with their facilitators on-site (de la Varre, 2011). For example, Odyssey Charter High School, a blended program, offers the majority of classes online and requires students to be on campus once a week. When students are on campus they meet with their mentor teachers to discuss their progress, organize their course work, and address student needs (Barbour & Plough, 2012).

Another example can be seen at Michigan Virtual School, who partnered with St. Clair County Regional Educational Service Agency to offer high school courses to students who voluntarily dropped-out of school or were expelled (Ferdig, 2010). These students left school, or were expelled from school, for a variety of reasons: possession and selling of drugs, boredom, anxiety, mental health issues, fighting, or being a threat to the teacher. Students who enrolled in the courses offered were required to meet with an on-site mentor twice a week to receive extra help, support, and encouragement. At the end of the study, 19 out of 26 students completed a survey. Despite student backgrounds, when asked about their experiences with their mentors, "100% of the students felt accepted by their face-to-face mentor" (p. 18), which meant a lot in light of the students' backgrounds. Ferdig noted the significance of this claim and recommended online schools look for ways to provide greater student support to help at risk students.

In a qualitative analysis involving five high school online instructors and 58 on-site facilitators, de la Varre et al. (2011) sought to identify common practices and activities carried out by on-site facilitators to support students in their learning. "One thing I believe helps most is maintaining a good relationship with the students. I listen, very carefully, and try to remain calm, cool, collected, and offer a sense of humor." She continued, "When time allows, I pull out my "college war stories" as an anecdotal learning experience. That helps them get into a positive

frame of mind." Another facilitator said she would "listen, be supportive and accessible, but not stand in the way of what the instructor does" (p. 6). An on-site facilitator may be a classroom teacher, or a non-content expert such as a guidance counselor, principal, secretary, librarian, coach, or another staff member in the school, (de la Varre, 2011; Hannum et al, 2008; Harms et al, 2006).

Research supports that the role of the on-site facilitator is a key part of student success in online learning (de la Varre, et al., 2011; Roblyer, Freeman, Stabler, & Schneidmiller, 2007). Hannum et. al (2008) provided empirical support to this claim. In a cluster-randomized control trial, including 36 match pairs of schools and 246 students, Hannum et al. tested whether having trained on-site facilitators would improve student persistence in K-12 online learning. Results indicated that students who received support from a trained on-site facilitator had statistically significant higher scores in the number of weeks they remained enrolled in the course, as well as in overall course completion, compared to those who did not receive support from trained on-site facilitators.

Unfortunately, on-site facilitators are not available for students enrolled in fully online programs. Davis and Ferdig (2009) recognized that there is a variety of organizational strategies in online learning, some being blended, or supplemental, and others being fully online. While there is considerable research on how on-site facilitators provide meaningful student support, Ferdig (2010) called for "more research to help practitioners understand the role of . . . online mentoring" (p. 20).

Online mentors may face some of the same challenges teachers have experienced when transitioning from traditional to online teaching. Just as good classroom teachers do not necessarily transfer to being good online teachers (Wood, 2005) good *on-site* facilitators do not

necessarily make for a good *online* facilitators. For example, one of the primary challenges

newly online teachers express frustration with is learning how to communicate and develop close

relationships with students when they never meet face-to-face (Murphy & Rodriguez-

Manzanares, 2009). Teachers find themselves working harder to achieve the same level of social

interaction they so easily achieved in traditional K-12 school settings (Harms et al., 2006;

Hawkins et al., 2012). This lack of verbal and visual cues can lead to feelings of isolation

(Kerka, 1996), for both the teacher and the student. Online facilitators will likely experience the

same frustrations if they exclusively base their practices on the literature for on-site facilitators.

This study comes in response to numerous calls for more research in K-12 online learning

(Barbour, Siko, Sumara, & Simuel-Everage, 2012; Cavanaugh et al., 2009; Davis & Ferdig,

2009; de la Varre et al., 2011; Ferdig et. al, 2009; Hawkins, Barbour, & Graham, 2011; Watson,

Murin, Vashaw, Gemin, & Rapp, 2012), specifically to the call for more research that will assist

practitioners in addressing the roles of online facilitators (Ferdig, 2010).

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