Foundations of Community in an Online, Asynchronous Professional Development Website

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Abstract: Having a sense of community can support teacher growth in face-to-face professional development, but teachers in online, asynchronous professional development might not feel a sense of community, given their isolation, both physically and temporally. To be successful, the learning must be enacted (in classrooms), but the community is ephemeral. To investigate whether participants on one large online teacher professional development (OTPD) site were hampered in forming community, or overcame these barriers, this study interviewed members of the PD site to get at their sense of community. Using grounded theory, the transcripts of the interviews were coded to reveal members' perceptions of community in this online space. Results suggest that most consider themselves as part of the community, and, importantly, see this as a space in which to share material resources. The results have implications for understanding and augmenting the role of OTPD in supporting professional learning.
Keywords: Online Learning Community, Professional Development, Community of Practice

Objectives

Having a sense of community has been heralded as a cornerstone to success in face-to-face and online learning environments (e.g., Supovitz, 2002). Although most scholars agree that community formation is beneficial, the definition of community and what it looks like varies across contexts. This study examines how elementary school teachers view community within the *Everyday Mathematics* Virtual Learning Community (VLC), a National Science Foundation-funded site with approximately 50,000 members. Specifically, we investigate 1) whether members think there is a community within the VLC and 2) why they think a community does or does not exist. Understanding users' perceptions of community has the potential to inform strategies to strengthen the community not only within the VLC but also within similar online teacher professional development (OTPD) sites (e.g., the Teaching Channel, Math Forum).

Theoretical Framework

Teacher PD has the goal of improving practice and student outcomes. Because sustained engagement with professional development appears to be key to achieving this outcome (e.g., Heck et al., 2008; Yoon et al., 2007), substantial work has been devoted to exploring the importance of developing community in online settings to prevent drop-outs (e.g., Liu et al., 2009). A sense of community also helps raise course satisfaction (Drouin, 2008), aids learning (Rovai, 2002), strengthens cooperation (Hur & Hara, 2007), and increases feelings of belonging (Besser & Donahue, 1996). With this in mind, having a sense of community in OTPD may support the kinds of persistent engagement that can make PD most effective.

Garrison, Anderson, and Archer's (2000) Community of Inquiry (CoI) theory explains the components necessary to create a successful community-based educational experience via the interaction of social presence (e.g., open communication and group cohesion), cognitive presence (e.g., cognitive exploration and application of new ideas), and teaching presence (e.g., organization and discourse facilitation). All three elements work together to determine the content, set the climate, and support discourse.

Although varied, definitions of online communities typically incorporate elements of the CoI theory and particularly focus on the strength of members' relationships (e.g., Haythornthwaite & Wellman, 1998). For example, Rheingold (1993) described the necessity of online communities to offer social network capital, knowledge capital, and communion to be true communities. When defining what community looks like in learning settings, there are also common threads across theoretical and empirical accounts (e.g., Hill, 1996; Lave & Wenger, 1991). For example, Rovai (2002) defined learning communities as having members who "believe that they matter … to the group; that they have duties and obligations to each other …; and that they possess a shared faith that members' educational needs will be met through their commitment to shared goals" (p. 4).

When online learning communities for teachers lack these features, the result can be a lack of participation and interest in the community, despite the perception that the community offers valuable resources (Barab et al., 2001). Nevertheless, many emerging OTPD communities are being built primarily to provide professional learning resources and experiences to teachers across the nation in an asynchronous, come-as-you-can setting. This context challenges the focused, collaborative tenets of community described above. To imagine how such new communities can be successful, it is important to understand how teachers themselves perceive community. What kinds of embedded supports are needed for teachers to invest in a community, particularly one focused on teachers individually learning to enact new practices in the classroom? How can OTPD sites provide a sense of community in an asynchronous space? This study's purpose is to uncover which research-based tenets of community are particularly important for OTPD community development as well which tenets are excluded from current definitions of online and learning communities and are therefore unique to OTPD sites.

Methods and Data Sources

Sample

Forty-one participants, all of whom were VLC members, volunteered to be interviewed for this study: 29 participants were classroom teachers, 7 were instructional coaches or curriculum coordinators, and 5 were classroom teachers and instructional coaches. Two teachers did not answer questions pertaining to community, leaving 27 classroom teacher participants and 39 total participants. Each participant was compensated $100.

Data Source: Participant Interviews

We used a semi-structured interview protocol to understand how and why participants used the VLC as well as their perceptions of whether (and how) the site contributed to their professional learning and to a sense of community. Two of the authors conducted the interviews, and most interviews lasted approximately 35 minutes. The key question about community was worded as follows: "The C in VLC is for Community. Does it feel like a community to you? Why or why not?" Answers to these questions serve as the basis for our analyses.

Coding

We looked for emerging themes using grounded-theory (Corbin & Strauss, 2008) and created codes that captured participants' thoughts about whether the VLC was a community, and why. Two authors independently coded 24% of the data. We achieved high reliability (Cohen's $\kappa = .97$). Disagreements were discussed and reconciled. Most participants clearly stated either that the VLC felt like a community or that it did not. However, a few stated that the VLC both did and did not feel like a community. Those participants were coded under both categories, and their reasons for both were documented.

<u>Reasons the VLC feels like a community.</u> We developed four codes to capture the participants' reasons that the VLC felt like a community: Togetherness, Sharing Resources, Familiarity, and Discussions.

We coded participants' comments as Togetherness when they discussed how members of the VLC have shared experiences or understanding of the rewards and challenges of the profession. Many participants discussed leaning on each other for validation and support, and particularly appreciated being able to rely on other members for curricular planning support, thus reducing their overall workload. Additionally, some participants commented on how they experienced elements of a shared culture. Reflecting on this, one participant noted, "We're coming together, and it is a unified effort towards teaching math well. I think people are on there because they want to be, so in that sense, it's a community. And I think there's a genuine feeling that these [videos] are to be helpful, so we're all gathered around a common idea."

We coded Sharing Resources when the participants indicated that they thought of the VLC as a community because its foundation is built on sharing resources. These comments highlighted how resources came from a variety of people, and some emphasized the bottom-up nature of resource development. One participant expressed the sentiment of many, "There's a lot of resources on here… There's so much free sharing, you know? "

When participants mentioned that they either knew, or felt like they knew, other members on the VLC, we coded these comments as Familiarity. Participants reported that a sense of familiarity made them feel connected and gave them a sense of belonging, allowing them to envision implementing suggestions and resources more freely. In recounting the progression of becoming more familiar with the other members, one participant said, "You know, there's even some people on the groups that are responding, and you don't know who they are, and you can't picture them, but you already have an idea of their voice."

We coded Discussions when participants mentioned dialogue with others and question-and-answer interactions about the content. One participant said, "People are open to help each other out or, like in the

discussion groups, people will check back and there are posts all week about 'Well, there was this mistake here—I'm confused' or 'Is anyone else feeling the same?' Perhaps there is a technology question or something. So, yes I would say it's definitely like a community."

<u>Reasons the VLC does not feel like a community.</u> We developed three codes that captured participants' reasons that the VLC did not feel like a community: Lacking Familiarity, Isolation, and No Discussion.

We coded Lacking Familiarity when participants remarked about not knowing anyone who was posting resources or not knowing the teachers in the videos. We also used this code when participants reported that they didn't feel like their classrooms were represented and that it was difficult to relate to the other members' experiences. As one participant noted, "When I look at other people's videos, I have no clue as to where the other teachers are… I'm in an urban setting… In the VLC videos, a lot of times the children are well behaved. I think, are they in an urban setting? ... When I see a video... a majority of the students are Caucasian."

We coded Isolation when participants reported that they felt anonymous and did not feel like they belonged. Some observed that VLC members seemed to work independently and were focused on their own goals. This was not always met with despair, as one participant offered, "I know what a community is, but... I feel anonymous. In fact, sometimes you might want that, I don't know. You know, I can go in, I can go out."

We coded No Discussion when participants pointed out that the discussions were not robust or there was a lack of conversation. Some noted that the discussions were impersonal and lacked insight. One participant described this issue when she said, "The one thing that I would say is that there is not a lot of people that post about their experiences. It would be nice to see more people saying… oh, I did this, and for this lesson, I did that."

Results
The VLC as a Community
The majority of participants indicated that the VLC felt like a community: 70% of teachers, 66% of coaches, and 80% of the teacher-coaches stated that the VLC was a community. 7% of teachers, 17% of coaches, and 20% of teacher-coaches believed the VLC both did and did not feel like a community. 23% of teachers, 17% of coaches did not think there was a community on the VLC. A χ^2 test revealed no statistical difference across roles.

Reasons the VLC Feels Like a Community
Participants most frequently cited Togetherness (41% of participants) as the reason that participants felt the VLC was a community. They also frequently mentioned Sharing Resources (26%) and Discussions (20%), but only 13% of all participants noted that they felt Familiarity with other VLC members.

Reasons the VLC Does Not Feel Like a Community
Few participants noted that the VLC did not feel like a community. When they did, 13% cited Isolation; 10% cited No Discussion; and 5% cited Lacking Familiarity. Interestingly, users who felt like there was not a community within the VLC cited the same aspects of what a community *should* look like by those who said a community existed. For example, both those who reported community and those who did not discussed knowing the other users (Familiarity vs. Lacking Familiarity) and having the same goals (Togetherness vs. Isolation).

Discussion and Scholarly Significance
For OTPD to work effectively, site developers must understand how learning and engagement develop within it, which implicitly requires examining how community forms and grows. This study shows that the members of one widely used OTPD platform—the VLC—currently feel a strong sense of community for a variety of reasons, some of which coincide with the literature on online professional development (e.g., Togetherness) and others that are more unique (e.g., Sharing of Resources). By devising a coding scheme to capture participants' feelings of community, we have provided a clearer picture of what makes teachers feel (and not feel) a sense of community.

This research has implications for theory and practice. Theoretically, this study contributes to understanding the types of behavior required for sustained engagement in professional development by demonstrating that engagement—but not necessarily collaboration—promotes community. Additionally, the definitions that emerged from this study emphasize the necessity of the three components of the CoI model: social presence, cognitive presence, and teaching presence.

Practically, this study led to the design and implementation of site-related innovations to boost interactive dialogue and community-building among VLC members. For example, the VLC now emails members when others respond to their posted commentary; other online communities could develop similar features. More broadly, this study suggests that research on online communities may need to focus less on whether teachers'

online activities rise to the definition of community established in off-line learning communities (such as shared tasks and a sense of closeness to each other) and more on how teachers define and create communities online through shared features, ideas, and resources, even in spaces where teachers have different goals and are unknown to each other. Perhaps it is possible that online teacher learning communities (like other online communities) can be powerful and effective without being overtly connected or collaborative. The reasons for feeling connected, which emerged from the comments made during the interviews, suggest that video resources on an online site can connect teacher-learners with ideas for enactment in their own classrooms. More generally, OTPD sites can capitalize on all of the reasons that participants provided, and amplifying the presence of these same reasons within any flourishing OTPD has the potential to make its community even stronger.

Because we know that fostering a sense of community is a key ingredient of successful online teacher professional development (Lock, 2006), paying attention to why teachers feel a lack of community can also point to avenues for productive changes, including attending to resources that are likely to increase feelings of belonging. Listening to users' perceptions of community in this setting and creating an environment that incorporates those perceptions has the potential to increase teachers' usage of OTPD sites, learning from the sites, and feelings of support within their profession.

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