

UNDERSTANDING TEACHER PARTICIPATION IN ONLINE COMMUNITIES: WHY
DO TEACHERS WANT TO PARTICIPATE IN ONLINE COMMUNITIES OF
TEACHERS?

Jung Won Hur

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Thomas A. Brush, Ph.D.

Doctoral Committee

Noriko Hara, Ph.D.

Elizabeth Boling, MFA.

Barbara Korth, Ph.D.

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This dissertation is dedicated to my parents
for their encouragement, love, and belief in me.

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This study examined reasons for teacher participation in three online communities of K-12 teachers with an aim of investigating methods to improve teacher professional development. To achieve the goal of this study, multiple data were gathered from four sources: (a) interviews with 31 members from the three online communities, (b) online postings, (c) member profiles, and (d) community guidelines. The findings of this study indicated that there were six reasons why teachers wanted to participate in the online communities of teachers: (a) sharing emotions, (b) exploring ideas, (c) seeking advice, (d) experiencing a sense of camaraderie, (e) combating teacher isolation, and (f) utilizing the advantages of online environments. These reasons are intrinsically connected to each other, so a holistic perspective is necessary to understand teacher participation in the communities fully. Moreover, the analysis of data indicated four components affecting teacher participation in the online communities. The components included community culture, safety, flexibility, and teachers' shared values and time. In conclusion, the findings suggested elements that should be considered when teacher educators create online learning environments in which teachers can freely share both emotions and knowledge.

Table of Contents

CHAPTER 1 INTRODUCTION	1
BACKGROUND OF STUDY.....	1
PROBLEM STATEMENT	5
OVERVIEW OF STUDY.....	7
SIGNIFICANCE OF STUDY	8
CHAPTER 2 LITERATURE REVIEW	10
COMMUNITIES AND ONLINE COMMUNITIES.....	10
<i>Definitions and Characteristics of Online Communities</i>	11
COMMUNITY OF PRACTICE AND NEW LEARNING PERSPECTIVE	13
<i>Communities of Practice</i>	13
<i>Social Learning Theory</i>	16
<i>Teacher Knowledge</i>	18
TEACHER PROFESSIONAL DEVELOPMENT.....	21
<i>Problems of Traditional Teacher Professional Development</i>	21
<i>Challenges Facing Teacher Professional Development</i>	22
TEACHER PROFESSIONAL DEVELOPMENT IN ONLINE ENVIRONMENTS.....	25
<i>Brief History of Utilization of Internet Technologies in Teacher Education</i>	25
<i>Online Teacher Professional Communities</i>	26
USABILITY AND SOCIABILITY	28
SUMMARY OF CHAPTER.....	30
CHAPTER 3 METHODS	32
RESEARCH DESIGN.....	32
<i>Characteristics of Study</i>	33
CASE SELECTION.....	34
PARTICIPANTS.....	37
DATA SOURCES.....	41
<i>Interviews</i>	41
<i>Archived postings</i>	44

<i>Community guidelines</i>	46
<i>Members' public profiles</i>	46
PROCEDURES	47
<i>Email interviews with teachers from T-LJ</i>	48
<i>Observations of archived postings</i>	49
<i>A brief survey with teachers who stopped participating</i>	49
DATA ANALYSIS	50
<i>Reconstructive analysis</i>	50
<i>Coding</i>	53
LIMITATION OF STUDY	56
VALIDATION METHODS	57
CHAPTER 4 RESULTS	61
TEACHER FOCUS	61
<i>Characteristics of Participants in Teacher Focus</i>	63
<i>Structure of Teacher Focus</i>	64
<i>Participation in Teacher Focus</i>	66
WETHETEACHERS	66
<i>Characteristics of Participants in WeTheTeachers</i>	67
<i>Structure of WeTheTeachers</i>	68
<i>Participation in WeTheTeachers</i>	69
THE TEACHING COMMUNITY IN LIVEJOURNAL (T-LJ)	70
<i>Characteristics of Participants in T-LJ</i>	71
<i>Structure of T-LJ</i>	72
<i>Participation in T-LJ</i>	74
RESEARCH QUESTION 1	74
<i>Reason 1: Sharing Emotions</i>	74
<i>Reason 2: Exploring Ideas</i>	89
<i>Reason 3: Seeking Advice</i>	99
<i>Reason 4: Experiencing a Sense of Camaraderie</i>	105
<i>Reason 5: Combating Teacher Isolation</i>	107
<i>Reason 6: Utilizing the Advantage of Online Environments</i>	109

RESEARCH QUESTION 2	111
<i>Community Culture: Respectful Culture vs. Offensive Culture</i>	112
<i>Safety: Preserving Anonymity vs. Sharing Personal Information in Public</i>	116
<i>Flexibility: Flexible Participation vs. Lurking</i>	118
<i>Teachers' Shared Values and Time: I Want To Help, But I Have No Time</i>	119
SUMMARY OF CHAPTER.....	120
CHAPTER 5 DISCUSSION AND CONCLUSION.....	121
EXAMINATION OF FINDINGS	121
<i>Research Question 1</i>	121
<i>Research Question 2</i>	130
IMPLICATIONS	135
<i>Practical implications</i>	135
<i>Theoretical Implications</i>	137
RECOMMENDATIONS FOR FURTHER STUDY	140
CONCLUSION	142
REFERENCE.....	143
APPENDIX A THE INITIAL INTERVIEW PROTOCOL.....	154
APPENDIX B THE FIRST EMAIL INTERVIEW QUESTIONS	158
APPENDIX C AN INVITATION EMAIL EXAMPLE	159
APPENDIX D FOLLOW-UP INTERVIEW QUESTION EXAMPLES.....	160

List of Tables

Table 1. Unique characteristics of the three online communities of teachers.	35
Table 2. Demographic information of participants.....	38
Table 3. Number of participants based on criteria.....	40
Table 4. Information about infrequent members or lurkers in WeTheTeachers	41
Table 5. Descriptions of data sources and analysis methods.....	56
Table 6. Discussion topics and number of postings in Teacher Focus as of May 25, 2007.....	65
Table 7. Discussion topics and number of postings in WeTheTeachers as of May 30, 2007.....	69
Table 8. Driving and restricting components affecting teacher participation	111

List of Figures

Figure 1. Conceptual map of this study.....	7
Figure 2. The Forums structure of Teacher Focus.....	65
Figure 3. Posting a new entry in LJ	70
Figure 4. Calendar view of T-LJ.....	72
Figure 5. Page outlook of T-LJ.....	73
Figure 6. Relationships among the six reasons for participation.....	122
Figure 7. Comparisons between social learning theory and community learning model	138

CHAPTER 1

INTRODUCTION

Background of Study

Since the Internet was first developed in the 1960s (Abbate, 1999), the methods people use to communicate have massively changed. In contrast to traditional communication methods restricted by time and location, this new technology enables people to interact with others all over the world, both asynchronously and synchronously, at low cost.

. According to Horrigan (2001), more than 80% of Internet users have participated in some type of online community. Through various Internet technologies (e.g., email, file sharing, etc.), the World Wide Web (WWW or simply Web) especially allows people to easily share linked documents and multimedia resources. However, communication on the Web has been limited; only Web site owners can add, modify, and delete Web pages, and users do not have the ability to change them. The new Web, called Web 2.0 (O'Reilly, 2005), however, enables anyone to contribute to generating Web resources. In response to this social-technical phenomenon, "You," people who are using or creating Web content by sharing comments, pictures, music, and videos, were awarded Time magazine's "Person of the Year" recognition in 2006. Lev Grossman, writer for Time magazine, said:

It's a story about community and collaboration on a scale never seen before. It's about the cosmic compendium of knowledge Wikipedia and the million-channel people's network YouTube and the online metropolis MySpace. It's about the many wresting power from the few and helping one another for nothing and how that will not only change the world, but also change the way the world changes. (Grossman, 2006)

These phenomena indicates that Internet users are not passive information receivers; they are actively participating in creating and sharing new information, which can be converted to new knowledge through an information interpretation process by each participant (Nonaka, 1994; Alavi & Leidner, 2001). Another interesting phenomenon is that people from online groups share

experiences, knowledge, and opinions. Advanced social networking software, including Internet forums, blogs, and wikis, allows anyone to create and join various online groups easily; these groups are often called online communities. Hundreds of new online communities are created every day (Preece, 2000).

One of the impacts of this new technology is to redefine the notion of community. The traditional notion of community is defined based on familiar relationships or physical locations (Riel & Polin, 2004). With advanced Internet technology, the notion of community can be expanded to include any groups of people who communicate online for a particular purpose. The membership of communities is not limited to personal relationships or local boundaries; anyone who has similar interests can create and become members of online communities.

Jones and Preece (2006) divide online communities into two groups: communities of interest and communities of practice. Communities of interest are informal groups that are open to anyone who share similar interests. By contrast, communities of practice are groups of practitioners who share knowledge, beliefs, and values within a supportive culture (Hara, 2000; Lave & Wenger, 1991; Wenger, 1998). The notion of communities of practice has been loosely used in diverse situations, including groups of students in classrooms. However, it has been most widely utilized to denote a group of people who share ideas and resources related to jobs in work settings (Jones & Preece, 2006). They are self-organizing and self-sustaining entities which entail a common practice and a joint enterprise (Ardichvili, Page, & Wentling, 2002; Schlager & Fusco, 2003).

According to Wenger (1998), the concept of communities of practice is not new. People have been engaged in various communities of practice ever since they have formed groups and learned from one another. One of the main reasons educational researchers and practitioners are

paying increasing attention to the concept of communities of practice is that scholars attest that learning occurs while people participate in them. This new perspective on learning is called social learning theory or situated learning theory (Putnam & Borko, 2000; Wenger, 1998). Social learning theorists claim that learning is not gaining knowledge inside the mind; rather, it is knowing how to participate in the world (Wenger, 1998), and people learn through the process of participating in communities of practice (Brown & Duguid, 1991). Interaction with people is a crucial condition for learning. Learning is not bound to a specific place, such as schools; rather, it occurs in every place where people interact with others. With technology, learning environments are not limited to certain geographical places; people can communicate without time and location constraints.

What the description above implies is that researchers need to understand learning from a broader perspective and need to examine how people learn in diverse environments, including online communities. In this study, I am particularly interested in understanding how teachers learn in online communities of teachers. More importantly, while there has been increasing research regarding creating online communities of teachers by researchers (e.g., Barab, MaKinster, Moore, & Cunningham, 2001; Schlager & Fusco, 2003), what has been left unexamined is online communities of teachers that are organized by teachers.

As a former elementary school teacher in South Korea, I have participated in several online communities of teachers that were developed by the members of those communities. My initial purpose for participating in those communities was to find teaching ideas for my classes. However, what I gained from participating in those communities went far beyond finding lesson plan ideas. The diverse stories shared by a variety of teachers also helped me learn what was occurring outside of my school and how to address difficult situations (e.g., problems with

students or parents). Consequently, I visited those communities on a daily basis in order to examine various stories shared by other teachers. Moreover, after I came to the United States, I found another online community of teachers and regularly visited it as a way to explore American school systems and to determine how teachers utilize technology in their classrooms. As in the communities in South Korea, American teachers discussed teaching tips and shared events that happened in their schools and classrooms. Visiting these communities helped me not only to develop new lessons for my undergraduate technology integration course but also to understand challenges teachers face in their local schools.

My experiences strongly influenced me to study teachers' participation in online communities of teachers. However, I was surprised that there was little research on online communities of teachers that were self-organized. Current research was limited to those communities initiated by university faculty members. Furthermore, even with studies that investigated self-organized communities, the focus was often restricted to the motivation for sharing and why people do or do not post through electronic mailing lists (e.g., Hew, 2006). What is lacking is the understanding of why people want to visit and participate in web-based online communities of teachers.

It should be noted that the communities investigated in this study are web-based communities, meaning that teachers need to visit the site to participate. This is different from electronic mailing lists, where new messages are automatically delivered via email. Based on my experience participating in online communities of teachers, I have found that thousands of teachers share in various online communities. More importantly, I have observed many teachers who have participated on a daily basis for several years.

I emphasize teachers' voluntary participation over a long period of time because many researchers claim that teachers do not participate in online communities of teachers due to time constraints (Moore, 2003; Baek, 2002). What this indicates is that some online communities of teachers may provide unique elements that help teachers' professional work so teachers voluntarily participate over a long period of time. Finding elements that teachers need is critical because it can provide a new and useful perspective for developing new teacher professional development programs that better meet educational needs.

Consequently, this study attempts to investigate reasons for participation in online communities of teachers with the goal of examining teacher needs in terms of teacher professional development and exploring methods to design online learning environments in which teacher learning can effectively occur.

Problem Statement

There has been growing interest in exploring online communities of practice in various disciplines. Many organizations perceive some tangible benefits of fostering communities of practice within organizations and encourage members to participate in communities of practice (Hildreth & Kimble, 2004; Wenger, McDermott, & Snyder, 2002). Educational researchers also foresee potential for assisting teacher professional development through fostering interactions in online communities of teachers (Schlager & Fusco, 2003). Over the past ten years, many researchers have attempted to create online teacher professional communities as a new method for fostering teacher professional development (Barab, MaKinster, Moore, & Cunningham, 2001; Schlager & Fusco, 2003). However, teachers do not actively participate in the communities for an extensive amount of time (Zhao & Rop, 2002). Consequently, despite the increasing interest in the creation of online teacher professional communities, little is known concerning influences

of participation on teacher professional development (Moore, 2003). Furthermore, even though researchers claim that they design online communities with teachers (Barab, MaKinster, Moore, & Cunningham, 2001), the communities are more representative of researchers' needs, rather than teachers' (Zhao & Rop, 2002). In other words, researchers design and develop communities for teachers and invite them to come and share ideas and resources in the communities. As a result, there is a lack of understanding regarding online communities that are created by teachers and for teachers. We do not know why teachers want to participate in online communities. Understanding teachers' motivation for creation of and participation in online communities is crucial because it can provide insights into the development of new teacher professional development programs. Without understanding what teachers need and how they learn outside of classrooms, developing effective teacher professional development programs is unlikely.

Moreover, we need to understand elements that either support or hinder teacher interaction online. Online environments are different from "off-line" environments in various ways, including lack of face-to-face interactions, text as a major communication tool, and anonymous interaction. Different levels of technology skills and user characteristics impact participation in online interaction (Andrews, 2002). Consequently, it is crucial to design online environments in which every user can easily communicate. However, well-designed technology alone is not enough; ways are needed to support social interaction online (Preece, 2000). Scholars have studied means to make technology easy to use (called usability) and to support social interaction (called sociability). General guidelines for usability and sociability have been defined by numerous researchers (e.g., Rogers, Preece, & Sharp, 2002). However, according to Preece (2002), each community has distinct characteristics and users need different types of support. Consequently, the question becomes "What helps or hinders teachers' participating in

the online community?” Wenger, McDermott, and Snyder (2002) argue that in order to help communities of practice thrive, creating a rhythm for the community is critical. In other words, there need to be different events and activities that allow each member to enjoy participation. In off-line environments, having informal meetings or retreats brings some rhythm to the community, but what activities will help teachers in online professional communities?

Overview of Study

The purpose of this study was to examine teacher needs in terms of teacher professional development by investigating reasons for participation in online communities of teachers. This study also aimed to explore means to design online learning environments in which teacher learning could effectively occur. Teacher participation in online communities of teachers was interpreted based on the notion of communities of practice and social learning theory. Figure 1 presents the “conceptual map” of this study.

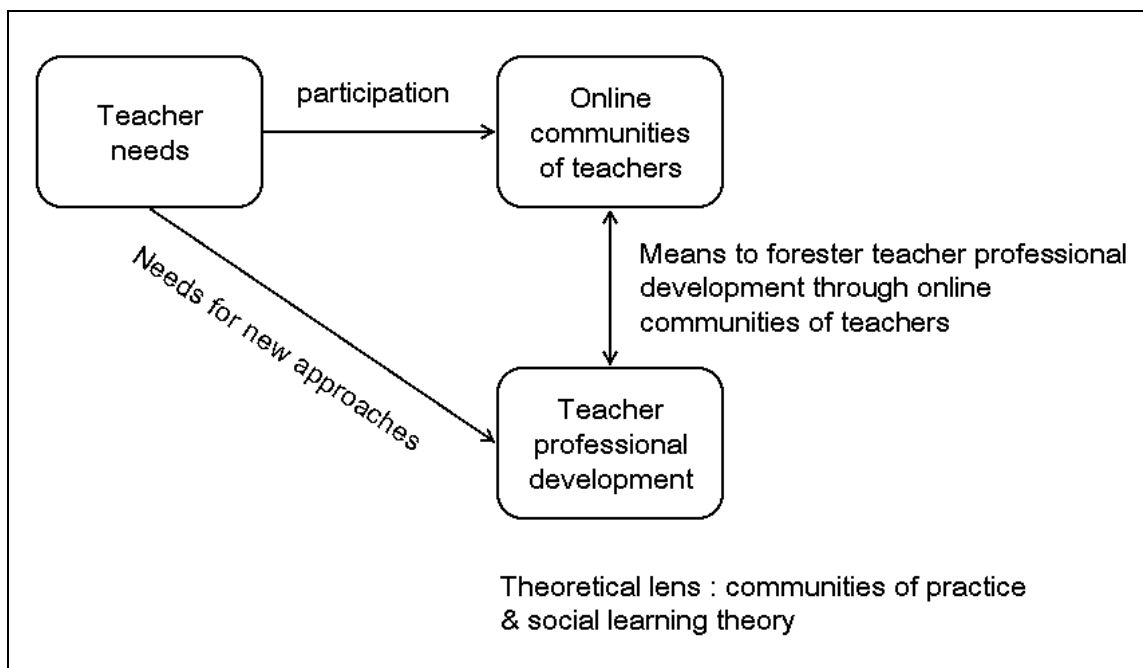


Figure 1. Conceptual map of this study

Two research questions guided this study:

1. Why do teachers want to participate in online communities of teachers?
2. What are the driving and restricting components affecting teacher participation in online communities of teachers?

To achieve the goals of this study, I investigated three online communities of teachers: the Teacher Focus community, the WeTheTeachers community, and the Teaching community in LiveJournal (LJ). All three communities are composed of K-12 teachers from the United States and several other countries, including Canada, the United Kingdom, and Australia. All three communities were developed by teachers. Many teachers maintained participation and the communities have evolved over time.

Significance of Study

This study contributes to the field of education and to the field of instructional technology, providing new insights into teachers' professional needs and teacher learning in online communities. Below I describe empirical, theoretical, and practical contributions of this study.

Empirically, this study provides insights into understanding the current phenomenon of increasing interest in creating and participating in online communities of teachers. Given the scarcity of empirical research on online communities that are self-organized by teachers, this study provides evidence for understanding reasons for teachers' participation in online communities. Furthermore, the descriptions of teacher interaction in online communities of teachers add new knowledge to understanding informal learning in online environments.

Theoretically, this study re-examines social learning theory as a theoretical lens to understand teacher learning in online communities of teachers. The results of this study suggest a new learning model that may better explain teacher learning in online communities of teachers.

Practically, the findings of this study may suggest useful approaches necessary for developing teacher professional development programs. Additionally, this study provides several guidelines that should be considered in designing online learning environments.

Without better understanding of teachers' needs and teachers' informal learning outside of schools, designing effective teacher professional programs is unlikely. This study provides insights into ways to develop new teacher professional development programs that assist teachers' professional growth.

CHAPTER 2

LITERATURE REVIEW

Understanding teacher participation in online communities of teachers from an educational point of view is complex. Researchers must not only understand the new phenomenon of increasing interest in both developing and participating in online communities, but must also examine the relationship between online communities and teacher professional development. This study examines teacher participation in online communities from a learning point of view: What do teachers want to learn from online communities? Why do they want to know this information? Examining previous studies of problems with teacher professional development programs and the means to support teacher interaction online is important in order to find better ways to enhance teacher professional development and online interaction. Consequently, the purpose of this literature review is to discuss the characteristics of online communities of teachers and to examine previous literature concerning social learning perspective, teacher knowledge¹, teacher professional development programs, and the design of online communities of teachers. To foster online interactions, design components that need to be considered are also described.

Communities and Online Communities

The term “community” has been used profligately in various settings and is at risk of losing its meaning and usefulness (Barab, MaKinster, Moore, & Cunningham, 2001; Riel & Polin, 2004). According to Riel and Polin (2004), a community is “a multigenerational group of people, at work or play, whose identities are defined in large part by the roles they play and the

¹ Knowledge that educators claim teachers should know.

relationships they share in that group activity” (p. 18). In contrast to the traditional notion of communities, which is presented as a group of homogeneous people who have a strong attachment and a sense of belonging, heterogeneous groups who might have less attachment are also considered as communities in modern society. The increased use of the Internet especially allows people to question the difference between a physical community and virtual community, how a virtual community influences a physical community or vice versa, and the level of belonging and attachment in virtual communities (Grossman, Wineburg, & Woolworth, 2001). Some scholars argue that online communities lack a sense of identity and belonging (Renninger & Shumar, 2004). The description above indicates that the notion of online communities is different from the traditional concept of communities and includes various unique characteristics. In order to elucidate the meaning of online communities in depth, I describe the definitions and characteristics of online communities in the following section.

Definitions and Characteristics of Online Communities

One-to-one communication was enabled online based on the development of email in 1972 (de Souza & Preece, 2003). In 1979, Usenet, a distributor of Internet discussion systems, was first introduced. Usenet allowed people to have many-to-many interactions online. Since then, the number of online communities has continually increased with the development of new online communication technologies (Darling-Hammond & McLaughlin, 1995). According to Horrigan (2001), more than 80% of Internet users have participated in some type of online community.

Preece (2000, 2005) argues that because of the complexity of the issues underlying online communities and the different interests and expertise of scholars from diverse disciplines, no single definition of online communities exists. However, she contends that having a working

definition of online communities helps researchers understand various issues associated with online communities and provides guidance for practice. In this section, I introduce two working definitions that are cited in many scholarly articles related to online communities and discuss some common characteristics of online communities.

Howard Rheingold (1993), a pioneer of online community research, defines online communities (virtual communities), as “social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace” (p. 5). Preece (2000) proposes that an online community can be defined as “a group of people who come together for a particular purpose or to satisfy particular needs; they are guided by formal and/or informal policies and supported by computing technology” (cited in Jones & Preece, 2006, p. 113). Both definitions emphasize social groups and their interaction online. However, the two definitions are different in that Rheingold’s definition highlights personal relationships among members, whereas Preece’s definition focuses on goals, policies, and technology. The strength of these definitions is that they both consider the term from multidisciplinary perspectives, including sociology, technology, and business. However, Kling and Courtright (2003) criticize broad definitions in that they do not distinguish among associations, fan clubs, and communities.

Online communities are often named based on the activities that members engage in, such as a football fans online community (Preece, 2005). Because of modern communication technologies, people can join any online community regardless of members’ physical locations or time constraints. Online communities rarely exist solely online. Off-line communities form online communities in order to share information and resources in more efficient ways. Similarly, members of online communities sometimes seek face-to-face meetings with fellow members. In

fact, many researchers argue that having off-line meetings is one of the most important factors to foster active participation in online communities (Johnson, 2001; Kling & Courtright, 2003).

Ellis, Oldridge, and Vasconcelos (2004) claim that the most crucial aspect of an online community is not the information shared in the communities, but it is the sense of belonging that participation engenders. Daugherty et al. (2005) state that members join an online community for various reasons, but some do not have any need for communication with other members.

According to Ling et al. (2005), 4%-10% of members in online communities produce more than 50-80% of the messages and resources shared. The development of advanced social network software, including instant messaging, Internet forums, blogs, and wikis, allows groups of people to communicate online easily; these groups of people are often called online communities.

Hundreds of new online communities are created every day, yet many of them disappear with little interaction among members (Preece, 2000).

The description above suggests that due to the complex characteristics of online communities, any groups of people who interact online can be called online communities. An online community of teachers is a specific type of online community. However, it is distinguished from other communities, such as online fan clubs. An online community of teachers is based on communities of practice. The notion of communities of practice is described below.

Community of Practice and New Learning Perspective

Communities of Practice

The notion of communities of practice is popular in the field of organizational learning and adult learning (Hara, 2000). The term “community of practice” was first coined by Lave and Wenger (1991) to emphasize learning through apprenticeship:

A community of practice is a set of relations among person, activity and world, over time and in relation with other tangential and overlapping communities of practice. A community of practice is an intrinsic condition for the existence of knowledge, not least because it provides the interpretive support necessary for making sense of its heritage. Thus, participation in the cultural practice in which any knowledge exists is an epistemological principle of learning. (p. 98)

Since its origination, the notion of community of practice has been widely applied to support organizational learning. Researchers have examined interactions among groups of people over a long period of time in order to describe the characteristics of communities of practice. For example, Hara (2000) addresses six elements that compose communities of practice: a group of practitioners, the development of a shared meaning, informal networks, supportive culture (trust), engagement in knowledge building, and individuals' negotiation and development of professional identities. Barab, MaKinster, and Scheckler (2003) also discuss numerous characteristics of communities of practice. Some of these characteristics include respect for diverse perspectives and minority views and opportunities for interactions and participation.

Wenger (1998) proposes that such communities entail mutual engagement of members around a joint enterprise. Members share repertoires of tools, stories, routines, and words that the community has generated or developed; the repertoire becomes a part of the community's practice. He explains, "Practice connotes doing, but not just doing in and of itself. It is doing in a historical and social context that gives structure and meaning to what we do" (p. 47). Baek (2002) claims that the notion of communities of practice is often confused with a metaphor describing a wide range of communities, including a knowledge, learning, and discourse communities. This confusion comes from the tendency to focus on the individual terms "community" and "practice." The notion of communities of practice needs to be understood as a whole. Therefore, if a community lacks a common practice, it is not a community of practice. Communities of practice are different from groups or gatherings in that they seek to develop members' capacities

and knowledge and sustain the community as long as the interests of members last (Moore, 2003). Recently, Wenger et al. (2002) defined communities of practice as “groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis” (p. 4). With new technologies, it has been suggested that communities of practice can be formed in virtual (online) environments (Jones & Preece, 2006).

Many researchers acknowledge that communities cannot be designed; they are self-organizing and self-sustaining entities. Wenger (1998) argues that a “community of practice can be recognized, supported, encouraged, and nurtured, but they are not reified, designable units” (p. 229). As he points out, communities of practice need appropriate support to thrive. This support can include providing guiding strategies (Wenger et al., 2003).

Previously, I claimed that online communities of teachers are distinguished from other interest-oriented communities (communities of interest) because they are communities of practice. One factor that supports this claim is that a group of practitioners (teachers) share concern, knowledge, and passion related to teaching and learning in online teacher professional communities. They informally communicate with each other and provide emotional support. In other words, the characteristics of online teacher professional communities fit into the general characteristics of communities of practice. It should be noted, however, that not all online teacher professional communities belong to communities of practice. There are online communities in which teacher interaction is minimal and mutual engagement does not occur.

The notion of communities of practice is unique and important in that it emphasizes learning not only as enhancement of individual knowledge and skills but also as identity formation in a joint and interdependent practice. Wenger (1998) states:

Because learning transforms who we are and what we can do, it is an experience of identity. It is not just an accumulation of skills and information, but a process of becoming—to become a certain person, or, conversely, to avoid becoming a certain person. (p. 215)

Thus, learning is viewed not only as a cognitive process but also as social engagement. This new view of learning is called social learning theory.

Social Learning Theory

Putnam and Borko (2000) explain that in social learning theory or situated learning theory cognition is viewed in three distinctive ways: cognition as situated, cognition as social, and cognition as distributed. Understanding each of these aspects contributes to a holistic understanding of social learning theory.

From a “cognition as situated” perspective, knowledge and learning are situated in contexts where learning takes place. Knowing and learning are typically understood as gaining abstract knowledge inside the mind. Situated theorists challenge this notion and argue that the social and physical contexts in which the knowledge is presented are an integral part of learning. Meaningful learning can only occur when learning is embedded in the social context where the knowledge is used. Brown and Duguid (1991) consider knowledge a tool. They argue that just as practitioners learn how to use tools by utilizing them, people learn new knowledge by employing that knowledge in certain communities. Brown and Duguid (1991) particularly highlight “learning-in-working.” They claim that working, learning, and innovating are closely related, and practice is central to understanding work. Learning should not be separated from actual practice.

The “cognition as social” perspective emphasizes social aspects of learning. What people consider as knowledge and how people think and develop ideas are the products of interaction and negotiation within communities of practice over time (Putnam & Borko, 2000; Wenger,

1998). Generally speaking, learning is traditionally treated as a highly individual process. It has a beginning and an end, and it is the result of teaching. Social learning theorists, however, propose that learning is a part of everyday life. The role of people in the learning process is more than simply providing encouragement for individual knowledge construction (Resnick, 1991); knowledge is the outcome of ongoing interactions with groups of people. From this perspective, learning can be defined as increasing participation in a community of practice where people work and use knowledge (Lave & Wenger, 1991). For example, teacher learning is viewed as a process of increasing participation in a teaching practice, and teachers become more knowledgeable through participation in their own communities of practice (Borko, 2004). As newcomers actively participate in a community of practice, they move toward the center of socio-cultural practice. Lave and Wenger (1991) refer to this stage in the process of enculturation as legitimate peripheral participation (LPP). Knowledge transfer occurs while people are participating in a community of practice and are utilizing knowledge in the community. As a person enters into full participation in a community of practice through legitimate peripheral participation, knowledge is learned and enculturation occurs (Baek, 2002; Brown & Duguid, 1991).

From the perspective of “cognition as distributed,” cognitive properties are not solely individual; rather, they are distributed across individuals and various tools (Lave, 1993; Salmon, 1993). According to Hutchins (1991), all division of labor requires some distributed cognition in order to coordinate the participants’ activities. For example, various kinds of cognition are needed in order to produce an automobile, including the cognition related to design of effective engines, safety regulations, and car body design. Distributed cognition across people who

develop the automobile and tools makes it possible to produce a safe and effective automobile (Putnam & Borko, 2000).

From a social learning perspective, teachers' participation in online communities of teachers can be viewed as a learning process. If so, researchers need to understand what teachers learn. Because learning entails knowledge, it is important to think of what knowledge teachers should or could develop through the learning process.

Teacher Knowledge

Traditional views of teacher knowledge come from an assumption that knowledge drawn from scientific research, often called formal knowledge or knowledge-for-practice (Cochran-Smith & Lytle, 1999a), is the best foundation for teachers to improve teaching practice because of its scientific approach (Hiebert, Gallimore, & Stigler, 2002). This approach assumes that there is a distinctive knowledge base that teachers should master and that it is possible to explicitly define this knowledge base. From this perspective, teachers are not those who generate knowledge; rather, they are the consumers of knowledge developed by university-based researchers. By this definition, an expert teacher is one who knows the existing formal knowledge and continually updates his individual knowledge base.

Another view of teacher knowledge is called practical knowledge or knowledge-in-practice (Cochran-Smith & Lytle, 1999a). A basic assumption of this perspective is that teaching is situational and uncertain and is constructed in response to everyday practice in classrooms. Teachers gain knowledge through experience and reflection. From this perspective, expert teachers are defined as those who are able to articulate the implicit knowledge explicitly for novices or less confident teachers. In this sense, novice teachers are expected to learn by observing and imitating the strategies of expert teachers.

Researchers argue that there are issues with viewing knowledge dualistically, as either formal or practical. First, some knowledge, such as pedagogical content knowledge (Shulman, 1987), does not belong to either category (Carter, 1990; Fenstermacher, 1994). According to Shulman (1987), pedagogical content knowledge is defined as “the blending of content and pedagogy into an understanding of how particular topics, problems, or issues are organized, represented, and adapted to the diverse interests and abilities of learners and presented for instruction” (p.8). What he means is that pedagogical content knowledge includes both formal and practical knowledge. When all knowledge is divided into two parts, an attempt to link two components, such as with pedagogical content knowledge, becomes problematic (Cochran-Smith & Lytle, 1999a).

Another problem of looking at knowledge dualistically is that both approaches assume that there is knowledge that is already known. Of course, there is a critical difference in terms of who possesses the knowledge. Formal knowledge emphasizes learning knowledge that is already known by someone else who constructed or discovered the knowledge, such as university researchers. Practical knowledge focuses on learning knowledge that is known by someone else who gained the knowledge by experience, such as expert teachers.

Cochran-Smith and Lytle (1999a) propose a new conception of teacher knowledge called knowledge-of-practice. This view stands in contrast to the dualistic view of knowledge. It is not a synthesis of formal and practical knowledge; rather, it is based on fundamentally different assumptions that understanding teacher knowledge goes beyond the idea of formal-practical distinction. It does not distinguish expert teachers and novice teachers. Both teachers work together to construct knowledge necessary for teaching. From this perspective, knowledge cannot be separated from the knower; rather, knowledge is constructed in contexts in which it is

utilized and connected to the knower. This perspective views a teacher as a researcher or knower who does not need more “findings” from university-based researchers but needs dialogue with other teachers in order to generate theories grounded in practice (Cochran-Smith & Lytle, 1999b). This view emphasizes teacher learning across professional life through participation in teacher communities. Cochran-Smith & Lytle (1999a) claim that:

Learning from teaching across the professional life span assumes that beginning and experienced teachers need to engage in similar intellectual work. Working together in communities, both new and more experienced teachers pose problems, identify discrepancies between theories and practices, challenge common routines, draw on the work of others for generative frameworks, and attempt to make visible much of that which is taken for granted about teaching and learning. (p. 293)

The reason I discuss teacher knowledge is neither to categorize teacher knowledge nor to prioritize it. My intention is to emphasize that researchers need to view teacher knowledge more broadly. I believe that both formal knowledge and practical knowledge are important for teaching. However, limiting teacher knowledge to two categories of knowledge, formal and practical, may prevent researchers from valuing knowledge that is created by teachers through communication with other teachers. The process of sharing teaching ideas and experiences as a knowledge construction process must be considered.

Up to this point, I have discussed the definitions and characteristics of online communities, the notion of online communities of practice, and social learning theory. As previously stated, understanding those concepts is important to examine teacher participation in online communities of teachers from a learning point of view. Teacher learning has been traditionally supported in the form of teacher professional development. In the following section, I discuss problems with traditional teacher professional development and new ways to support teacher professional development.

Teacher Professional Development

Problems of Traditional Teacher Professional Development

Scholars and policy makers frequently claim that in order to help students meet high standards and be prepared for a competitive global society, teachers need to change their teaching practice from transmitting predefined knowledge to assisting students in constructing their own knowledge (Darling-Hammond & McLaughlin, 1995; Scribner, 1999). Traditionally, teacher learning is supported via staff development or teacher professional development.

Schlager and Fusco (2003) define teacher professional development in the following way:

Teacher professional development is viewed as a career-long, context specific, continuous endeavor that is guided by standards, grounded in the teachers' own work, focused on student learning, and tailored to the teacher's stage of career development. Its objective is to develop, implement, and share practices, knowledge and values that address the needs of all students. It is a collaborative effort, in which teachers receive support from peer networks, local administration, teacher educators, and outside experts. (p. 205)

Traditional teacher professional development programs are often considered ineffective and inefficient (Guskey, 1986; Moore, 2003). They are largely developed based on knowledge transmission from experts (Baek, 2002). Teachers are asked to be passive listeners, consuming knowledge created by outside experts who often have little knowledge about local conditions (Wilson & Berne, 1999). The learning focus is mainly on mastering teaching skills and basic rules (Darling-Hammond & McLaughlin, 1995). The lack of relevance is also problematic. Teacher professional development programs are designed as "one-size-fits-all" and often do not consider an individual teacher's professional development needs (Guskey, 1986). More importantly, teacher learning opportunities are often provided separately from actual classes, such as summer teacher professional workshops, and teachers do not have chances to discuss ideas with fellow teachers after teaching is put into practice (Fischer, 2004).

To overcome the problems related to teacher professional development, educators have suggested various strategies:

- being school based (or school network based) and embedded in teacher work (Hiebert, Gallimore, & Stigler, 2002; Lieberman, 2000)
- providing ongoing support, promoting interaction among teachers (Fischer, 2004)
- focusing on crucial problems of curriculum and instruction (Little, 1988)
- emphasizing student learning with the guidance of evaluation of its effectiveness (Borko, 2004; Guskey, 1986)
- considering teachers' prior experience, knowledge, and beliefs (Ball, 1996; Raymond, Butt, & Townsend, 1992)
- providing opportunities to develop the personal qualities, commitment, and self-understanding essential to becoming a teacher (Hargreaves & Fullan, 1992)
- giving teachers encouragement, support, sympathy, and respect (Bell & Gilbert, 1994; Jackson, 1992)
- acknowledging and understanding teacher perspectives on their own professional growth (Scribner, 1999)
- promoting teacher reflection; encouraging each teacher to give feedback

Challenges Facing Teacher Professional Development

Educators have made various efforts to help teachers with their professional growth. Some studies show the effectiveness of their approaches, such as increasing students' achievement or higher teacher satisfaction, but some approaches do not provide substantial evidence of their effectiveness (Borko, 2004). Despite numerous efforts teacher educators have

made, it is widely acknowledged that there is little evidence that teaching practice has changed through teacher professional development programs. Multiple reasons can explain the ineffectiveness.

One reason is related to contradictions between researchers' approaches and teacher culture and teacher needs. Researchers claim that in order to change teaching practice, teachers need to reflect on their own teaching practice critically and provide critical feedback to peers. Wilson and Berne (1999) argue that helping teachers think and talk critically about their own teaching practices can be very uncomfortable and time-consuming. However, it is vital for teachers to go beyond politeness and critically discuss their current teaching practices in order to develop an understanding of new teaching approaches. Despite the importance of critical reflection, the culture of teachers' critical examination of teaching and learning is not well established (Barab, MaKinster, Moore, & Cunningham, 2001). Ball (1994) criticizes the lack of critical discussion on teaching in the following way:

Making disagreements hides the individual struggles to practice wisely, and so removes an opportunity for learning. Politely refraining from critique and challenge, teachers have no forum for debating and improving their understandings. To the extent that teaching remains a smorgasbord of alternatives with no real sense of community, there is no basis for comparing or choosing from among alternatives, no basis for real and helpful debate. This lack impedes the capacity to grow. (Cited in Putnam & Borko, 2000, p. 9)

The emphasis of critical attitude is also contrasted to teacher needs. Scribner (1999) interviewed teachers and school administrators and found that teachers were intrinsically motivated to look for new learning because of (a) content knowledge needs, (b) pedagogical skill deficits, (c) challenges to classroom management, and (d) gaps in student-centered knowledge. However, even though teachers acknowledge their knowledge gaps and dissatisfaction regarding their teaching practices, they also need to feel that their teaching practice is acceptable overall; teachers do not expect their knowledge and expertise to be questioned (Bell & Gilbert, 1994;

Fischer, 2004; Wilson & Berne, 1999). In particular, in order to help teachers adopt new teaching strategies and change classroom activities, supportive feedback is crucial. However, researchers often do not fully consider teacher culture and teacher needs when they design and provide teacher professional development programs.

Another reason for the ineffectiveness of teacher professional development is a lack of understanding of teacher concerns. Bell and Gilbert (1994) argue that there are several concerns that restrain teachers from adopting new practice. Teachers have many fears regarding change:

- Losing control in the classrooms: New approaches provide students with more opportunities to make their own decisions and to critique teacher ideas; teachers perceive that their authority is being challenged.
- Providing little guidance: Teachers give less assistance in new learning environments; teachers feel irresponsible for not doing their jobs.
- Not covering the curriculum: Teachers want to ensure that they teach all the predefined content; new approaches sometimes make teachers focus on one or two activities intensively.
- Not knowing the subject: New approaches often emphasize students' inquiry. Teachers feel insecure about their knowledge regarding subject matter and fear not always knowing the answers.
- Not meeting assessment requirements: Teachers feel that they may be unable to meet requirements for standards with new teaching approaches.
- Having different relationships with students: Because new approaches often ask students to seek answers to problems more independently, teachers feel they are not very helpful.

- Not producing necessary outcomes: Teachers think that a new teaching activity may not produce the evidence required by the government or administration, such as qualitative workbooks or notebooks.

School culture also sometimes prevents teachers from implementing new teaching practices. Barnett (2002) argues that even the teachers who are excited and motivated to adopt new practices are often discouraged because of a school culture that does not value the sharing and discussion of innovative teaching concepts.

The description above presents the difficulties of providing effective teacher professional development. It especially emphasizes understanding teachers' needs and concerns. If teacher professional development programs do not help teachers successfully deal with day-to-day teaching practices, teachers may find the programs ineffective. Providing on-going support is particularly important to assist teachers' day-to-day practice. Researchers suggest utilizing online technologies in order to provide on-going guidance without time and location constraints. Barnett (2002) states that encouraging teachers to communicate through online communication technologies is particularly useful for reducing teacher isolation, fostering teacher reflection, and supporting formation of communities of practice. The next section explains increasing interest in utilizing Internet technologies in teacher education.

Teacher Professional Development in Online Environments

Brief History of Utilization of Internet Technologies in Teacher Education

Interest in utilizing Internet technologies has been growing since network systems were implemented in schools in the early 1990s. Early research examined the effects of network systems as a way to overcome teacher isolation or to provide moral support for beginning teachers (Jinks & Lord, 1990; Merseth, 1991). For example, Jinks and Lord (1990) found that a

computer network assisted isolated teachers living in a dormitory for a month exchange information and provide emotional support. Similarly, Merseth (1991) reported that access to interactive computer networking effectively provided beginning teachers with moral and mental support.

More recently, researchers examined how technical tools such as electronic mailing lists or discussion boards could be utilized to promote reflective discourse or to share teaching experience and ideas (Nicholson & Bond, 2003; Piborn & Middleton, 1998). A study by Piborn and Middleton (1998) showed that electronic mailing list postings were as thoughtful and reflective as traditional journal entries. Nicholson and Bond (2003) revealed that the use of online discussion boards not only extended discussion beyond the classroom but also improved pre-service teachers' reflective thinking skills.

A recent approach to assist teacher professional development is through creating online communities of teachers. Educators note the importance of teacher interaction and sharing ideas and concerns in helping teachers change teaching practices. They acknowledge that online networking technologies can help to create environments in which teachers can freely share ideas and resources and learn from each other. The online environments are often called online communities of teachers, teacher electronic communities, or online teacher professional communities. Two major attempts to create online communities of teachers are described in the next section.

Online Teacher Professional Communities

Schlager and Schank (1997) launched TAPPED IN, a multi-user virtual environment. The main purpose of the community was to assist teacher professional development by encouraging teacher reflection and interaction with other teachers. The developers were also

interested in understanding the use of emerging Internet technologies in developing online communities of teachers. The community was organized around the metaphor of virtual conference centers, public meeting rooms, private offices, and outdoor areas (Gary & Tatar, 2003). About half of the members are K-12 teachers; the remainder includes university faculty, researchers, technology supporters and pre-service teachers. Interaction among members is facilitated by a small group of paid and volunteer staff members. The major communication method is text based, real time discussion. Gary and Tatar (2003) found that certain technology functions foster private dialogue with other members. For example, a “whisper” function allows members to contact others privately. This function helps experienced users to assist novice members in becoming familiarized with the community. Each member can customize his or her own personal office and have meetings or informal conversations in the room. Various professional development activities occur in the community, such as the After School Online Seminar series. The topics of the seminar included technology, language learning, and school administration. Some of the seminars are organized by the staff members, yet most are designed and run by volunteer members. Despite various efforts by developers, they have struggled with increasing teachers’ informal interaction. After several years of attempts, the developers attest that the creation of a community takes a number of years and short-term efforts cannot succeed.

The Inquiry Learning Forum (ILF) is an online community of teachers designed to assist math and science teachers’ use of inquiry-based teaching practices. The majority of members are either university students or K-12 teachers. The site was designed around the metaphor of “visiting classrooms.” Teachers with a diverse range of experience and expertise come together to discuss, observe, and reflect on pedagogical theory and practice anchored to video cases. Each classroom includes not only classroom videos related to teaching inquiry based lessons

but also teachers' reflections, lesson plans, and supporting materials. All the classrooms also have one or two discussion boards in which visitors can discuss the class with other teachers or have conversations with the teacher in the video. In order to support interaction of small groups, ILF provides a group space called the Collaboratory. Similar to the TAPPED IN community, ILF also has problems in encouraging teachers to participate in the community activities. Baek (2002) claims that teacher culture influences teacher participation in the ILF community. The elements that influence participation include (a) lack of time, (b) isolated work, (c) lack of reflection on their practice, (d) lack of technical support, (e) pressure from state mandated standards, and (f) pre-existing mistrust directed at the university and preferences for face-to-face interaction.

Despite the potential of Internet technologies to assist teacher learning, empirical research concerning how online teacher interaction influences teacher practice is still lacking (Barnett, 2002; Moore, 2003; Zhao & Rop, 2002). The main focus of researchers has been on creating online communities of teachers; in order to study online communities, they needed to create them first. During the process of the creation of online communities, scholars have found that supporting both usability and sociability is important to help communities thrive. The next section explains the concepts of usability and sociability.

Usability and Sociability

Researchers in the field of human computer interaction (HCI), computer-supported cooperative work (CSCW), and computer-mediated communication (CMC) have examined a variety of ways to enhance human interactions in online environments. The topics of those studies include the effect of different media on group work online, impact of social factors in CMC, online group formation, and online trust building (Gunawardena, 1995; Hoffman, Novak,

& Peralta 1999; Kling & Courtright, 2003; Preece, 2000b). What researchers commonly agree upon is that neither technology nor social interaction alone support online communities (Mynatt, Adler, Ito, & O'Day, 1997; Preece, 2000b). Success of online communities is determined by usability and sociability (de Souza & Preece, 2003). Usability focuses on human/computer interactions, whereas sociability is concerned with social interactions. According to Jones and Preece (2006), main usability principles for online communities are similar to other types of software design.

Preece (2000) attests that usability has to do with making an interface consistent, predictable, controllable, and simple. Rogers, Preece, and Sharp (2002) describe five usability goals: Interactive systems should be designed in a way to support user tasks effectively (effectiveness), to help users efficiently accomplish tasks (efficiency), to protect users from dangerous conditions (safety), to be understood easily (learnability), and to assist users in remembering use of systems once learned (memorability). They especially emphasize user experience: Use of systems should be enjoyable, fun, entertaining, motivating, rewarding, and helpful.

Sociability is concerned with developing social policies to support community purpose. It changes as the community evolves. Preece (2000) suggests several guidelines for sociability:

- Give the community a clear meaningful name.
- Clearly state the purpose of the community.
- Explain technical and other access requirements.
- Support social presence, such as avatars, icons, and personal stories (Short, Williams, & Christie, 1976).
- Encourage empathy, trust, and cooperation.

- Protect confidential information.
- Establish netiquette.
- Enforce rules.

In summary, in order to guide online community development successfully, community facilitators should consider both usability and sociability.

Summary of Chapter

Online communities can be defined as a group of people who interact with each other based on online technology. They are developed with particular purposes and governed by rules constructed by the members of communities. Online teacher professional communities can be viewed as a community of practice in online environments. A community of practice is a group of practitioners who share knowledge, beliefs, and values within a supportive culture. The category entails a common practice and joint enterprise and develops meaningful relationships over time. Participation in communities of practice is important because learning occurs in the process of participation. In other words, teachers learn while they interact with fellow teachers in communities of practice. During participation, teachers learn knowledge developed by others, such as formal or practical knowledge. Teachers can also develop their own knowledge.

Teacher educators have made numerous efforts to provide on-going support for teacher learning. However, many efforts were unable to change teaching practice. Some of the reasons include contradictions between researchers' approaches and teacher needs/culture and a lack of understanding of teacher concerns and school culture.

Using the Internet is considered an effective way to help monitor and increase teacher professional development. Researchers have particularly tried to create online teacher professional communities based on the belief that interaction with other teachers will reduce

teacher isolation and promote teacher reflection. However, most communities have struggled with maintaining participation. Consequently, the influence of participation in online teacher professional communities is still unknown.

Due to the special characteristics of online environments, researchers have been interested in understanding how to foster interaction online. Considering both usability and sociality is suggested to support active participation online.

CHAPTER 3

METHODS

Methods for research primarily depend on research problems, purposes, and questions (Creswell, 2003). Newman et al. (2003) claim that through consideration of research questions and research purposes iteratively, researchers can make an appropriate methodological choice. The purpose of this study was to examine teacher needs in terms of teacher professional development by investigating reasons for participation in online communities of teachers. This study also aimed to explore means to design online learning environments in which teacher learning could effectively occur. Two research questions guided this study:

1. Why do teachers want to participate in an online community of teachers?
2. What are the driving and restricting components affecting teacher participation in an online community of teachers?

Research Design

To achieve the goals of this research, I conducted a case study. A case study is defined as “a detailed examination of one setting, or a single subject, a single depository of documents, or one particular event” (Bogdan & Biklen, 2003, p. 54). According to Merriam (1998), the purpose of a case study design is “to gain an in-depth understanding of the situation and meaning for those involved. The intent is in process rather than outcomes, in context rather than a specific variable, in discovery rather than confirmation” (p.19). Cases are bounded by time and activities, and a variety of data collection methods are used to collect detailed information (Stake, 1995; Yin, 2003). The rationales for selecting a case study methodology for this study are described below.

Yin (2003) attests that the selection of appropriate research strategies can be guided by three conditions: (a) forms of research questions, (b) extent of control over behavioral events, and (c) degrees of focus on contemporary events. A case study is particularly appropriate in situations where (a) research questions mainly focus on “how” and “why,” (b) behaviors in cases cannot be manipulated, and (c) the research concentrates on contemporary events.

This study is intended to explore why teachers participate in online communities of teachers. Participation in an online community is a contemporary phenomenon in which the behavior of participants cannot be controlled.

Characteristics of Study

Stake (1995) divides case studies into two types: intrinsic and instrumental. If researchers study a case because they have an intrinsic interest in it, the study is an intrinsic case study. If researchers conduct a study to understand something other than the case itself, it is an instrumental case study. Even though understanding the case itself is important, the main focus of this study is to examine reasons for participation in order to investigate teacher needs pertinent to professional development. Thus, this study is an instrumental case study.

The major characteristic of this study is qualitative. Qualitative inquiry is suited for this study because it seeks an understanding of participants’ routine activities in online communities, motivation for participation, beliefs about teaching, history of participation, and perspectives on participation. In other words, this study seeks an understanding of the meaning of experience (Merriam, 1998). Researchers claim that qualitative research is well suited when the aim of a study is to examine ordinary, daily practices, to understand unique contexts and the relationships between participants and the contexts, and to explore the process of participation (Bogdan & Biklen, 1992; Maxwell, 1996; Silverman, 2000). In this study, qualitative data were gathered

primarily through interviews with 31 participants and observations of postings on three online communities.

Case Selection

The most important consideration in conducting a case study is to select case(s) properly (Stake, 1995). To achieve the purpose of this study, I developed ten criteria for the selection of cases. The criteria included:

1. Participants: The majority of members should be K-12 teachers from all over the United States.
2. Large membership: The number of participants should be no less than 1,000.
3. Communities of practice: The community needs to meet the characteristics of communities of practice, including a shared domain of interest, a supportive culture, engagement in knowledge building, a group of practitioners, joint activities, and discussions and informal interaction (Wenger, 1998; Hara, 2000; Barab et al., 2003).
4. A long history: The community needs to have been active at least one year.
5. Current participation: Interaction among participants should be ongoing.
6. Voluntary participation: Participation should not be imposed by someone else for research or business purposes.
7. Self-evolving: Communities should have been developed by a number of interested members.
8. Web-based: Members need to visit communities in order to participate. This structure is different from listservs, where new messages are automatically sent to a subscribed email address.

9. Reliance on technology: Communities need to provide various current technologies to assist members in effective communication.

10. Accessibility: I should be able to access the communities.

Based on the ten criteria described above, I selected three online communities of teachers: the Teacher Focus community, the WeTheTeachers community, and the Teaching community in LiveJournal (T-LJ)². Although the three communities have the ten criteria in common, each community also includes several unique characteristics. I summarize the unique characteristics in Table 1.

Table 1. Unique characteristics of the three online communities of teachers.

	Teacher Focus	WeTheTeachers	T-LJ
Membership Size	5,300	2,500	1,500
Date of Inception	2001	2005	2001
Main Purpose	Discussion	Lesson plan sharing	Discussion
Technology	Structured forums	Structured forums	Blog
Active Participants	Experienced teachers	New + experienced Teachers	New teachers

As of May 2007, more than 5,300 teachers were registered for the Teacher Focus community, and 2,500 teachers were members of WeTheTeachers. T-LJ had approximately 1,500 teacher members. The Teacher Focus and T-LJ communities were developed in 2001, while WeTheTeachers was created in 2005.

² Dozens of online communities of teachers exist in LiveJournal. However, I mostly observed the Teaching community. For the sake of simplicity, I call teaching community “T-LJ,” unless otherwise specified.

In terms of the main purpose, sharing ideas and concerns is the main activity in Teacher Focus and T-LJ. Many members in WeTheTeachers, however, participate in the community to look for lesson plans or teaching resources shared by other teachers. WeTheTeachers provides file sharing spaces in which each member uploads lesson plans, rubrics, worksheets, or any other documents necessary for teachers. With regard to the use of technology, Teacher Focus and WeTheTeachers utilize structured forums: new posts are organized under certain pre-defined categories in a reverse chronological order. T-LJ, on the other hand, employs a blog technology. There are no categories. People can post any messages related to teaching, and new entries are arranged by dates. Lastly, each community is somewhat different in terms of the active participants. My definition of an active participant is a member who posts frequently. The active participants in Teacher Focus are experienced teachers. Many of them have at least ten years of teaching experience. In contrast, many active members in T-LJ are new teachers. They have fewer than five years of teaching experience. Active members in WeTheTeachers are somewhat balanced. I observed postings by retired teachers, members who have ten years of experience, and those who have one year of teaching experience.

The differences in the three communities provide a broad view of online communities, so the findings from the three online communities suggest compelling reasons why teachers want to participate in certain online communities of teachers. In other words, the three cases provide the best opportunity to answer the research questions, which is an important criterion in the selection of cases (Stake, 1995). The full description of each community is included in the next chapter.

Participants

I used purposeful sampling (Creswell, 1998) to recruit 31 members who participated in one of the three online communities of teachers. I first interviewed 24 members and invited 7 more to a short email interview. The major criteria for the selection of participants were participation level and the community to which each participant belonged. I tried to recruit teachers who had actively and regularly posted and those who had participated over a long period of time yet made postings infrequently. I also invited teachers who were lurkers or had stopped participating. I divided the participation level into three groups: active participants (A), infrequent participants (I), and lurkers (L). In Teacher Focus and WeTheTeachers, I could easily recognize the number of postings that each teacher made and the date when teachers made those postings. The system provides the information by default. However, it was almost impossible to discover this information from T-LJ because the system did not provide it. Consequently, I had to review hundreds of postings from the past five years in T-LJ to select members who fit my criteria.

I recruited participants by sending Personal Messages (PM) in Teacher Focus, sending both emails and PMs in WeTheTeachers, and sending emails in T-LJ. Teacher Focus and WeTheTeachers provide a PM tool, while T-LJ does not. Most teachers in Teacher Focus do not share their email addresses, whereas teachers in WeTheTeachers do. In other words, within the constraints of each system, I made every effort to recruit as many participants as possible. I summarize participants' demographic information in Table 2.

Table 2. Demographic information of participants

Pseudo- nym	Teaching experience (years)	School level	Gender	Participation*	Case**	Inter- view***	Additional information
Bob	10	High	M	1820 (A)	TF	6	
Susan	10	4-8th	F	1810 (A)	TF	2	
Dick	17	Elementary	M	1480 (A)	TF	4	Moderator
Kathy	24	6-8th	F	650 (A)	TF	2	Moderator
Ryan	Over 20	Elementary	M	18 (I)	TF	3	Retired teacher/ Canadian
Anna	35	Middle	F	1200 (A)	TF	1	
Emily	0	High	F	100 (I)	TF	2	High school student
Tyler	Over 10	7th	M	530 (A)	TF	2	Moderator/ Norwegian
Sydney	3	5-12	F	120 (A)	TF	3	
Maria	Over 20	Elementary	F	15 (L)	TF	1	Left TF two years ago
Nancy	10	Middle	F	32/82 (A)	WT	3	
Sophia	Over 20	High	F	63/36 (A)	WT	T (4)	Retired teacher
Sarah	3	High	F	0/51 (I)	WT	2	
Savannah	3	Elementary	F	1/19 (I)	WT	3	
Mary	1	Elementary	M	0/0 (L)	WT	1	Both WT & LJ
Austin	8	High	M	8/23 (I)	WT	2	
Alexis	1	Elementary	F	6/2 (I)	WT	1	Both WT & LJ
Amy	2	6th	F	190/35 (A)	WT	T	Developer of WT
Amanda	Over 20	Elementary	F	A	T-LJ	4	
Jessica	1	Elementary	F	I	T-LJ	4	
Hannah	3	High	F	I	T-LJ	2	
Mia	8	Elementary	F	A	T-LJ	1	
Judy	1	Elementary	F	A	T-LJ	1	
Ava	1	High	F	A	T-LJ	3	Both WT & LJ

*Number refers to number of postings (TF); postings/file shared (WT), A=active member (>30 postings), I= infrequent member (5 to 30 postings), L=lurker (< 5 postings)

**TF: Teacher Focus, WT: WeTheTeachers, T-LJ: teaching community in LiveJournal

*** Number of email exchanges, T: telephone interview

Note that the number in the participation cell refers to the number of postings that each participant made as of May 2007. The active participants in Teacher Focus had participated at least three to five years. Hence, their number of postings was greater when compared to the teachers' postings in WeTheTeachers. Two numbers are given for the teachers in WeTheTeachers. The first number is the number of postings in the *Forums* section, whereas the second number refers to the number of files shared in the *Lesson and File* section. I considered both uploading files and posting in the *Forums* as part of participation. I thus recorded both numbers. As I previously described, I could not count the number of postings in T-LJ; therefore, no number is provided in the participation cell in Table 2. Finally, based on the number of postings and the frequency of visiting the community that I found during the interviews, I defined the participation level of each participant. The level that I defined was recorded as A (active member), I (infrequent member), and L (lurker), denoted in the parentheses within the participation cell.

Table 3 is a summary of the number of participants based on teaching experience, school level, gender, participation, and the community to which each member belongs.

Table 3. Number of participants based on criteria

	Criteria	N
Teaching experience (years)	0	1
	1-5	10
	6-10	5
	11-20	2
	Over 20	6
School level	Elementary	10
	Elementary- Middle	7
	High School	7
Gender	Male	6
	Female	18
Participation	Active	14
	Infrequent	8
	Lurker	2
Community	Teacher Focus	10
	WeTheTeachers	8
	T-LJ	6

In addition to the 24 participants above, 7 teachers responded to a short email survey. I selected teachers I considered infrequent members or lurkers from Teacher Focus and WeTheTeachers. I sent an email to ask (a) whether they still participated, (b) what was their primary purpose for participation, and (c) why they stopped participating. I did not ask any demographic information or send follow-up questions. Consequently, I did not include them in the participant list in Tables 2 and 3. Instead, I summarized their participation level and the day

they made their last post in Table 4. Note that all seven teachers are from WeTheTeachers because no one in Teacher Focus responded to my emails.

Table 4. Information about infrequent members or lurkers in WeTheTeachers

	Participation*	Last posted date
T1	3/ 0	12/29/2006
T2	12/24	12/10/2006
T3	6/ 0	05/21/2006
T4	8/23	09/12/2006
T5	3/10	02/11/2007
T6	2/15	06/08/2006
T7	2/ 0	07/21/2006

*Number refers to number of postings/file shared

In summary, 31 members from the three communities participated in this study.

Data Sources

A case study requires diverse data sources to have a full picture of the cases and to ensure valid conclusions (Yin, 2003; Stake, 1995). Data were gathered through telephone and email interviews with 31 members and observations of archived postings, member profiles (including homepages and blogs), and community guidelines.

Interviews

In order to understand teachers' experiences in these online communities, I conducted interviews with 31 members from the three online communities. The interview protocol was developed based on Carspeckens's (1996) critical ethnographic method. This method begins with very broad and general questions called "lead-off" questions. These questions are designed to open up a topic domain that a researcher wishes interviewees to address. I developed the following four topic domains based on previous literature and the research questions of this study.

1. *Beliefs about teaching and local school culture*: good classes and bad classes, personal teaching styles, relationships with other teachers in local schools, general atmospheres of staff rooms.
2. *Teacher learning and participation in the online community*: initial involvement in the community, application of ideas to classrooms, frequency of participation, ways to search postings.
3. *Reason for participation*: favorite topics or forums, motivation for posting, most challenging aspects of being a teacher, ways to handle challenges.
4. *New tools and activities in online communities*: desires for new technological tools, technical problems, disliked activities.

In addition, I also gathered background information such as years of teaching experience and school level.

Based on the themes above, I developed an interview protocol. The protocol was first reviewed by a methods faculty member and was tested with a high school French teacher. The teacher was not a member of any of the online communities that I studied. However, she had participated in various bulletin board systems (BBS), electronic mailing lists, and online communities of teachers since the late 1980s. It was a face-to-face interview and lasted approximately one hour. I transcribed the interview in order to examine my interview pattern (e.g., the frequency of paraphrase and the appropriateness of my active listening responses). Active listening is a technique in which a researcher describes feelings that the researcher recognizes but the interviewee does not explicitly articulate (e.g., “Sounds like you’re very

frustrated with his response”; Carspecken, 1996). The final interview protocol is provided in Appendix A.

Telephone interview

I conducted telephone interviews with two members from WeTheTeachers, Amy Chambers and Sophia. Each interview was audio-taped with permission from the participants, and I took notes while I interviewed them. I transcribed the interviews for further analysis.

Email (or PM) interviews

My original intention was to conduct phone interviews with all participants due to geographical limitations. The participants were dispersed all over the country. However, as I recruited participants, they indicated that they preferred email interviews to phone interviews. The main reasons they preferred PMs or emails included maintaining their anonymity, participating at a time of convenience, and having more self control over their own answers. For example, Susan explained that her past experiences growing up in a very large city and observing a variety of unusual events encouraged her to preserve her anonymity. She is the wife of a pastor, and they prefer to keep the phone line open in case of emergencies. She also pointed out, “Even if I were to set up a time, chances are that something could crop up requiring attention. Emailing helped me do it at a time of convenience.” Dick preferred to communicate via email because it gave him time to frame a more thoughtful response. He added, “A response via email or posted reply also allows me the opportunity to reply at MY convenience.” Consequently, I modified my data collection method from a phone interview to email or PM interview.

After I realized teachers preferred email conversations, I sent emails with questions, asking participants to answer them. I reviewed my interview protocol and reduced the number of initial questions to ten in order not to overwhelm participants with many questions at once (See Appendix B). Instead, I provided several follow-up questions two to six times in order to ensure that I understood each participant's experiences and opinions properly. Even though I included questions, I also provided options for a phone interview for those teachers who might prefer talking over writing. No one requested a phone interview. Consequently, data from 29 teachers in this study came from PM or email interviews.

Meho (2006) attests that email interviewing has unprecedented potential to overcome some challenges in conducting qualitative research, including cost and access to participants. He further states that email interviewing can be a viable alternative to face-to-face and telephone interviews, especially when there are barriers to an investigation such as time and geographical boundaries. He suggests several guidelines for conducting effective email interviews, including inviting participants individually, rather than via a mailing list or message board, and providing a clear and appropriate number of interview questions. I carefully collected interview data following those suggestions.

Archived postings

Thousands of postings shared in the three communities were collected and reviewed in this study. The specific procedures of selecting and reviewing archived postings within each community are described below.

Postings in Teacher Focus

Popular posts.

The Teacher Focus system allows people to review the number of views and the number of replies to each post. I first visited the five sub-forums,—New Teachers' Place, Science and Mathematics, Middle School, Special Education, and Literature and Humanities— and reviewed all the posts that were viewed more than 1,000 times. While I reviewed them, I either quickly summarized the main ideas of posts or copied and pasted some sentences to my field notes. There were two reasons why I particularly examined the posts that were viewed over 1,000 times. First of all, I wanted to explore topics of teachers' interest. Secondly, I found the posts viewed many times received more responses than other posts. The subsequent responses helped me understand the pattern of discussion (e.g., who responded to whom, which phrases are quoted, etc).

Ongoing communication.

In order to understand current topics discussed in the community and teachers who had continually participated, I reviewed every thread posted from January 1 to April 30, 2007. I summarized the main ideas of each post and copied and pasted important sentences to my field notes while I reviewed them.

Postings by interview participants.

I sorted out postings made by the interview participants in this study. I first reviewed participants' initial postings to examine the purpose of their initial participation (e.g., how they got involved in the community and how they introduced themselves). After that, I randomly selected 20-50 postings for each participant and read through them. While I reviewed them, I

paid attention to the role of participation (e.g., did they ask questions or did they answer?) and frequency (e.g., how often did they post, daily or weekly?).

Postings in WeTheTeachers

The number of postings in WeTheTeachers is relatively small. Consequently, I reviewed all threads shared in the forums. The main ideas were summarized, and unique sentences were copied and pasted to my field notes during my review.

Postings in T-LJ

There are no categories in T-LJ and every entry is arranged by date. As a result, I first reviewed all new entries, which numbered 531, and subsequent comments posted from January to April 2007. Then, I randomly chose entries posted from 2002-2006 and reviewed them. I took notes while I reviewed those postings. The sentences that showed the unique culture of the community or teacher needs were copied and pasted to my notes.

Community guidelines

Each community provides specific guidelines that participants must follow, including rules and policies, copyright notice, and procedures for posting and editing messages. I copied and pasted these guidelines to my notes for analysis.

Members' public profiles

In all three communities, each member shares his or her personal profile. However, the specific information each member provides varies. Some people share their email addresses, homepage addresses, personal pictures, location, and school level. Some do not provide any of that information. In Teacher Focus and WeTheTeachers, the system, by default, provides the day

when the member joined the community and the number of postings that made since they joined. However, this information is not provided in T-LJ. One unique feature of T-LJ is that each member has his or her own journal (blog). Although most members restrict views to friends only, some journals are open to the public. As a result, whenever I visited communities, I reviewed members' profiles, visited homepages if they were shared, and read journals. I took observational notes while I looked through member profiles.

Procedures

I sent an interview invitation (see Appendix C) to twenty teachers, ten from Teacher Focus and ten from WeTheTeachers. Two people agreed to participate in a phone interview: Amy Chambers, the creator of WeTheTeachers, and Sophia, a member of WeTheTeachers. The interview with Amy took approximately 30 minutes, with Sophia, 45 minutes. After the interview, I sent an email to Sophia four times for follow-up questions and member checking.

Based on those interviews, I modified my original interview protocol and developed a new protocol for the participants of the email (or PM) interviews. I asked a methods faculty member to review my protocol and made minor changes based on his comments (see Appendix B). Among the twenty teachers to whom I sent my interview invitations, six teachers, excluding the two phone interview participants, agreed to participate: four from Teacher Focus and two from WeTheTeachers.

As soon as I received the first response from each participant, I sorted out the postings that the participant made on the communities and skimmed through them to explore their interests in topics (e.g., What topics did they ask and respond to?) and communication patterns (e.g., Do they usually post a new message or respond to others' posts? How much do they usually write?). Moreover, I read their responses to my interview questions at least three times

and carefully developed several follow-up questions. I phrased the follow-up questions by quoting the participants' unclear phrases, asking them to clarify their responses. I sometimes provided my own interpretation to do member checking and allow them to correct my interpretation if necessary (see Appendix D). If I found any special occurrences from the postings that they had made (e.g., posting many times in both elementary and secondary forums), I also included questions related to those occurrences. I tried to reduce the number of follow-up questions but made questions very open, allowing participants to provide more detailed responses. The number of follow-up questions varied depending on respondents. I usually asked five to seven follow-up questions when I conducted second email interviews. For the third or fourth follow-up interviews, two to five questions were generally asked. The number of email (or PM) exchanges for each interviewee is provided in the interview cell in Table 2. In order to ensure the propriety of my follow-up questions and communication pattern, I copied and pasted my data and showed a methods faculty member. He confirmed that the way I communicated with my participants was appropriate and verified that I was providing proper follow-up questions, neither too broad nor too narrow.

After I completed interviews with the initial six respondents, I sent emails to appropriately 60 members through PMs and emails from both Teacher Focus and WeTheTeachers. In total, ten people from Teacher Focus and eight from WeTheTeachers participated in PM or email interviews.

Email interviews with teachers from T-LJ

While I interviewed teachers in WeTheTeachers, three of the participants, Mary, Alex, and Ava, informed me of the communities in LJ in which they more frequently participated. I visited several communities in LJ, including the "student_teachers," "1st_year_teachers,"

“2ndgradeteachers,” and “teaching” communities. Among various communities, I found the Teaching community (T-LJ) was most popular, so I decided to examine only T-LJ. In order to understand the culture of T-LJ, I observed the community every day for two weeks, reading archived postings, checking member profiles, and examining communication patterns with other communities. After I understood general discussion topics and characteristics of members’ profiles, such as years of teaching experience, I began recruiting teachers by sending emails. Contacting members in T-LJ was difficult because most members did not share their email addresses. I had to examine 40-50 user profiles to find 10 teachers’ email addresses. In total, six people from T-LJ participated in email interviews.

Observations of archived postings

While I interviewed teachers from the three communities, I also read and analyzed archived postings in those communities. I visited the communities on a daily basis for a period of six months. Sometimes I visited only one community, other times I went to all three communities. I usually spent 30 to 90 minutes reading postings and analyzing member profiles and communication patterns, taking notes about my observations. I also visited members’ homepages or blogs if they shared the addresses.

A brief survey with teachers who stopped participating

As I analyzed postings in WeTheTeacher and Teacher Focus, I noted some members stopped posting at some point. I was not sure whether they left the community or just lurked without making postings. I thus sorted out 25 teachers from WeTheTeachers and 10 teachers from Teacher Focus and sent PMs, asking (a) whether they still participated, (b) what was the primary purpose for participation, and (c) why they stopped participating. Seven teachers from WeTheTeachers replied to me; no teachers from Teacher Focus responded.

Data Analysis

Merriam (1998) argues that analysis begins with the first interviews and the first document read. The analysis of this study was concurrently conducted while collecting data. The major analysis method in this study was coding with reconstructive analysis, including meaning field analysis and validity reconstruction. I first explain the reconstructive analysis method, followed by an explanation of coding procedures.

Reconstructive analysis

Meaning field analysis

Meaning field analysis is a technique that makes tacit meaning explicit by articulating possible meanings, meanings that participants in the site overtly or covertly express or infer (Carspecken, 1996). As researchers, we can never be certain what an actor intended to do or say; we can only specify possibilities. Carspecken (1996) calls it “the uncertainty principle of meaning; meanings are always experienced as possibilities within a field of other possibilities” (p. 96). Conducting meaning field analysis is important because it allows researchers to understand tacit meaning fully before beginning to code the data (Carspecken, 1996). Below is an example of meaning field analysis.

Kathy expressed what she liked about Teacher Focus in this way: “I like Teacher Focus because posters are, for the most part, friendly. Discussions are respectful.” The possible meanings she might intend to express include:

[MF] “There are posters who are not friendly.” AND “Friendly attitude is good.” AND “I respect others’ postings.” AND/OR³ “I was hurt by disrespectful discussion.” AND “I am a friendly person.” AND/OR “Disrespectful discussion is not allowed in the community.” AND/OR “If people in the community do not respect others I will not participate.” AND “People should respect other’s opinions.” AND/OR “I hate disrespectful discussion.”

³ Uncertain claims are noted with OR in front.

I conducted meaning field analysis for the following three reasons. First, it helped me examine possible biases and missing points. It was especially useful because it gave me opportunities to show my meaning fields to my peer debriefer who is a doctoral student majoring in Education and receive his feedback. Considering the fact that most meaning reconstruction takes place mentally (Carspecken, 1996), receiving feedback helped me appropriately code my data, reducing possible biases. Second, through meaning fields, I could recognize cultural forms that needed to be understood through further analysis. In the case above, the meaning field analysis allowed me to analyze the respectful culture of the online communities. Finally, meaning fields lay the groundwork for validity reconstruction, which includes horizon analysis and vertical analysis.

Validity reconstruction: horizon analysis and vertical analysis

Carspecken (1996) explains that “putting previously unarticulated factors into linguistic representation is reconstructive” (p. 42). This includes a horizontal analysis and a vertical analysis.

Horizontal analysis places validity claims or assertions⁴ within three categories: objective, subjective, and normative-evaluative. Carspecken (1996) developed the horizontal analysis method based on Habermas’ (1987) theory of communicative action (1987). Habermas (1987) presents three “worlds”—the objective world, subjective world, and social world—and argues that one refers to all three worlds when making a communicative action. In other words, all three worlds are referenced in each speech act (Wagner, 2006). Vertical analysis is used to distinguish

⁴ According to Carspecken (1996), assertions are defined as claims about reality that one could be asked to defend.

the level of reference—immediate reference (foregrounding) or remote reference (backgrounding).

The reason I utilized validity reconstruction was that it is crucial to understand the relationships between school culture and the online communities and norms within the communities in order to understand why teachers want to participate in them. In the example below, in which I utilized the validity reconstruction method, the ways this teacher conceived the culture of her local school and WeTheTeachers became explicit. Nancy claimed:

It is hard to look at a colleague at work and explain that we are struggling with the same group of kids that are acting perfect in their classroom—you often get the “look” from them. On the Internet, there isn’t a disapproving look; there is just advice.

Possible objective claim

Quite foregrounded, quite immediate

- Some students do not follow teachers’ guidance.
- Teachers share their struggles both in their local schools and in the community.
- Some teachers in her local school criticize other teachers’ faults.
- Teachers do not criticize other teachers in the online community.

Less foregrounded, less immediate

- Teachers are afraid of sharing their struggles in their local schools.
- If teachers make mistakes, they are considered to be unsure teachers.

Highly backgrounded, remote, taken-for-granted

- People do not know each other online.
- Most teachers struggle.
- (OR) If a teacher is considered an unsure teacher, he is going to be fired.

Possible subjective claim

Quite foregrounded, quite immediate

- I do not like talking about my problems with peers in my local school.
- I like talking about my problems with other teachers in the online community.

Less foregrounded, less immediate

- I feel uncomfortable when people look down on me.
- I wish people did not look down on others.
- I want to share my problems with other teachers.
- I want to be understood by other teachers in my school.

Highly backgrounded, remote, taken-for-granted

- I feel defeated by students and teachers.
- I want to be respected by others.
- (OR) I want to quit my job.
- (OR) I hate some teachers in my school.

Possible normative-evaluative claim

Quite foregrounded, quite immediate

- Struggling with students is bad.
- Providing a disapproving look is bad.
- Giving advice is good.

Less foregrounded, less immediate

- Teachers should encourage each other.
- Teachers should overcome difficulties.
- Teachers should respect other teachers.

Highly backgrounded, remote, taken-for-granted

- (OR) My local school atmosphere is bad.
- The online community is good.
- Some teachers are better than others.

The example shows how validity reconstruction can help researchers more closely understand the participants' intended meanings and explicitly articulate backgrounded meanings. I continually compared the results from validity reconstruction with other data, such as the member profile and postings in the community, in order to precisely present participants' intentions.

Coding

Researchers can either employ pre-defined codes that come from existing theories or previous research findings, or they can generate codes from the data collected (Glaser & Strauss, 1967). The major purpose for which researchers utilize pre-defined codes is to confirm a theory or to test a hypothesis by utilizing statistical methods (Newman, Ridenour, Newman, & DeMarco, 2003). In contrast, researchers can construct codes as they find meaningful segments

of texts from the data. These codes are continually compared with other data collected and are redefined as researchers conduct the analysis (Glaser & Strauss, 1967). The purpose of generating codes is to holistically understand complex social phenomena without being restricted by pre-defined rules.

In this study, I generated codes as I analyzed the data for the following two reasons. First, to have a holistic understanding of teacher participation in the particular rather than in general online communities, it was necessary to look at the raw data and find meanings from them. Second, as Lincoln and Guba (1985) assert, to understand multiple realities that might exist in the online communities, exploring diverse experiences of participants without being limited by one particular framework was critical.

The codes that emerged from the data were later categorized as themes based on my research questions. I examined the hierarchical relationships and binary contrasts among all the codes and grouped them together into several larger categories. While constructing the themes, I carefully examined the frequency and uniqueness of codes in terms of my research purpose. The codes that appeared more than five times were considered as themes and these themes were reviewed in terms of the connection to teacher professional development, which was the goal of this study. Detailed coding procedures are described below.

I first created low-level codes with my interview data. Low-level codes refer to codes that require little abstraction and are objective (Carspecken, 1996). I read through the transcripts and email responses and typed in the codes as explicitly as possible. As I continued to read them, I created both main codes and sub-codes as necessary. When I encountered sentences that had implicit meanings, I conducted reconstructive analysis to make meanings explicit. A methods faculty member reviewed my codes and provided comments on them. As I coded, if I found

some sentences that were not clear to me, I emailed the participants and asked them to clarify them. I also shared my interpretation of their responses and asked them to correct my interpretations if necessary. In other words, I continually conducted member checking while I collected and analyzed data. I also had a peer debriefer, a doctoral student in Education. I frequently showed him my reconstructive analysis results and codes and received feedback on them. After I coded data from the first five interview participants, I examined common patterns and developed 22 categories that explained the emerging themes. Based on these categories, I conducted more interviews and continually analyzed the interview data. The initial categories were modified or re-categorized as I collected and analyzed additional data.

While I analyzed interview data, I also analyzed observation notes and the postings that I had copied into my notes. I coded them in the same way that I coded the interview data. While I analyzed postings, I asked two doctoral students to read some postings and explain to me how they would code them. I did this to ensure that the way I interpreted postings was appropriate, not to examine inter-rater agreement (Everitt, 1996). After I coded one third of the notes, I developed eleven categories. I showed the categories to my peer debriefer and received some feedback. Based on his feedback, I refined the categories from eleven to nine. At this point, I started analyzing postings on the three communities based on those categories. I selected a number of postings and checked whether each posting could fit into one of the categories. During this process, the original categories were continually modified. In Table 5 below, I summarize data sources and data analysis methods for each research question.

Table 5. Descriptions of data sources and analysis methods

Research Questions	Data Source	Analysis Method
1. Why do teachers want to participate in online communities of teachers?	<ul style="list-style-type: none"> - interview transcriptions - observations of achieved postings (field notes) - member profiles - members journals or homepages 	<ul style="list-style-type: none"> - coding and reconstructive analysis (Carspecken, 1996) - descriptive statistics
2. What are the driving and restricting components affecting teacher participation in online communities of teachers?	<ul style="list-style-type: none"> - interview transcriptions - observations of achieved postings (field notes) - community guidelines 	<ul style="list-style-type: none"> - coding and reconstructive analysis (Carspecken, 1996)

Limitation of Study

First, generalization of the findings from this study should be done with caution because participants may not represent the entire population in the communities. Although I made great attempts to invite diverse populations, the major participants were active members in those communities, meaning that opinions from infrequent participants and lurkers may not be well presented. Additionally, the findings of this study may not be applicable to all types of online communities of teachers. This study investigated only web-based online communities that were self-organized and where anonymous participation was allowed. Consequently, caution should be taken when researchers apply these findings to other types of online communities, such as electronic mailing lists or communities created by university faculty.

The next limitation is related to email interviews. Meho (2006) claims that email interviews have unprecedented potential to overcome some challenges in conducting qualitative research. However, the email interviews also include several drawbacks. For example, although

most participants in this study provided refined and detailed answers, some sent me short answers or did not reply to my follow-up emails. There were limitations because I tried to reduce the number of questions in order to take less of the participants' time, so I did not ask all of the questions that I wanted to explore in the initial email. To address these challenges, I chose some participants who were more willing to answer my questions and invited them to several additional follow-up interviews. For example, I conducted email interviews with Bob six times, and there were four teachers I interviewed four times each.

Thirdly, my observations of postings may be limited in that I mostly observed archived postings. I might not have detected postings that were edited or deleted by original posters or moderators. However, I interviewed two moderators and asked about the types of postings that had been deleted or edited.

The final potential limitation is an interpretation limitation. It might be possible that I interpreted hidden intentions of participants incorrectly because of my own bias as a researcher. Additionally, it is possible that I might not fully interpret underlying intentions of postings cited in this study because I could not interview many of the original posters. In order to mediate these limitations, I provided raw data along with the descriptions of my interpretations in the final report in order to allow readers to compare my own interpretations with the original data. More importantly, I utilized the following validation methods to ensure that the findings of this study are trustworthy (Lincoln & Guba, 1985).

Validation Methods

As a researcher, what I must do is to create truth claims that have met validity requirements and support my findings (Carspecken, 1996). In qualitative research, appropriate interpretations of the social phenomena and participants' intentions are particularly critical. To

ensure that the data and the interpretations of this study are appropriate and the results are valid, I employed the following validation methods.

- Inviting diverse participants: As shown in Table 2, I invited a wide range of interviewees in terms of levels of participation and years of teaching experience.
- Conducting consistency checks between member postings and what was said in interviews: I reviewed postings that each participant shared in the communities before and after the interviews and compared them with the interview data. If I found something that interviewees did not mention I emailed them and asked them to further explain the events or their opinions concerning those events.
- Utilizing several data sources: Data were gathered from several sources, including interviews, archived postings, member profiles, and community guidelines. All data were cross-checked for data triangulation (Denzin & Lincoln, 2000; Merriam, 1998).
- Conducting member checks: The term “member check” refers to a procedure in which researchers share notes or interpretations with the people who are studied in order to enhance rigor in qualitative research (Carspecken, 1996). I sent my interpretations to the participants and asked whether I interpreted their responses correctly. If I found conflicts, I explained the way I interpreted data and asked participants to give me feedback.
- Interviewing the same participants repeatedly: I continually sent follow-up questions to interview participants. Sixteen participants answered the questions more than twice.
- Using peer debriefing: I frequently asked a methods faculty member to review my interview protocol and coding schemes to help me find any possible biases. I also asked a doctoral student majoring in Education to review my analysis results.

- Prolonged engagement: I have visited each site almost every day for a period of six months. I reviewed thousands of postings that had been made over the last five years.
- Using strip analysis: According to Carspecken (1996), “strip analysis” is a method in which a researcher takes a small part of a primary record and examines whether that part fits the constructed codes or structures. This analysis is particularly useful for the themes explaining social routines or interactions. For example, one theme that I constructed was “others’ responses to their own postings.” The findings suggested that teachers tended to participate more often when others responded to their own postings. In order to validate this finding, I took out some primary data from my observation notes and examined whether the raw data could be explained by the theme. I noted that although most teachers wanted others to comment on their own postings, some teachers continually participated regardless of others’ responses. I further examined other generated codes and raw data and found that teachers’ shared values played an important role. In other words, teachers believe that teaching is sharing and helping so they tried to respond to others’ postings or voluntarily share new ideas regardless of others’ responses. Consequently, I defined a new theme, teachers’ shared values, which better explained the social routines in the communities.

Finally, as I conducted this study, I continually examined my biases and value orientation as a researcher. The major reason I became interested in this topic was that I found value in the process of participation in several online communities of teachers. While I was teaching in South Korea, I frequently visited online communities of teachers to look for lesson plan ideas. Every time, I was able to find diverse ideas that worked very well with my students. While I conducted this study, I knew that my past experience would influence my research both positively and

negatively. I was familiar with various online communities, so I could quickly understand why people made certain postings and what they expected from others. However, my own positive experiences sometimes made me neglect components that needed to be critiqued (e.g., lurking, asking questions without sharing opinions, etc.). Thus, throughout the research process, I carefully examined my field notes to look for possible biases.

CHAPTER 4

RESULTS

In this chapter, I first provide a description of each community, beginning with Teacher Focus, followed by WeTheTeachers, and T-LJ. Then, the findings of this study are provided according to the two research questions.

Teacher Focus

The Teacher Focus community (<http://www.teacherfocus.com>) was developed by Lucy Vaysman in 2001. She used to be a high school science teacher and is currently teaching general chemistry at a community college. According to an article she wrote⁵, the main reason she developed the community was her realization of limited sharing opportunities among teachers in school, across the country, and around the world. She noted that teachers were often isolated in their own classrooms and did not have many opportunities to communicate with other teachers. She also thought that teaching resources were not effectively utilized. She wrote, “Every year educators ‘invent’ a method of teaching that has been around for years, instead of actually building on that method of teaching and allowing it to evolve.” She believes that “together teachers can achieve more” and decided to develop an online community in which educators can find common issues and interests, regardless of cultural, educational, or geographical differences.

After the first launch of the site, Vaysman advertised the community through various teaching related electronic mailing lists and other educational online forums. She also designed

⁵ The quote was retrieved from http://technologysource.org/article/announcing_teacher_focus_an_online_community_of_educators/ on April 22 2007.

and distributed posters, asking members to place them in their classrooms and school offices. Monthly newsletters were published to announce various activities shared in Teacher Focus.

The interview data revealed that the most active current members, whom I call core members, came from another online community, the ABC community⁶. This community had many K-12 teacher members and provided various discussion boards. However, some teachers did not like ABC because it had a liberal posting policy. During the interview, Dick, a moderator in Teacher Focus, who also came from the ABC community, described:

People could write whatever they wanted. The end result? Anarchy. A small group of people brought chaos to the site, “flaming” anyone they didn’t like with hateful words and repeated personal attacks.

No registration was necessary so many non-teachers often posted inappropriate messages. The Teacher Focus community was introduced through this community, and a group of teachers who did not like the inappropriate discussions signed up for Teacher Focus together. These teachers became the core members of Teacher Focus and have actively participated for the past five years. Many postings in early 2002, when Teacher Focus was first introduced through the ABC community, were the self-introductions of teacher members from the ABC community. In those introduction postings, teachers often conveyed that Teacher Focus would be different from the ABC community and would function as a place where teachers could freely share opinions and emotions related to teaching. For example, one teacher posted:

I remember when we began [the ABC community] and our main purpose was for stress relief and in general to enjoy visiting with each other. Now, it seems that every time I check it out, somebody is flaming somebody else. Hopefully, this chat board will never experience those situations. I think that the commercialism and possibly \$\$\$’s caused its demise. I’m looking forward to some fun times and good ole visiting!!! (February 8, 2002, in Teacher Focus).

⁶ I used a pseudonym for this site.

Consequently, the members who came from ABC stated that they preferred that postings were monitored in Teacher Focus. There are multiple moderators for each forum topic. The moderators have the ability to delete or edit posts that are in violation of board policy.

Characteristics of Participants in Teacher Focus

As of May 2007, more than 5,590 people were registered for the community. From the member list that the site provided, I found one to four new people registered for the community almost every day. However, most new members do not make posts, participating only as lurkers. Membership is divided into four levels: moderator, senior member, member, and junior member. The newcomers automatically become junior members. After ten posts, junior members become members. Once members make over 100 posts, they become senior members. As of May 2007, there were 56 senior members and 224 members. The other 5,300 people were junior members, mostly lurkers. However, interview participants stated that they did not pay attention to membership status because everyone can equally participate in discussion regardless of their membership level. Twelve teachers volunteer to moderate several forum topics.

From the analysis of member profiles, I found teachers who have made over 500 postings generally have extensive teaching experience, from 10 to 35 years. However, many potential teachers, including those who have changed or plan to change careers, student teachers, and new teachers who have less than five years of teaching experience also participate in the community. I also noted that some members are high school students and retired teachers. I interviewed a high school student, Emily, and asked why she participated in the community. Emily stated:

I'm fascinated by the profession; I want to absorb as much information as possible about others' experiences in it. Also, I've always been able to connect with and understand my teachers in a way that other students couldn't. It's nice to be able to communicate with teachers in an online context.

Members teach grade ranges from Kindergarten to High School. Some members are university instructors. Subjects that the members teach vary from Math to English, and some members are special education teachers. One of the unique characteristics of the Teacher Focus community is that there are many teachers who come from other countries, including Canada, South Africa, Sweden, Singapore, Norway, New Zealand, and Australia. The two teachers from Norway and New Zealand have made over 500 postings as of May 2007, meaning that several international teachers actively participate in the community.

Structure of Teacher Focus

The Teacher Focus community includes several components, including *Forums*, *Resources*, *Chat*, *Classifieds*, *Newsletter*, and *Lesson Plans*. However, the Forums are the areas that are most utilized by teachers.

The Forums were developed based on the phpBB, free, open source bulletin board system. The Forums include eleven discussion topics, which are overseen by multiple moderators. Table 6 below shows the discussion topic names, the number of threads, and the number of total posts as of May 25, 2007. For example, New Teachers' Place, where new teachers seek and receive advice and share teaching experiences, has 917 threads. A number of teachers commented on each thread, so the total posts shared within this topic have gone up to 4,801.

Table 6. Discussion topics and number of postings in Teacher Focus as of May 25, 2007

Discussion Topic	Thread	Posts
New Teachers' Place	917	4801
Educational Technology	346	1391
Sciences and Mathematics	350	1505
Literature and Humanities	270	1295
Other Subject-Related Forums	219	1013
Higher Education and College Preparation	97	416
Elementary and Early Childhood Education	317	1310
Middle School Forum	221	1501
Special Education	314	1399
Online Education	40	199
Teacher's Lounge: Off-Topic Conversations	2767	20046
Teacher's Pets	120	627

In terms of technical structure, each discussion topic shows topics, the number of replies, the author's username, the number of views, and the latest date. New messages are highlighted to help members quickly note unread postings. User names are clickable, allowing people to view members' profiles (See Figure 2 below).

Topics	Replies	Author	Views	Last Post
Announcement: Procedures for sharing articles from other websites	0	David Chin	2322	09-04-2006 11:49 AM David Chin →
Announcement: Advertising sign for a new post	0	curiousmind	5241	12-28-2001 07:00 PM curiousmind →
Teaching Foreign Language: Russian	2	River	9	07-18-2007 01:47 AM River →
Advice for a Student Teacher!	9	ilanatempest	597	07-17-2007 12:22 PM ilanatempest →

Figure 2. The Forums structure of Teacher Focus

Participation in Teacher Focus

Newcomers need to register in order to post messages. However, anyone can lurk without logging in. As of May 2005, over 35,500 postings have been shared. In terms of the number of threads, Teacher's Lounge is the most popular forum. It is designed to allow members to introduce themselves and to discuss various issues, such as current events in schools and classrooms. The analysis of postings suggested that it is primarily a place where the core members share their lives, both inside the classroom and outside of teaching. Several core members shared events that happened in their classrooms on a regular basis. I counted all threads updated from January to April 2007. The total number of threads updated was 323⁷. Among them, 150 threads were posted in Teacher's Lounge, meaning that postings for personal communication with other members were more common when compared to teaching related postings (e.g., suggestions, good books, lesson ideas for a class).

WeTheTeachers

The WeTheTeachers (www.wetheteachers.com) community was developed in 2005 by Amy Chambers, a former 6th grade teacher, and Nate Chambers, Amy's husband. Amy has a bachelor's degree in chemistry and a master's degree in education. According to the interview with Amy, her frustration of finding quality resources encouraged her to develop the community. She expressed, "You will go one page of links from another page of links... it is hard to tease out what materials were good what materials weren't... Even worse, you have to pay for the resources you want to use." She came up with the idea of developing a website that helps teachers share their lesson plans for free, communicate with the teachers who create the lesson plans, and share feedback each other educators. Nate, who has an advanced degree in a computer

⁷ This number refers only to the number of new posts. I did not count the subsequent responses.

science, built the site. After one and a half years of development, the site was launched in December 2005.

According to the community introduction page⁸, the name of WeTheTeachers comes from the US Constitution preamble, “We the People.” The following message greets visitors to the site:

If teachers choose to sit out, little help will be available for other teachers. But if everyone creates a profile, joins an interest group, submits lesson plans, meets new teachers seeking help...it can and will rise, and oh how far can it rise! In the end, we just hope to provide educators the help they need, and to make them as effective as possible.

The growth of the community was a grassroots effort. As soon as they developed the site, Amy sent invitations to her former colleagues, classmates in graduate school, and teacher friends and asked them to join, as well as to invite other teachers. Nate also made invitation postings to various education related websites.

Characteristics of Participants in WeTheTeachers

As of May 2007, more than 2,570 people have registered for the community. From the analysis of member profiles, I have found that at least one new person registers for the community per day or every other day. Membership is not divided into levels as in Teacher Focus. Most members are K-12 teachers who teach various subjects including foreign languages and arts classes. Members have a wide range of teaching experiences; from college students who are majoring in education to teachers who have taught for 40 years. There are also teachers from other countries, including Canada, the United Kingdom, and India; however, they are mostly lurkers.

⁸ The quote was retrieved from <http://www.wetheteachers.com/aboutus.php> on May 7, 2007.

Structure of WeTheTeachers

WeTheTeachers includes four major components: *Lessons & Files*, *Tools*, *Forums*, and *Groups*. The Lessons and Files section is a place where teachers can share their lesson plans and teaching resources. According to the interview with Amy, the site first provided a pre-formatted lesson plan tool designed to help teachers quickly examine the content and usefulness of their lesson plans, and it did not include a file attachment function. Soon after, she realized that teachers were emailing each other to share worksheets and rubrics that would go along with the lesson plan. To help more efficiently share all resources, she added a file attachment function under the lesson plan tool and allowed people to upload their own lesson plans, rather than reformatting them. After the function was added, she found most teachers using the pre-formatted lesson plan tool. As of June 1, 2007, 984 files have been shared.

The Tools section provides free tools that teachers commonly use in classrooms but cannot get for free from other education websites. Currently, WeTheTeachers provides four tools: Word Searches, Crossword Puzzles, Word Scrambles, and Sudoku.

The Forums section is a place where teachers can share their experiences and communicate with the teachers who share their teaching materials. On the community introduction page⁹, a visitor sees, “You don't just find a lesson plan you like; you can meet the person who wrote it!” Currently, the Forums are divided into three groups, Teacher Specific, Classroom, and After School. Table 7 below shows the discussion topic names, the number of threads, and the number of posts as of May 30, 2007.

⁹ The quote was retrieved from <http://www.wetheteachers.com/aboutus.php> on May 7, 2007.

Table 7. Discussion topics and number of postings in WeTheTeachers as of May 30, 2007

Forum	Topic	Posts	Forum	Topic	Posts
Teacher Specific			Classroom		
New Teachers	28	169	Elementary Education	12	69
The Lounge	72	406	Home Schooling	1	8
Certification and Testing	9	47	Secondary Education	10	39
After school			Arts and Music	7	35
Entertainment	9	62	Computer and Technology	8	36
Home and Family	7	39	Foreign Language	2	9
Travel and Leisure	5	51	Health and PE	2	6
Everything Else	4	8	History and Social Studies	8	26
			Reading and Writing	16	64
			Science and Mathematics	16	61
			Special Education	4	18
			Library and Resources	6	14

Groups are mini communities in which teachers can interact more closely with people who have similar interests. As long as they are members, participants can either create or join any groups. As of May 27, 2007, there were 101 groups, but I found most groups were inactive.

Participation in WeTheTeachers

Anyone can read and download lesson plans without logging in. However, to make a post in the Forums or share lesson plans, participants need to log in. As of May 30, 2007, 1,195 postings had been made since the first thread was started in April 2006. The interview data

indicated that most users come to WeTheTeachers to share lesson plans or teaching resources. Discussion does not frequently occur through the Forums. Only 63 new postings had been made from January 2007 to April 2007.

The Teaching Community in LiveJournal (T-LJ)

LiveJournal (www.livejournal.com) is an online social networking and journaling site created in 1999. Once people sign up for a free membership, they can post journal entries in their own personal space. According to LiveJournal (LJ) statistics available on the web¹⁰, 13,026,759 new accounts have been created as of May 28, 2007, yet only 1,773,939 journals have been updated. The site runs on open source code that the LJ team developed.

One of the unique features of LJ is that every member can create communities. A community is a journal (or blog) where many people can post entries concerning a topic of their interest. It is different from a personal journal where the journal owner is the only user who can make a post. Every user can create communities or join communities created by others. LJ has developed a function to aid users in participating in various communities. As a user, when I write an entry, I can choose the journal where I want to post the entry. For example, if I am a member of the “1st_yr_teachers” and “teaching” communities, my entry can easily be posted to my personal journal or either of those communities (See Figure 3 below).

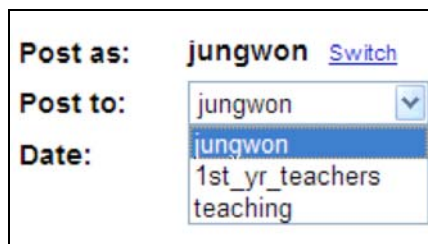


Figure 3. Posting a new entry in LJ

¹⁰ The statistics were retrieved from <http://www.livejournal.com/stats.bml> on May 28, 2007.

In other words, I do not need to go to a specific community to make a post there; I simply need to choose the community where I would like to make a post from a list. Once I make a post, it automatically appears on top of the community page. This function is important because many people in LJ are members of several communities.

There are many online communities related to education in LJ, including “teaching (T-LJ),” “1st_year_teachers,” “elem_ed,” “lesson_plans,” “teaching_sp_ed,” and “urban_teachers.” Communities are created and disappear on a regular basis. For example, two new communities called “teacher_vent” and “iteach3rdgrade” were created on May 20, 2007. In contrast, a community called “2ndgradeteacher” was removed because the teacher who created the community left LJ. Among those communities, T-LJ and “1st_year_teachers” are most popular in terms of the number of members and frequency of updates. T-LJ was created in 2001 by a physics professor and is moderated by the professor and a junior high school mathematics teacher in Canada. According to the site information page, the community was developed for anyone who is interested in teaching to ask for tips, seek support, and participate in discussion.

Characteristics of Participants in T-LJ

As of June 17, 2007, there were 1,541 members in T-LJ. From the postings in the community, I discovered that many participants are student teachers or new teachers who have less than five years of teaching experience. However, I have also witnessed several experienced teachers providing informative comments on new teachers’ postings. Like the two other communities above, most members are K-12 teachers and teach various subjects. In terms of nationality, most teachers are American, though I have found several entries made by Canadians and Australians.

Structure of T-LJ

There are no sub-categories in T-LJ. Teachers can discuss any topics related to teaching, and new entries are organized by dates. As a result, members can only search entries by dates, not by topics. Figure 4 shows the calendar view of T-LJ.



Figure 4. Calendar view of T-LJ

The newest entry appears on top of the front page of T-LJ. Twenty postings appear on one page by default. If members want to read older postings, they need to click the “previous 20” link at the bottom of the page. Figure 5 shows the page outlook of T-LJ.



Figure 5. Page outlook of T-LJ

User icons (called userpics in LJ) appear on the left, and the content of postings shows next to the user icon. The number of responses is noted as “apples,” as each comment is nicknamed “An apple for the teacher.” For example, the first entry in Figure 5 received four replies, whereas six members commented on the second entry. The text in the red box in Figure 5 says, “x-posted,” meaning cross-posted. Many members in T-LJ are also members of other education related communities. Consequently, if a member posts the same entry to different communities, he or she will often specify that the same post is made to other communities by saying “x-posted.”

Participation in T-LJ

Users do not need to be a member of the community to read entries or comment on them. However, in order to post a new entry, they need to join the community. The analysis of postings indicated that the community was practically inactive for the first three months: only one post per month. However, the number of posts gradually increased as people responded to the previous posts and started making their own. In December 2001, 29 new threads were posted, and a total of 154 comments were made on those new posts. Currently, active discussion occurs daily in the community. As of April 2007, on average, 4.4 new entries have been posted every day, and each entry usually receives approximately eight comments. The total number of new entries from January to April 2007 was 531.

Research Question 1

Why Do Teachers Want To Participate in an Online Community of Teachers?

Analysis of data identified six reasons for teacher participation. The reasons included (a) sharing emotions, (b) exploring ideas, (c) seeking advice, (d) experiencing a sense of camaraderie, (e) combating teacher isolation, and (f) utilizing the advantage of online environments. Although all of these reasons are intertwined, each reason must be considered separately in order to understand the motivation as a whole.

Reason 1: Sharing Emotions

Interview participants expressed that they participated in the communities to share emotions related to teaching. Nancy said, "Teaching is a hard profession. We get emotionally involved. It's nice to give and share those emotions with one another." Postings in the communities supported this claim that sharing emotion was one of the reasons for participation. I found that a number of postings in the communities were related not only to sharing emotions

but also that such postings often received great attention, implying that teachers may be interested in reading and responding to this topic. For example, one teacher shared the stresses associated with multiple responsibilities in her school on October 11, 2006, in Teacher Focus. This thread received 72 replies and had been viewed more than 11,400 times as of May 24, 2007.

The emotions that teachers share in the communities are divided into two categories: *negative emotions* and *positive emotions*. Negative emotions are related to difficulties that teachers encounter in their schools, whereas positive emotions are related to pleasant teaching moments.

Negative Emotions

From both interviews and observation field notes, I found the negative emotions that teachers expressed were mostly related to three facets: students' behaviors, time management, and relationships with parents or administrators. Some of these facets overlap, but each one provides stress independently. Below I provide several examples related to each facet.

Students' behaviors.

A first year 8th grade teacher shared her struggle with one particular class in Teacher Focus. She tried everything that she believed might work, yet nothing helped.

No matter what I do, they seem to think they can walk all over me... They continue to stroll in late, proud of it, even. They say things like "faggot," etc, no matter how many times they *are* reprimanded (and sent to ISS, etc.) for it. Several students target me...they try to make me angry, and my goal becomes not to lost my cool. They constantly talk when I am talking—not a few students, but the whole entire class!! Every day I am going home angry/upset, and I have one student who is ready to switch out of the class because he cannot focus/learn. I feel horrible. This is not a learning environment. These students have had to do numerous "respect" related assignments, but they don't get it. (They don't care)..... Any suggestions will be welcome. I feel like it couldn't get worse. (January 3, 2007, in Teacher Focus)

Responses to postings about negative emotions such as this one were divided into two types: providing possible solutions and offering emotional support. Eleven teachers commented on this posting, demonstrating both categories of response. I provide five responses below, identifying respondents as T1, T2, T3, T4, and T5.

T1: I don't have any suggestions, but I have one class like this as well. I try to remember that 5 of my 6 classes are not generally like that, so although I do think there must be things I can do to improve the situation, it doesn't necessarily mean I'm a terrible teacher. It just means that I have some learning to do about how to work with kids who are like this. Try not to be too hard on yourself. It sounds like a tough group. Anyway, you're not alone!

The response of T1 provided emotional support. She shared her past experiences and encouraged the original poster, saying, "You're not alone." The analysis of postings suggested that this type of phrase continually occurred whenever teachers shared their struggles. Interview participants explained that they felt encouraged after they realized that all teachers struggle, implying that teachers share negative emotions in the communities in order to receive encouragement from their peers. The second response provided possible solutions.

T2: I would enlist the help of an administrator if I were in that situation. Meet with the administrator and explain the situation. Ask him/her to please come by and observe and offer suggestions about how to restore order.

We have one administrator at our school who has visited several classes, spoke directly with the students and threatened to issue tickets (with real \$ fines) to anyone the teacher feels is preventing learning from taking place.

If the first admin you speak with refuses to help, ask another, and another, then counselors, other teachers, ANYONE.

Another adult in the room frequently causes drastic changes in behavior amongst students. You may even be able to use that glimpse of their "good" side(s) to help bring about the necessary change. Keep your head up.

Because many teachers participate in this community, a wide variety of solutions were shared. For example, T3 first quoted the poster's expression, "They constantly talk when I am talking." He then provided solutions to this problem.

T3: Hmm...I have gone around the room and spoken to each person quite directly on occasion, as in "I expect you to pay attention when I am talking." You might find it necessary to be quite confrontational—do so. And, what Mary said about bringing in an administrator might be worth doing, that is, if the admin is not a part of the problem (some admins essentially do nothing, which can sometimes cause a situation like this.) It sounds to me like the discipline plan you are using needs to be scrapped and a new one devised—one that doesn't allow much leeway and is more like an if-then statement.

In addition to the solutions to the specific problem quoted, T3 also provided some general classroom management strategies that might help the original poster.

T3: Also, some thoughts

1. Do not take it personally when some little X@#! is acting like a little X@#!. They are just that way and you didn't make them that way. There is no use getting angry about it.

2. Structure—the more disruptive, the less intelligent, and the least-likely to succeed need more structure than those who are opposite. And structure requires clarity—that is, phonetically, k-l-a-r-i-t-e-e, so that there is no mistake and no grey areas for them to step into and hurl their defiance.

Just 2 cents. Now, take a deep breath, clear your head a moment, and get a bit of clarity for yourself.

T3 provided emotionally support by saying "do not take it personally." He also encouraged her to reflect on the situations with objectivity by pointing out, "get a bit of clarity for yourself." Another teacher added to the list of classroom management strategies.

T4: The instant the bell rings they begin working. Hold them to strict and unbending time limits. If they don't finish their grade suffers. If they come in late they do not get instructions. If they are talking during instructions they do not get seconds. There are bound to be a few good kids in the room so take them aside and tell them what is happening and don't penalize (sp) them. This won't work for all of the students and it will take time.

Begin reading a book to them—make sure it is a good one and one they will be interested in—for the first 5 or so minutes of class. You might be surprised how quickly they start to listen. Just start to read.

Set out the rules as nonnegotiable with consequences. Be exceptionally clear with everything and put these in writing. Then start calling parents. Especially if they are at work, and explain to them that they will need to attend a meeting regarding their child's behavior.

But, make sure you start by getting some help. If nothing else, there will be a witness to the behavior you are experiencing.

One of the advantages of participation in online communities is that teachers can continually ask questions and provide answers. For example, after the original poster read the above responses, she commented:

I realize how this sounds, but I am always the kind of person who is reluctant to seek help...I feel uncomfortable with the idea of bringing in an administrator. What if they just see a teacher who can't handle her class? Then I'm likely out of a job next year (one-year contract).

Today I went over some non-negotiable class rules with them. They were a little bit grouchy about it, but in the end, they knew they were fair. It was really basic stuff like, "Don't talk while I am speaking to the class," etc. I am also imposing stricter consequences for everything, and they now understand this. I just need to remember to follow through every time. Wish me luck.

She mentions that she feared asking for help from administrators because she worried about her future employment; this theme appeared during my data analysis several times. T5 advised her in the following way:

T5: I think in the long run it is better to seek help. The administrators probably already know that you are having problems. I know that at my school EVERYONE knows who can't control a class. It is no secret. I think it is more professional to seek advice. I wouldn't go in crying of course, but approach an administrator—or even better, a teacher with awesome classroom management!—just say matter-of-factly, "I have one class that is really difficult for me. Could you come observe and give me some pointers?" Personally, I'd be flattered and would love to help a new teacher like that.

Don't take it personally. Do not get angry. I think this has really helped me maintain control over difficult classes. Student breaks a rule, student gets in trouble. Really doesn't bother me. It was their choice, their consequence. I don't yell. I don't cry. I just kinda shrug, like, "If you want to choose this action, and this consequence, oh well, have fun."

My general strategy is keep them busy at all times! Have a very structured class. We always start with a warm up. Teach them how to enter the classroom, how to take out

their belongings, how to start before the bell rings, etc. Teach them how to raise their hands. Seriously. Never think that high schoolers are too cool for routine and standards. Many of them will feel relief that the teacher has taken control and they can do their work without the interruptions. Good luck, and don't take it personally!

As the above examples prove, teachers want to help the original poster, not critique or evaluate her. During data analysis, I found that respect was the unique culture of the three communities. In other words, when teachers share their problems, other teachers do not try to evaluate them (e.g., "You may have poor classroom management skills."). Rather, they express their understanding (e.g., "I had a similar experience.") and try to provide possible solutions (e.g., "Try this one. It might work."). Providing advice without judgment is important because, based on the interview data, some teachers cannot receive this type of support from their local schools.

Nancy stated:

It is hard to look at a colleague at work and explain that we are struggling with the same group of kids that are acting perfect in their classroom. You often get the "look" from them. On the Internet, there isn't a disapproving look; there is just advice.

Like many teachers, Nancy wants to receive constructive advice without being considered insecure, and the online communities help teachers avoid disapproval or discomfort.

Time management.

The second facet of teachers' negative emotions is related to teachers' multiple responsibilities. Below I provide one example. A first year 8th grade math teacher shared her stress in Teacher Focus. She wrote:

I have finished about 5 weeks of my first year of teaching. I am working very long hours (often 12+ hours a day) and feel like I am accomplishing nothing. The kids are not very motivated and I am having a hard time reaching them...

Right now I am so discouraged and stressed that I want to quit. And I don't mean after waiting until the end of the year. Unlike many of the other new teachers that I talk to at my school, I am not really enjoying any part of teaching and I really don't think I will like it even after I get used to everything....

I would really hate to quit midyear, but I am not sure I can make it through an entire year... Any advice? How would they get a replacement midyear? What can happen to me regarding breaking a contract? Anyone absolutely hate teaching in the beginning and now happy with it? (October 11, 2006, in Teacher Focus)

Several teachers tried to help her by sharing possible solutions and encouragement. T1 replied:

T1: That soon into the first year of teaching is NOT the time to make a long-term decision about whether or not you'll like teaching. I can honestly say that I was not totally enjoying teaching until around my 5th year! During those years I was in the same district, but I was in two schools with several different grades/classes. I finally found the right fit for me, and I love what I do! ...That's not to say that things are easy, or that I don't sometimes work long hours. However, I can say that I enjoy what I do!

Instead of simply encouraging the original poster to stick it out, T2 provided specific suggestions for solving her problems. First, he quoted her claim, "I am working very long hours (often 12+ hours a day) and feel like I am accomplishing nothing." He provided the following solutions:

There are ways of cutting back on the time:

1. Make very clear cut decisions—decide, that 1. This is what we are going to do, how we do it, and then proceed to do so.
2. Plan, but don't agonize if it is not completely thorough.
3. Choose a system for making assignments and grading papers you can live with—if you have a student assistant, let them do it instead, and if not, use something like multiple choice that can be graded quickly for common, everyday tasks.
4. Delineate very clearly to yourself how many hours you will work that day, and stop when you get there.

I generally work about 45 minutes before school and about an hour after, depending. Some of my colleagues are in as soon as the bell rings, and out at 3:15—I suppose they get their work done. I had a hard time at the beginning, and now, a decade later, I have improved—it can take awhile. As far as the stress—take time for yourself. Relax, and do so at least once every day. Hope things work out for you—sounds like you know what work is, so you can make it if you manage your time properly.

Although several teachers tried to help her, the original poster continued to struggle. She explained more problems in the following reply:

Thanks so much to all of you for your replies. Unfortunately I am not feeling much better about the situation in the last few days... I keep hearing from everyone that it gets better in a few years. That is a long time to wait to see if you like something, especially since I have a husband and three year old at home that I am never seeing. As lame as it sounds, this whole situation is making a huge emotional and physical toll on me. A big part is how I handle stress. I am not able to just let go and since the stress hasn't stopped I have been tense and anxious for 6 weeks. I am seriously considering talking to my doctor for some meds in case that would help me any.

To make it worse, about 25% of my students passed the state's standardized math tests in 7th grade and I am getting pressure that 75% of them need to pass this year for 8th grade due to accreditation warnings. That seems very unrealistic and only adds the stress I am not handling well. They are also expecting us to do group tutorials during our planning time to help with scores. Ok, sorry to be such a downer. Thanks to all of you!

Upon reading the response above, T2 responded to the poster again. Once more, he quoted some sentences and shared his opinions. He wrote:

“I am getting pressure that 75% of them need to pass this year for 8th grade due to accreditation warnings.”

Welcome to education, where 100% is expected, when often 30-50% is actually possible. When faced with this phenomenon, the best way to handle it is to say, “I will do my best.” Then, you do the best you can, under the circumstances you have. If you get 100%, great. If you don't, great. Your admins may grouse and b**ch, but the fact is that if left up to you, all your students would do well, pass with flying colors, etc. Unfortunately, a lot is up to them, and so, they don't. You affect what you can affect, and that's all you can do.

“Ok, sorry to be such a downer.”

Don't worry about it. Education in and of itself has some rough parts—almost everything does. It's just that the rough parts of it have few counterparts in other professions and lines of work, and are not familiar to the general public. For example—teachers are often expected to perform like veteran teachers right out of the box. They can't—there is a lot to learn in the years ahead, that they do not know. The first couple of years of teaching is pretty much learning to do the job. And in some school systems, the noobs get the roughest assignments so that the system can observe how bad it the noob is, and screen out the worst ones. (Some systems inadvertently crush a lot of new teachers that way, but I digress) What you are going through is fairly typical, and can be remedied. You just have to structure your time and put immediate priorities first, and then set some down time for yourself, because nobody else is going to. Good luck to you.

Teachers continually tried to provide encouragement and possible solutions to the original poster in a very respectful manner. This repeated behavior indicates that teachers share their negative emotions in the online communities so they can receive emotional support and help for possible solutions to their problems, and they provide those resources to other teachers seeking the same assistance.

Another common theme that I found through analysis was that one teacher's posting encouraged other teachers to share their own problems. About two months later, the original poster commented again and explained that she had continued teaching, but things had not improved. She wrote:

I have been trying to have a positive attitude but every day I am drained by the end of the day and feel totally defeated. I am having tons of problems maintaining classroom control and motivation... I would love for this to work, but it is wearing on me so much that I am having anxiety and depression issues. I've never had these problems before. I am tense all the time. I actually think I had an anxiety or panic attack yesterday... It is just getting really bad.

T4 and T5 responded to the original poster, sharing similar feelings about teaching.

T4: Your posts sound like I typed them myself! Seriously. I feel the same way. I've never been physically ill over a job, until now. I've always enjoyed my jobs. I feel defeated, I cry, I question it over and over and over. My thoughts on the whole thing consume me!

I have prayed and prayed, and I've decided to go with my gut feeling on this one. Everyone says, "Oh, by your 5th year, you are smooth sailing." Well, whoopy-doo!! I could die next week, who cares about five years from now! But seriously, some teachers have the momentum to keep going for a few years—they are willing to wait it out. I am just ready to move on. Feel free to send me a message any time—I would love to chat more about this!

T5: Sign me up for the support group! I too am wanting to resign due to stress-related sickness brought on by my job. I too am reluctant to resign because I've signed a contract and it really goes against the grain to break it. I too have turned into a shell of the person I used to be—and just in the span of 4 months!

I am not glad that any of us are in this situation, but I am glad to know that there are other people out there who feel the same way. When I went to the doctor to see what might be

causing my symptoms, I actually started crying because I felt like such a traitor! Who's ever heard of a teacher who hates to teach?!

Despite all the support other teachers provided, the original poster and T4 reported that they left their schools. Teachers in the community understood their decisions and wished them luck. T6 commented to T4, "Wow! That took some guts. I sent you a PM about this, but I wanted to publicly wish you well. I wish you all the best in the future." T4 responded, "Thank you all SO much for the support and encouragement. It really does help!"

Although teachers do not generally critique or evaluate others in the communities, that does not mean they do not offer different opinions. Sharing opposite perspectives is always allowed in the communities. For example, T7 commented to the original poster in this way:

Hello!

I don't mean to be rude but if you are truly unhappy in the teaching profession and you feel it isn't for you, it is time to leave. The students **DESERVE** someone who is **passionate** and **enthusiastic** about teaching and learning! If teaching is just a job for you, do us all a favor and go do whatever it is that makes you happy! There are plenty of new teachers waiting in the wings who would be **THRILLED** to have your position!

If you are wanting to leave as soon as possible, notify your administrators **NOW** so they have time to interview and find a suitable replacement. If you were to give them notice **NOW**, I imagine they would be able to fill the position before the children return from Christmas/Holiday break.

From the subsequent responses, I found that teachers thought that providing support was more important than reproaching new teachers who were experience difficulties. T8 responded to T7:

You make a good point, but passion is cultivated over a period of time with confidence that is gained through experience. Wonderful years of teaching do not just occur. It takes time and hard work.

T2 also made similar comments to T7:

Passion and enthusiasm are usually the first casualties of reality. First year teachers, if they are to survive, need to come to terms with the realities. This can take a bit of time. Hardly anyone is a great teacher right out of the box, and if a first year person quits right away, then they have really quit before they had a chance to succeed or learn from their

mistakes. Experience will teach the neophyte teacher much more than their teacher-training program in college—if they are willing to learn, and it may be a painful experience. As it stands, not many survive after their first year in a lot of places—there are plenty of stats about teachers not lasting their first five years. So, I always make it a point to try to encourage them.

The discussion among T2, T7, and T8 indicates the openness within the culture of the online communities. Teachers are free to share their personal opinions even if they disagree with others.

Relationships with parents or school administrators.

The two examples above, students' behaviors and multiple responsibilities, suggested that the reason teachers want to participate in the communities is to receive emotional support and look for possible solutions to their specific issues. However, sometimes teachers just want to vent. The third facet, problems with parents or school administrators, is often related to teachers' venting. On March 1, 2007, a fourth year high school teacher posted the following entry to T-LJ:

It is rare I am offended, but I was so...offended today. Here's what happened. Allow me to rant for a moment.

Firstly, I'm in my 4th year of teaching. I am tenured. My admin and department peeps like me. And I get along well with many of the students I teach. (This year, I teach Honors English 10, 9, and journalism.)

Also to point out—one of my hobbies is that I am a fan of the *Back to the Future* films and actor Michael J. Fox. Thus, in my desk area, I have several posters and photos with Fox or from the BTTF films posted on my wall, including a big READ poster that Fox did in 1987.

A parent of a freshman student (let's call him Ed...the kid, I mean) wanted to do a confab tomorrow after school on why his kid is flunking English. I told the VP (who sent me an e-mail about the meeting) that I was going to be out of town then (I'm going to San Diego tonight to visit family I rarely see until Monday), so she told me to call the parent myself to talk. Which I did during prep.

Let me preface this by saying I've never had a problem with this kid -- no behavior issues or attitude. He's a smart, quiet kid -- who rarely turns in work, hence his flunking.

The convo started out okay, blah blah, not turning stuff in, blah blah. Then this happens:

Father: “Can I tell you something about your teaching style that my son has told me?”

Me: “Okay.”

Father: “Ed tells me that you discuss *Back to the Future* and Michael J. Fox all the time. And it really annoys him. Now, I’ve been in your classroom before [for back to school night] and I know he’s not exaggerating. You have a whole shrine to this guy. I think it’s unprofessional.”

Me (struggling to scrape my jaw from the floor): “Uh, well, you know, that subject rarely comes up, and if it does, it’s like a running joke. The kids are the one to bring it up.”

Father (without apologizing): “My son also says you are too young to teach. How old are you?”

Me (deeply offended even more): “I’m 28.”

Father: “Well...that’s not so young, but he thinks you are still too young. Maybe it would be better if he had another teacher with more experience.”

Am I overreacting here, or was the parent/student rather out of line?

More than twenty teachers commented on this entry. Most teachers expressed that the original poster was not overreacting, and the parent was out of line. Some teachers tried to help him understand alternative perspectives and provided some advice on what to do next time. For example, T1 wrote:

Try not to take it personally. It wasn’t about you. The parent was simply using the old “deflect the issue” ploy to take the onus of his son’s nonperformance off of his son and put it on you. See? Now it is not Junior’s fault for not passing your class. It’s YOURS because you have a poster of Michael J. Fox in your room and you are too young (which actually backfired because you really aren’t as young as he thought you were.) If I had been his teacher, the father would have told me I was too old and can no longer relate to teenagers. And maybe if the Dad talks long enough, he may even convince himself. But really deep down, he knows he’s lost control over his son and it is hella more difficult to get Junior to step up than it is to blame you about your poster/age.

Next time, you could point out to him what a poster of MJF or your age has to do with his kid not doing his homework? I’d tell Dad that his son has got to learn to deal with all sorts of people in his life, MJF fans, not-so-young people and if he lets every little thing interfere with his effectiveness, then he’s going to have a long, disappointing row to hoe.

In short, he needs to “get over it” and “get on with it.” Yep. Dad was just doing a number on you. Next time you’ll know what to do.

T1 first provided encouragement by saying, “Try not to take it personally.” She also provided some useful strategies. These patterns coincide with the patterns in the previous examples, including providing possible solutions and emotional support.

Above, I attested that teachers were free to share different opinions in the communities. One teacher shared her different perspective about this issue, further demonstrating the teachers’ openness to disagreement. T2 commented:

I don’t often disagree with the group but this time I have to on the second issue. Yes it was out of line for the child to complain you were too young but your parent AGREED with that from what you said. The BTTF issue though does kinda bother me. If the item is causing any form of serious distraction from the subject then I feel it needs to come down. I appreciate your right to love whatever you love but your job is to create a learning environment that draws the best out of your students. If BTTF posters is drawing away from that then perhaps it’s time to replace a few of those posters with others (of course keep the READ poster since it’s completely on topic) that help to draw your students towards the subject area. ...

This is not to say you don’t have the right to be offended, I would have been as well, but maybe just maybe this is a sign towards what the other students are focused on and might be more of a problem than the poster is worth.

Best of luck with the parent and the student, and please realize this is not to scold but to present another view.

It should be noted that although T2 provided different opinions, she tried to be respectful to the original poster and help him see the situation from a different point of view. Interview participants claimed that they liked participating in the communities because it gives them opportunities to be exposed to different perspectives. Austin stated:

As a teacher I am constantly evaluating myself. I think WeTheTeachers is helpful because while your colleagues may say they like something you are doing just to be nice, people on this website tend to be straightforward and honest about their comments.

Susan explained what she liked about Teacher Focus is that “in posting, there is feedback from others who do care, and can see my situations with objectivity.” She implies that teachers appreciate different perspectives that other teachers share in the communities, and these new perspectives may encourage them to participate in the communities.

Positive Emotions

The postings in the communities also indicated that the online communities were the places where teachers shared their happy teaching moments and enjoyment for teaching. For example, a teacher who graduated in 2006 made the following entry to T-LJ on June 5, 2006:

I feel like I'm the only person in the entire state of Massachusetts who doesn't want the school year to end.

I *love* going to the school.

I *love* seeing my kids.

I *love* how creative and funny my students can be.

I *love* how each and every student is different.

I *love* lesson planning.

I *love* how I once planned a lesson in my sleep.

I *love* the fact that I don't actually get any sleep.

I *love* how every day is something new and that nothing ever repeats itself.

I *love* how the students can always make me laugh.

I *love* how the staff of the school where I am is so supportive and helpful and just plain wonderful.

I *love* how for the first time in my life, I look forward to Monday mornings and get just a little bit sad on Friday afternoons...

One teacher replied to this posting and said:

This post made me smile this morning, thank you! :D I have been teaching for two years now, and this year I was sad to see the year end. I love my kiddos! And...I planned a lesson in my dreams recently, woke up, wrote it down...and then I thought I had serious mental problems for doing so. I am glad to see this happened to someone else!

During her interview, Hannah said, “Sometimes people post great stories that make you think, or reaffirm the choice you made to become a teacher.” Jessica also made a similar claim, saying, “I also post infrequently with the ‘cute teacher moments’ that help us all remember why we do

what we do.” Some teachers like to share positive teaching moments because those stories remind themselves and others about the benefits and joys of being a teacher. This claim is further supported by the following post which was posted on April 23, 2007, in T-LJ. A member wrote:

I’m about to graduate with my Master’s and I’m seriously starting to dread looking for a teaching job. Everyone keeps talking about all the horrible things that happen to them: how NCLB makes it impossible for them to do their jobs, and how kids threaten to kill them and parents try to sue and horrible, horrible, horrible. Please, somebody post some good things that happen to them—preferably some kind of regular, reliable good things that might also happen to me—before I start to doubt my decision (and regret all this tuition money!)

Seventeen teachers shared their enjoyable teaching moments. Below I present two of them. T1 wrote:

I think that is the thing about teaching— it very rarely is the “Freedom Writers” or “Dead Poet’s Society” kind of impact we have— it may be years later or something we never hear of.

We have a lot of small good moments. I have a collection of notes from parents and teachers and former students that I read when I’ve had a tough day (and that I re-read just prior to my decision to give up my coffee shop and go back to teaching).

One of my best teacher moments: I had a kid who was a perfectionist (not to mention extremely ADHD, dyslexic and significantly below grade level in writing and reading). One day he turned in a paper. That was such an amazing thing for me that I cried. Not in front of my class of course—I’m known for being a hard ass. But I finally convinced him that it was okay to not be perfect. Just that one day. Just once.

T2 shared her aunt stories and her personal experiences. She wrote:

My aunt died last month. She taught for 65 years. Yes, you read that correctly—65 years. She was 89 when she died. Even in her retirement, she continued teaching. She took the bus from halfway across town to volunteer at the parish school she grew up in. A few years ago, she moved to the provincial house in Spokane (she was a Holy Names nun) to be their gardener.

By the time she died, she had become a mainstay at the school. The students had to earn the right to work with her—complete all assignments and follow their behavior contracts. I attended her funeral and was not really surprised to see every single student from the school in attendance (maybe 20 of them) all dressed in their nicest clothes. They stood

grouped around her coffin towering over the tiny nun who offered them words of comfort. My heart broke for them, my own grief paling in comparison to theirs.

I knew she had taught them far more than I've ever taught anyone in all my 20+ years of teaching. But I have had my own successes—a second generation (mother and daughter both in my first grade class), a former student who subbed for me on more than one occasion last year and the student who won a national academic award plus a full scholarship to a prestigious university whose mother brought him in on the day he graduated to thank the teachers who helped him get to that point in his life.

I say—go for it! Yes, we may complain about what's bugging us at the moment but that's just human nature and the type of support we receive in groups like this really helps. We can see that we are not alone in our struggles and laugh together for the same reasons. Hang in there. It's worth it.

Summary

This study suggests that many teachers participate in the communities to share emotions related to teaching. Sharing helped teachers not only receive emotional support and a variety of solutions to their problems, but it also assisted them in seeing situations from a different point of view.

Reason 2: Exploring Ideas

Regardless of their level of teaching experience, participants in this study claimed that they participate in the communities to explore new ideas. Savannah, with three years of teaching experience, explained her reasons for participation in this way:

I would like to find more creative ways to teach; the resources are never lacking, I just like to 'switch things up a little bit'. I am a very creative person by nature, so I like to be creative with the lessons I plan. Plus, if the kids have fun in the process, then that's a bonus!

Austin, who has taught for more than eight years, claimed:

A long time ago I was told that teachers are the biggest thieves, and that wasn't a put-down of our profession. But rather a way of saying that we need to be resourceful. I would say that about half of the 'big' things I do in class are my own creation, while the other half are things I have taken from others—colleagues, websites, books, etc.

Ideas that teachers share in the communities can be divided into two categories: *classroom teaching related ideas* and *non classroom teaching related ideas*.

Classroom Teaching Related Ideas

The findings of this study suggested that classroom teaching related ideas included lesson plans, resources, and classroom management strategies. When searching the communities for ideas, teachers look for very specific ideas that are appropriate for their unique teaching situations. For example, the following three examples are all related to ideas for teaching poetry. However, the specific components that each teacher is looking for varied.

Poetry for eighth grade.

I'm trying to write my plans for this week and I can't for the life of me think of good poems to do with my eighth graders. Any suggestions for good poems to read with eighth graders? Something that will be a good example of various poetic terms (metaphor, alliteration, simile, imagery, etc, etc), would be good, but really anything that is a good level for eighth graders would be great. Please help! I need to get these plans done so I can get to bed!

Poetry lesson for second grade.

This quarter in language arts, 2nd graders will learn about poetry—both reading and writing it...one of the first lessons in our writing guide has the class write a poem together about an object...I'm not sure how to do it, but I know the first hurdle is to find an object that they would enjoy writing about—and do well at...any suggestions?

Handwriting poems for kindergarten.

I teach K and I am looking for simple poems that go with teaching formation of letters and numbers. Simple, easily memorizable poems that the kids will remember forever...Well, okay, maybe not forever, but at least until second/third grade?

EX: “Across the sky and down from heaven, that’s how you make the number 7.”

Anyone have their own or links? I know they exist and I've requested them from a teacher in another district because I know she has them but I'm sure she just hasn't had the time to get them to me.

Each post differs in terms of grade level: eighth grade, second grade, and kindergarten.

Furthermore, each teacher has specific requests. The first teacher looked for poems that included various poetic terms (metaphor, alliteration, simile, imagery, etc.). The second teachers' request was not for specific poems but the best way to teach her introductory poetry class using tangible objects for inspiration. The third teacher wanted to find simple poems that could go with teaching letters and numbers.

The analysis of the data suggested that the reason teachers looked for teaching ideas in the communities was that each different need is often met there. Below I include the responses for example two, demonstrating how the teacher's needs were met in the community.

Suggestions for poetry lesson.

T1: Reggie Routman's book "Teaching Second Graders to Love Poetry" is a great resource. Doesn't answer your question, but I LOVED the first grade version of this book and plan to use it with my second graders this year since I don't have the second grade version.

T2: I would start with an acrostic poem about spring (since that's the current season) and acrostic's are the easiest to teach.

I taught my grade 2's an important poem based on the Important Book by Margaret Wise Brown, and it had a lesson on overhead where they followed along, wrote a little, conferenced with a buddy, and at the end I proof read them all before they wrote a good copy. The poems were SO GOOD that I laminated them and bound them into a book, and the kids take it home to read it with their families, and they write comments in the book about it. I'd be willing to email you the ms word document that I used during the activity if you're interested... just let me know.

T3: We did much the same thing with the Important Book, only each child wrote an important poem about their grandparents that they made into a tri-fold book for grandparents day. The grandparents were all very excited about it.

T2: What a cool idea! I let them pick anything that they really liked and they got to tell everyone what was so important about that one thing.

We had mermaids, soccer, sisters, brothers, mom, dad, dirt bikes, race cars, turtles, horses, cats, the list goes on and on, it was great to see how creative they were!

T4: I did that activity with my 4th graders too! love *The Important Book*.

T5: To start, I would probably bring an object in. To stick with spring, you could use a flower. Everyone could brainstorm what they see, smell, feel, taste, hear (if anything).

T6: I observed an ESL class last year that did this, except instead of an object, everyone went outside for five minutes to jot down things they noticed using different senses (which were reviewed in class beforehand). Then they all went inside and wrote a short poem about spring, using whatever they noticed outside (and other experiences if they wished). I think this idea could easily be adapted for children as well.

I found three patterns that commonly occurred when teachers shared ideas in the online communities. Understanding these patterns is important because they relate to teacher participation in the communities. First, teachers explained what they did in their own classrooms and how well it worked. T2 and T3 explained in detail how they taught their own classes based on *The Important Book* and the results of those classes. This information is important because interview participants stated that they liked to participate in the communities because they could explore ideas that were proven to work in actual classrooms. For example, Nancy said:

It is nice to see practical lessons that are effective in the classroom. There have been many experiments that I have started in the classroom that didn't work, which caused disappointment with my students.

Sharing is very important in the field of teaching. I can purchase a book in the store, find a great activity, try it in the classroom and it fails horribly. Or I can come on WeTheTeachers and find an activity that other teachers have proven to be successful and succeed in the classroom.

Through participation in the online communities, teachers in this study find ideas that are proven to work in the classroom, and finding effective ideas encourages them to continue participating in the communities.

The second pattern is that a variety of teaching ideas are shared. In the example above, at least four different types of teaching ideas were shared: books (*Teaching Second Graders to Love Poetry* and *The Important Book*), possible objects (flower), ways to write a poem with an

object (sense the object first and write a part of poem), and follow-up activities (create a book and share it with family). Interview participants claimed that they participated in the communities in order to look for new ideas. This example shows that new ideas are continually generated through sharing, so teachers can acquire them whenever they participate. Sarah expressed that her participation in WeTheTeachers is not a planned activity. She just looks through what would be useful for her class. She said:

Mainly I keep a file of ideas I would like to use in the future or adapt to my purposes as the need arises. I was impressed with some student movies from another Spanish teacher's class, so I have that idea to get me thinking on new tracks.

This statement indicates that the online communities include two functions: a knowledge generating space and an online knowledge database. Interview participants stated that they knew that there were a variety of ideas shared in the communities so they frequented. Susan explained that participation in the online community helps her create a wider variety of effective teaching ideas to assist student learning. She stated, "I want to include more hands-on activities to reduce the paper and pencil learning so students are more engaged. Looking out there in the community has provided a lot of options." Teachers in this study clearly participate in the communities to look for new and different ideas to help students learn but also to keep them interested.

The final pattern is that teachers who have different years of teaching experience and who teach different grade levels or subjects share together. In the example above, a fourth grade teacher (T4) participated in the discussion of a poetry class for second graders. T6 shared an experience in an ESL class that she observed. Interview participants claimed that they liked looking at various postings because those postings helped them broaden their perspectives and create even more ideas. Sophia said, "Forum postings in WeTheTeachers have broadened my horizons beyond science. Seeing how reading and writing teachers handle assignments is very

helpful in science. They use strategies I was never taught.” Ava explained the reason she liked participating in T-LJ in this way: “It’s nice to hear about different ways other teachers approach a certain type of lesson. There are teachers from all levels, states, and ages which help me with my questions or lessons.” Participants also indicated that other postings provided them with opportunities to reflect on their own teaching practices. Sarah attested, “Something that is posted also gives me an idea of how to change something that I’m currently practicing in my own classroom.” Nancy confirmed that she participates in WeTheTeachers to reflect on her own teaching based on other teachers’ teaching strategies, and she is always looking for ways to improve her teaching skills.

The above descriptions can also be interpreted that teachers in this study continually learn through participation in the communities, so they continue to participate. They can acquire new teaching ideas and explore how other teachers approach a similar lesson in a different way. In other words, learning occurs. Sophia supported this claim when she emailed me after the interview and said, “An afterthought, I may not have indicated WeTheTeachers is important because I learn so many things! In fact this is the main reason I continue to use it.” I asked what she learned and she explained:

I have learned a lot of content things by using the various lessons that are posted, teaching tips also in the lessons and in the forums, there are teachers who care more about kids learning than about state tests (this is a very important concept I easily loose [sic] sight of), there is always something to learn from these teachers from the newest teachers to the oldest, it is wisdom on what is really important about teaching and learning, teachers struggle everyday (I know this when I am teaching, I forget this as soon as I step away from the classroom)...

She indicated that participation in the communities not only helps her learn content related knowledge but also assists her in becoming a teacher. This finding supports the claim by Wenger (1998) that learning is becoming.

Similar patterns that I describe above appeared when discussing different topics such as classroom management. I provide one more example related to classroom management in order to present the similarity.

Positive rewards/reinforcers in high school classroom.

Help! I'm a first-year high school biology teacher.

I've reached the point where if the trouble-makers are quiet, the rest of the class behaves and works diligently, but if the trouble-makers start misbehaving, the class gets very disruptive (talking, feet on chairs, aimless walking around class, loud laughing).

The class is well aware of the classroom rules and disciplinary consequences of breaking the rules. **However, I would like to incorporate some positive rewards/reinforcers for the good students to encourage better behavior. I am not looking for rewards for the entire class but rather individual student rewards.** I found several lists online, but many of them were not applicable because:

1. We don't have a class pet.
2. They cannot be released early from class.
3. We cannot give them candy, sweets or unhealthy food.
4. We cannot watch non-instructional videos (which would benefit the whole class anyway, not the individual)

This leaves:

- Happy Note to Mom
- Tell the Class a Joke

Yikes! So are there any good activities for high schoolers (specifically 9th grade)?
Thanks!

This teacher has very specific needs. She wants to find positive rewards for individual students, not an entire class. Additionally, the rewards should be applicable in her school environment. My point is that when some teachers in this study participated in the community, they had unique needs. Eleven teachers responded to this post. I provide two responses and the original poster's comments to present how the teacher's needs were met.

T1: Our school (6-8) uses token slips to be used like cash at the school store or to be saved up to be used as admission to school functions like dances or after-school movies. Something the whole school would have to be on board with, but something to think

about. Also, on my own I give out library passes and Internet time passes, as well as free homework passes. I think these would be useful for your older kids.

Original poster: School-wide policies for dance and after-school movies would be unlikely at my school.

Library and internet passes are not available, since the Media Center is a “classroom sign-up” basis, not individual students going over there on their own. (Requires teacher supervision which the Media Specialist won’t provide).

However, homework passes are GREAT idea. Thanks.

T1: You’re welcome. Remember, though, sometimes all it takes is a “Good job today,” or a positive phone call home to get a kid on your side. It sounds foolish, but it works sometimes.

T2: Last year I used a ticket system and my 7th graders responded very well. I gave them tickets for good behavior and at the end of the week (you could even do two weeks) I had a lottery for small prizes (homework pass, lunch in my room with 2 friends and school supplies - they loved mechanical pencils). I also did candy bars some weeks, but I guess that’s not an option.

You could also let the class pool their tickets for a group reward—free time is always nice—maybe you could do half a class period on Fridays if they do well as a whole class (a specific number of tickets from each student). You could also hold a movie over their heads—even instructional videos seem like fun—an escape from the routine for the whole class IF they meet expectations. Good luck!

First, teachers shared ideas that worked well in their own classrooms. Secondly, a long list of ideas was shared. I only included two responses, but eight more teachers shared additional ideas. What this indicates is that teachers who ask questions can find a variety of ideas that may meet their individual needs in the online communities. Other teachers who browse existing postings in the communities can also acquire many ideas that can be utilized in their classrooms. Savannah said, “I am always interested in getting new sources to use in my classroom. I beg, borrow, and steal whatever I can find useful in my classroom.” As a result, teachers in this study participate in the communities to look for ideas that are continually generated through sharing among teachers.

Non Classroom Teaching Related Ideas

The findings suggest that non classroom teaching related ideas include classroom environments, school events, and teachers' administrative work; literally, anything related to teachers' work other than teaching itself can be included in this category. I provide some examples below to present the diversity of topics shared in the communities.

Bulletin board ideas.

It can get old doing the same bulletin boards from year to year, but it's so easy!! What are your best ideas for bulletin boards that we can prepare now and not have to stress over during the year?

Talent show.

My school has a talent show in March, and we'd like the staff to get together and participate. Does anyone know of a funny teacher song or skit that might work for this? We are a pretty small staff, so a skit wouldn't need a large number of parts.

Getting organized.

What are the special tricks you use to keep yourself organized? Do you use a lesson plan book? Filing system? Computer program(s)? Grade book? What is it that keeps you sane when there is so much paper, so many schedules, and so much stuff to keep track of in your classroom?

Science resources.

So for one of my classes I have to create a resource file of science resources—basically begging people like NASA and wildlife people (no abbreviations coming to me at the moment) for free classroom stuff. So my question to you is: Who do you recommend? Who has good stuff to add to a resource file? I'm teaching 2nd right now and hope to stay here so geared toward primary level.

Student-led conferences.

My school is moving to student-led conferences for the spring. They're less than a month away, actually. I have received ZERO training for this...and neither have the kids. All I know is that I'll be with my 25 advisory kids (who I see once a week for 30 minutes and range from grades 9-12). Naturally, I have a few questions for anyone out there who has experienced student-led conferences.

A variety of ideas was shared for each of the above examples. For instance, nine teachers shared bulletin board ideas. I provide three of them below.

T1: Depending on the grade level, I usually find some nice fabric at a fabric store, and leave it up all year. I also look at the work they do, and leave it up, instead of a theme, I like for my students to be proud of what they've done. For example, we did a unit on slavery, and they had to create a diary as a runaway slave. They made them look authentic and everything. They worked so hard, that I just had to leave them up from Feb. until May. Everyone that walked in, loved their project. And they were just ecstatic with their hard work.

T2: Have you ever tried a word wall? Use some fadeless background paper, then post special core vocabulary words from any or all subject areas. The words can be written on sentence strips. Words are changed easily and can be saved from year to year. I keep either a folder or a binder for each unit I teach, and the vocabulary cards are stored in those when not being used.

T3: Another variation the word wall is the "dead" or "retired" word wall. The concept allows you to take all the worn-out, overused, and boring words students use and display them to help students *eliminate* them from their writing. Of course, using a tombstone motif won't really go over too well in some schools, so you might put the words "out to pasture" instead.

Teachers in this study have their own unique needs that come from specific personal or professional situations. These needs are often met through participation in the communities when they cannot be met elsewhere.

Summary

This study suggests that teachers participate in the communities because they can find a variety of ideas that are appropriate for their specific situations. Moreover, reviewing postings where teachers shared their own ideas assisted them in developing new lesson activities and reflecting on their teaching practices.

Reason 3: Seeking Advice

From interviews and observation field notes, I found that teachers also participate in the communities to seek advice on issues related to teaching. Advice that teachers share in the communities can be broadly divided into two categories, *being a teacher* and *becoming a teacher*. The category of being a teacher includes components concerning teaching or teachers' professional work, whereas becoming a teacher is related to strategies of becoming an effective teacher or job seeking.

Being a Teacher

The analysis of postings indicated that the advice teachers sought and shared in the communities varied widely and included helping individual students (e.g., special education students or ESL students), communicating with parents, working with administrators or other colleagues, preparing specific lessons, and managing classroom learning environments. Similar to ideas that teachers explored in the communities, advice teachers sought in the communities varied widely. Some examples to present this are below.

Helping students with ASD.

So, what I want to know is—have any of you dealt with large numbers of students with ASD? What are some of the best strategies you have used to keep them involved in the classroom? What about in a composite classroom?

Concerned about a student.

I teach high school chemistry and physical science. Most of my students are juniors and seniors (16-18 years old).

I complimented one of my students (S) on her outfit today, and she said, "Oh, my new boyfriend bought it for me. He took me shopping and bought me \$1000 worth of new clothes." One of her friends asked who, and S said, "Jim." her friend replied, "Do you mean Creepy Jim?" S replied that her boyfriend was indeed "creepy Jim."

When S said that her boyfriend spent \$1000 on her I thought to myself that the boyfriend probably expects something in return for spending all of that money on her. When I heard that people refer to him as "creepy Jim," I became really concerned. It is very

likely that S is already paying for her new clothes with (ahem) favors to creepy Jim (and perhaps I am naive to think that all of my students are pure and innocent). And if she isn't already doing these things, then I'm pretty sure that creepy Jim is going to hold it over her head when he starts to request such things. IMO, receiving expensive gifts in exchange for such favors sounds a little like prostitution to me. BTW, I have no idea about creepy Jim's age. He very well may be an adult, and S is 16 or 17.

I definitely want to bring this to someone's attention, because I feel that S may be in a dangerous situation (and she probably isn't aware of it). Should I speak to her counselor, the SAC (student assistance counselor), or call her parents directly? Or am I being overly concerned and should just keep my nose out of it?

Religious tension with subject matter.

I've been starting to plan the second semester for my high school students and I'm becoming a little nervous about teaching the Holocaust to my ninth graders. I'm a first year teacher at a primarily Muslim school (of which most of the students are of Arabic descent) and I have been warned by a few other teachers that there are a number of students who deny that the Holocaust occurred (which, as far as I know, stems from the Arab-Israeli conflict). The previous teacher said she "skipped over it" with her students last year, which made me pretty furious...I think that of all students these are the ones who need to hear about it. I know that I can't force students to believe something, especially if I don't have the backing of their families, so I'm just a little unsure of how to approach teaching it. Has anyone dealt with something similar?

The analysis of postings suggested that many teachers were willing to help when asked for advice. Below I present various opinions that members in T-LJ provided for the teacher who posted about her concern for her student, S. Six teachers shared their opinions, two of which are included.

T1: In my opinion you should contact her counselor. Calling her parents directly could affect the trust you may have built up with the student, or trust you could build up in the future. I doubt she would see it as an attempt to help her, and if she has a good relationship with her parents, it could be helpful, but if you're unsure about her home situation, it could potentially compound the problem or alarm the parents/guardians. A lot of the times you can choose to be present when the counselor chats with the student, or not present. I would choose to be present, just so that she knows you reacted out of genuine concern, not anything else. I don't think you're being overly concerned, those would be little red flags to me too.

T2: Unless you have actually observed abuse of this student, discussing the situation with the student's counselor is the best and only thing to do in this case. Don't create a

situation involving this student that may not exist, and do not contact the parents regarding this matter. Let the counselor do this, as they have the resources and experience to communicate such information to parents. Hell, “Creepy Jim” could very well be a high school student who pulls down good coin at a decent job...it is not unheard of.

Two days later, the original poster made the following entry.

Original poster: I spoke to S’s guidance counselor yesterday afternoon. She said that she and the parents are aware of the situation, and everyone is very concerned. She was not aware that the boyfriend (who is an older man) has been spending so much money on her and she said that she thinks that S is very naive and she agrees that a man dating a young girl will probably expect something in return for such lavish gifts. She thanked me for letting her know about how much he had spent on her and said that she will talk to S and probably tell the parents as well. It also turns out that S had been suspended from school in November for bringing a knife to school. The knife was given to her by this boyfriend.

This example shows that other teachers’ opinions may help advice seekers make an appropriate decision. This claim was supported by interview data. For example, Jessica stated that the reasons she seeks advice are that the feedback she receives from fellow teachers helps her consider her choices more carefully. She shared the following story:

A student of mine has proven to be rather...unique. She is a prime candidate for Model Day Treatment (SIED) but her mother, a counselor, has refused to sign the forms allowing the switch in her IEP. I have experience working with students with SIED or other forms of emotional disturbance, and I can teach effectively without constantly sending her to the office. This was not the case with her first grade teacher, and I suspect, will not be with her third grade teacher. I went to the communities for advice on how I can (a) approach the mother/father in a nonthreatening manner about the situation and affect a change (b) supply and support her third grade teacher will the necessary resources to make the transition as smooth as possible and maintain some sort of consistency, etc. When faced with the situation, I received several responses...from “yikes” to “Okay, then, that’ll work...oh, and have you tried this?”—while most of the “have you tried” had been tried, it did help me to rethink the situation and be certain that I am thinking of all options.

Jane attested that reading various postings also assisted her in reflecting on her teaching styles. She stated, “I read a lot of situations posted here and the following responses which confirm that a lot of what I do is congruent with fellow educators whom I respect. This would pertain to classroom management a lot of the time, as well as in dealing with parents.” Consequently,

teachers in this study seek advice from the communities to help them make informed decisions about their unique issues.

Becoming a Teacher

The data of this study indicated that members in the communities sometimes seek advice on becoming a teacher. Advice shared in the communities can be discussed in the following three ways, broken down based on the population asking questions.

First, members who want to change their careers ask for advice from experienced teachers in the communities. They mostly ask teachers' opinions about being a teacher (e.g., pros and cons of being a teacher, teacher's salary, the amount of free time that teachers have, teachers' general satisfaction level, etc.). Some people ask about specific procedures for receiving a teacher certificate. Some members are not even sure whether teaching will be an appropriate profession for them, although they are considering pursuing education. One member in Teacher Focus asked advice on what level she should teach. She graduated in 2006 with a B.A. in Psychology and was investigating getting a teaching certificate and becoming a teacher. She asked:

I am confused, however, about what level I want to teach. I love working with infants and youngsters, so was originally thinking kindergarten or early elementary. However I would also like working with high school students teaching Psychology.

I would love to hear from you as to:

- how you chose what level you teach
 - some pros/cons to different levels
 - any other tips or things you think would help me make a better informed decision
- (January 7, 2007, in Teacher Focus)

Six teachers replied to this post; two responses are included below.

T1: I highly recommend either taking a substitute position and working your way through all the various grade levels you are considering, or just requesting permission to observe a few classes in the various levels to see what a typical day is like. I teach high school

and feel that this is by far the best placement for me. The subject that I teach at any level lower than high school would bore me to tears. If I do ever decide to change levels, it will be post secondary. The decision comes from within. The best way to be informed it to get your feet wet.

T2: I thought I wanted the little ones. For the first 15 years I taught everything from PK - 4 with most of them in first. When we moved I found a position as a K teacher but when a sixth grade position opened they literally begged me to take it. I have been there and departmentalizing in 5-8 for the past 20 years. I loved every grade. Each was perfect for the time of life I was in at the time. I doubt that I would go back to the little ones again at this point, however.

These examples reveal that potential career changers can receive specific and practical suggestions from experienced teachers.

Second, the findings of this study suggested that student teachers seek advice on becoming a good teacher. For example, a student shared her concern about being an effective teacher in Teacher Focus. She explained:

This fall I will be doing Student Teaching. My concern is that I don't feel prepared! I am scared out of my mind and I have no idea of what the school district expects of newly graduated teachers... I should add that I am a mother of two boys and I have been going for my teaching degree for 7 years. I have taken classes in between changing diapers and other domestic duties and I loved every second of it... Basically, I am constantly feeling unsure of everything I do and I sometimes feel I am being over critical of myself. I worry that I will not have enough time to be an effective teacher and still give my family the attention they deserve...I am wondering if any of you have been in this position and if you could give me any guidance. (March 14, 2007, in Teacher Focus)

The analysis of this study indicated that some student teachers feel uncomfortable before they begin student teaching and many ask for help in the communities. One student teacher asked:

I am getting ready to start my student teaching and I am terrified. I know that teaching is what I want to do, but I can't help being worried about it. Does anyone have any advice on how to get through student teaching without losing your mind? I would really appreciate all the help I can get. (July 5, 2006, in WeTheTeachers)

Some student teachers need assistance during their student teaching experiences. For example, a student teacher in Teacher Focus wrote:

I was observed today, and my supervisor called me, saying I really need to work on...pretty much EVERYTHING but planning lessons. I've been student teaching for 4 weeks, and it hasn't gotten any better. The whole time, I've been anxious and depressed and wanting out. I feel so much guilt for thinking about quitting, and I LIKE the kids; I just feel like I'm not a good teacher and I don't enjoy teaching. I really thought I would. It makes me sad. I wish I could have figured this out earlier. Now I feel like I'm going to disappoint everyone if I quit: my mentor, all the great teachers I've gotten to know, and above all, my family. If anyone has any advice or a bone they could throw me...that would be great. And be honest. (February 16, 2005, in Teacher Focus)

Whenever student teachers asked for advice, many teachers shared their own experiences and tried to provide helpful suggestions. I found the following comment summarized well the advice that the student teachers received from other teachers in the communities:

A friend, who is an experienced teacher of over 30 years experience, told me he was not what he would call a good teacher until he'd worked for 12 years. My opinion is that someone who is a good teacher right out of the box is exceptional.... I'm neither a naturally dynamic speaker nor an excellent verbal communicator, which are both skills necessary to teach. I am happy to report though that I am learning to do both, and will probably be learning throughout my career... The point is, these things can be learned, if the will is strong enough, and if you are willing to say to yourself, "I can do this, and do it better than I was doing it before." (February 16, 2005, in Teacher Focus)

Consequently, this study indicated that some student teachers feel uncomfortable about becoming a good teacher, so they participate in order to ask for help from other teachers in the online communities.

Third, members in the communities ask advice in the communities about job seeking. They ask advice on preparing job portfolios, conducting effective job interviews, the negotiation process, and components that need to be considered when deciding appropriate positions and changing schools. For example, during her interview, Jessica reflected on an experience in which she made the right decision based on other teachers' advice. She said:

When interviewing for jobs nearly-fresh-from-school, I often sought the advice of experienced teachers in regards to how to best approach the interviews. I was offered several jobs, but in the end, I turned six down before accepting a contract. I looked for advice about possible issues regarding the class I would be teaching. In one case, a multi-age 1/2 grade class as a first year teacher, with an administration that wasn't overly

supportive. I thought I could handle it, but wasn't overly sure. So I asked for other 1/2 or multi-age classroom teachers' advice. It helped me make an informed decision.

Summary

Teachers in this study participate in the communities to seek advice on teacher related work. Potential teachers (including career changers, student teachers, and new teachers) also ask for help becoming a teacher and with job seeking. The variety of advice they receive helps them make an appropriate decision.

The analysis of data indicated that the three reasons above were related to specific teacher needs. However, the next reason, a sense of camaraderie, was generated in the process of sharing the above three needs. In other words, this reason is more related to the teachers who continually participated, regardless of whether they had specific needs or not.

Reason 4: Experiencing a Sense of Camaraderie

Interview participants claimed that the primary reason they continually participate in the communities is because of a sense of camaraderie. Hannah said, "It is for a feeling of comradeship. 'I'm not the only one bad things happen to!' and stuff like that." Jessica also expressed, "It helps keep me grounded. The easiest way to explain that is I realize I am not alone in my frustrations, I am not alone in my success." Jessica also added that she felt a bond with some of regular posters in her community. She said, "For the most part, it's a meeting of the minds, not necessarily names or faces. A few regulars have become my 'friends' via LJ and are friended¹¹ to my personal journal. Those that have ended up on my friends list. Yes. There is a bond." Sydney explained that she participates "mainly to interact with people who share my life

¹¹ To "friend" someone in LJ provides that person with more complete access to a journal that may otherwise be blocked from the public eye.

experience. I like being around folks who do what I do and discussing that.” Jane said she likes Teacher Focus because “there are a fair number of committed, dedicated professionals who become a part of a cyber family. I feel like I know some posters fairly well... I read a lot of the regular posters and follow what is going on in their lives. I respond to many of them.”

From the interviews, I found teachers’ initial participation was related to specific needs such as sharing emotion, exploring ideas, or seeking advice. However, a sense of camaraderie was developed during participation, and these friendships encouraged them to participate more in the communities. Hannah stated, “I originally joined T-LJ for lesson plan ideas and classroom management help. Now I stick with it because I enjoy reading other people’s concerns, and what conditions are like in other states or countries.” Bob also made a similar comment: “I went looking for teaching resources one day, and sort of stumbled on the forum via a link in a search engine. I lurked a bit, and then sort of plunged ahead.”

The analysis of postings also supported that teachers have developed a sense of camaraderie in the process of participation. I particularly noted this level of connection in Teacher Focus, where many members have been in the community for several years. For example, every holiday teachers posted saying, “Merry Christmas to my friends.” Teachers who leave the community because of personal reasons make posts specifically to announce their return. Whenever old members come back, several members post responses to welcome them. For example, on June 10, 2007, a teacher made the following post in Teacher Focus: “I’m BACK! Did you miss me? Long story—some of you know it—been in a dark place for awhile, but things are looking up.” Ten teachers welcomed her, acknowledging that her presence was missed:

- I am glad you have been able to take care of whatever problems you faced. Welcome back!
- I was just wondering last night where you had gone! Missed you!

- Welcome Back! I just got home from church and read this - I'll have to do more delving as time permits! I'm glad to see you back though!

Summary

Most active participants claimed that they participate in the communities every day; many teachers continually participate in the communities because of the sense of camaraderie that they have developed with fellow teachers.

From data analysis, I found reasons for teacher participation were also related to “off-line” and “online” environments. The next two reasons explain how these two different environments are connected to teacher participation in the online communities.

Reason 5: Combating Teacher Isolation

From the interview participants, I found that some teachers participate in the communities because there are limitations when it comes to finding people who can understand issues related to teaching inside or outside of schools. I call this experience teacher isolation. Teacher isolation appeared in the study in three different ways.

No People to Talk to in Schools

Teachers who work in isolated places stated that a reason they participate in online communities is to meet teachers who share common interests. Dick reflected:

I first became involved with online communities while working in Saudi Arabia as a third grade teacher. Since my school was very small (only one teacher per grade level at the elementary school), the best way for me to discuss curriculum and other concerns with fellow third grade teachers was through websites.

Bob explained that he does not live in the community in which he teaches and drives about one hour every day to get to school. He wants to have more time with his colleagues but cannot. He

stated, “Teaching can be a very isolating profession. This forum helps mitigate that to some extent.”

Sometimes, isolation is not a matter of location; it is matter of whether there are available people who can understand specific issues in schools. Sophia claimed:

In most of the schools I worked in there was no place to talk with other teachers about day-to-day things. I often found myself isolated with people who did not understand or care about my subject or the problems I was having teaching certain concepts. There was no one to ask.

No Time to Talk in Schools

Even teachers who could share common interests with colleagues in their local schools feel isolated because there is no time to talk. Kathy said,

I enjoy talking to the teachers in my building. It’s just that there is so little time during the workday that we actually see each other. These kinds of conversations are only possible outside of school, and when we aren’t caught up in the rest of our lives. For me, that’s early morning when no one else is up. My local colleagues are also getting up and getting ready for the day at this point. I don’t call them at 4:30 a.m. to chat about work!

No People to Talk to Outside of Schools

Teachers stated that they cannot find people outside of schools who can understand teaching. Kathy claimed:

Outside of work, I can’t talk about my professional life much. My family and friends aren’t teachers, and they just don’t relate. They love me, and they’ll listen, but it’s just not the same as talking to someone who understands the issues.

Consequently, teacher isolation encourages some teachers to participate in the online communities as a way to reach out to other teachers who can understand issues related to teaching.

Reason 6: Utilizing the Advantage of Online Environments

The analysis of interviews and observational field notes suggested that two advantages of online environments encourage teachers to participate in the communities—protecting teacher confidence and communicating with a large audience.

Protecting Teacher Confidence

The data of this study indicated that online environments provide places in which teachers can safely share issues that they cannot share with local school teachers. I found teachers worry that they may be looked as incapable teachers if they share problems or ask questions in their local schools. Nancy said:

It is hard to look at a colleague at work and explain that we are struggling with the same group of kids that are acting perfect in their classroom. You often get the “look” from them. On the Internet, there isn’t a disapproving look; there is just advice.

Ava in T-LJ made a similar comment: “I can ask the people on the computer anything and not feel intimidated by their response because they don’t personally know me, and I wouldn’t feel stupid or anything.” A posting in Teacher Focus also supports this claim:

As a new teacher I think sometimes there can be a lack of support in the actual school, you’re afraid to tell people when something goes wrong because they are your coworkers. My advisor even told me not to tell anyone because it can affect my hiring back for next year. (October 25, 2005, in Teacher Focus)

This indicates that because teachers can freely share certain issues they participate in the online communities.

Communicating with a Large Audience

Interview participants claimed that communicating with a large number of participants in the communities encourages them to participate. They suggested that having large numbers of participants helps them in three different ways.

First, they can receive diverse perspectives from different teachers and a variety of opinions helps them view situations from a different point of view. Judy stated:

Everyone is coming from all different parts of the country and world. They are able to offer so many different perspectives and views that perhaps I wouldn't be able to find in my own community, where we may tend to think the same way. Others are able to offer different insights and approaches that maybe I would not have come across otherwise.

Several teachers pointed out that they particularly like to communicate with teachers from different countries. For example, Kathy stated, "I liked communicating with teachers from all over the US plus Canada and a few other countries in Teacher Focus because it gives me a broad perspective on education issues."

Secondly, because participants can communicate with teachers from other grade levels, other districts, or other states, they can learn how schools or classrooms work in other places. Bob said, "It is a good way to anecdotally see what goes on elsewhere." Judy pointed out, "There seems to be a balance of elementary versus secondary postings, and I find it interesting to read the secondary posts since I am not familiar with that age group at all!"

Thirdly, there are chances to communicate with teachers who have had similar experiences or can provide some useful solutions. Anna stated, "In the online community, you are sure to find others who have 'been there, done that' and can either commiserate or give you solutions." She made this claim comparing online communities to local schools, where teachers may not find peers who have had specific experience related to certain issues. For example, Amanda reflected that she had a student with autism, but she had no experience or ideas on how she could make his learning productive. She also could not find a teacher to help her in her local school. She made her first post in T-LJ in the hope of exploring what others know about this disability. She was able to relax when she realized that this was something many others had dealt

with, and there were many teachers who were willing to share with her about what did and didn't work for them.

Summary

Some teachers in this study could not find peers who understood their specific issues in or outside of schools, so they participated in the online communities. The online communities enable teachers not only to share issues that they might not be able to share in their local school but also to communicate with teachers who have a wide range of experiences.

Research Question 2

What Are the Driving and Restricting Components Affecting Teacher Participation in an Online Community of Teachers?

Four components affecting teacher participation in the online communities of teachers were found in the data of this study. Each component is divided into two elements, driving and restricting factors. The components are summarized in Table 8 below.

Table 8. Driving and restricting components affecting teacher participation

Components	Driving factors	Restricting factors
Community culture	Respectful	Offensive
Safety	Preserving anonymity	Sharing personal information in public
Flexibility	Flexible participation	Lurking
Value & time	Teachers' shared values	Time

Community Culture: Respectful Culture vs. Offensive Culture

The results suggested that the community culture influenced teacher participation in the communities. Interview participants expressed that they participate in the communities because the culture is respectful. However, some members disrespect others' opinions; this can make the communities less pleasant. Specific examples are described below.

Participants stated that a respectful culture helps them be open to sharing. Susan said, "I like the positive and quality atmosphere here where the members contain themselves so as not to become insulting. Members monitor each other to hold to the level of respect." My analysis of the community postings showed that when members ask questions or seek advice, other teachers try to help and respect others' opinions. For example, on May 10, 2007, a teacher in Teacher Focus asked for advice on dealing with students' behaviors. She wrote:

Okay, the post I am about to write is so obviously written by a first year teacher that I'm embarrassed to share it, but I really need help. I made a few huge rookie mistakes in the last couple of days, and I'm going to have to do some serious digging after Spring Break (we're off this week, thank God) to get myself out of it. Any suggestions would be very welcome, because I really don't know what to do....

Rookie mistake 1: I punished the whole group.... Rookie mistake 2: I tried to have a class discussion about their behavior. Rookie mistake 3: I have become engaged in a power struggle with students. The fact is that there is a power struggle going on between me and the three, and the three kids are winning....

If at all possible, I want to solve this without having to go to administration. I know I am screwing up big time. I'm afraid that when I get back, I will face serious mutiny if I don't come extremely well-prepared to get that group back on track. But I don't know how to get them back on track. What should I do now? (May 10, 2007 in Teacher Focus)

Ten teachers replied to her, providing encouragement and possible solutions. Below I provide some of the responses.

T1: You are taking this quite personally—don't. Treat it more as a problem for which you are seeking a clinical and clean solution, (although there isn't one). Remember, the students you are dealing have only one known quantity and that is, that they are themselves big balls of feelings. It will not help to have your own feelings deeply involved—if they are, then you will become internally overwhelmed instead of merely externally. If administration gives you any static about it, remind them that in a public

school, the responsibility to teach comes first- which you can't do if a disruptive student remains and is disruptive. Most importantly, enjoy your break—remember that those 3 students are just mere appendages of the 5 billion people on earth—not the whole universe.

T1 was clearly trying to encourage her by telling not to take the situation personally. While T2 showed agreement with other posters, he offered additional advice.

T2: I agree with the others ... however don't discount administration. Have a heart to heart talk with your administration. What are your expectations for when you send a child to the office? Be aware that you can't expect miracles. The building administrator can't don a stern expression and expect the students in question to trip over themselves in wanting to rectify their behavior.

Note that T2 respected T1's opinions but also provided their own opinions. Another teacher, T3, encouraged the original poster by stating that one of her "rookie mistakes" may not have been such a critical error.

T3: I don't think punishing the whole class was such a bad thing. However my style is more to reward the good ones in front of the bad ones. It has worked wonders in my 7th and 8th grade classes.... Best wishes, and please do enjoy your break.

T3 also provided another method that might help the original poster handle her problems.

The examples above show that since members in the communities respect others' opinions, they can freely share their emotions. One new member's posting also supports this claim:

I am new to this forum. I have been reviewing a lot of the posts here and I am impressed with the generosity and wisdom that I have read. This is why I am posting my concern and I hope that you all will give me your input. (March 14, 2007, in Teacher Focus)

Similarly, when teachers shared ideas, they generally received positive comments. For example, on March 1, 2007, a teacher shared her sub plans and asked others to give her some feedback. Below is a sequence of postings and responses.

T1: That lesson seems pretty clear and easy to follow. That math activity doesn't seem like it would last for an hour. Does it? (I'm an art teacher, but that made me curious!)

Original poster: The estimation activity should have taken roughly 35-40 minutes, and then cleaning up the cubes (with a sub—my kids get a bit goofy with subs) probably would take at least 10 minutes. Not quite the hour, but I don't plan on things going as smoothly when I'm not there as they do when I am.

T1: Ah I see... I wasn't trying to be rude.. just curious! :)

Original poster: Oh, I didn't think you were being rude at all! I asked for input. :) But I have a folder that I leave on my desk *always* that has some generic activities in it in case something like today happens.

T1: That's a good idea to have a folder with extra activities just in case :)
(March 1, 2007 in T-LJ)

The example above demonstrates that teachers share opinions in a respectful manner in the communities. Consequently, the respectful culture encourages teachers to participate in the communities.

However, the findings indicated that disrespectful attitudes sometimes made others leave the communities. For example, on January 5, 2007, an active member in Teacher Focus shared his feelings in this way:

Aw well....it's been coming I think.... It's a small thing, but one of our lovelies stole one of our class pets after school yesterday. It was a water dragon, one I had raised from a baby, after the two I had before it died in the first months I had them. This was a “success” story. The kids took it pretty hard too. The boy (yeah, they caught him on video tape) denies the whole thing but evidence is pretty heavy against him. I think more of it is utter frustration. The reason SOOOOO many kids think they can do this kind of thing (and other things too) is that few hold them accountable. Yeah, I'm a dinosaur and it's time for me go extinct....'cause the ole world is not gonna change, not gonna go back like it was... We don't have the leadership for that OR the vision... I really fear for the future...

A member replied to him and said, “Jeez... So jaded! You're stating your own feelings and your own perception as if they're absolutes that apply to everyone!” The original poster replied:

Alas... I think there's been a mighty misunderstanding. I think all of us need a place and a time to unburden ourselves. That's all I sought to do here, not offend or harm. If my

“jaded” thoughts are going to do that, then I will do the same as I did with the main board of the ABC community. I don't come here to make trouble....or have it made for me. Have a good rest of the year everyone. I'm history....

Another active member replied to the original poster and said, “Steve, you thought I thought...

sigh this is why I haven't been posting. I'll crawl back under my rock too...” This example

shows that disrespectful responses may hinder participation in the communities. During the

interview, Dick explained a negative experience in this way:

The least rewarding experience is that I occasionally encounter rude spiteful people. A woman once wrote asking about teacher certification in Las Vegas, Nevada. From the way she wrote, it was evident that she thought that Las Vegas had different certification requirements from the rest of the state. I posted a link to the state department of education. I also pointed out that Las Vegas was part of the state of Nevada and that the state of Nevada (Department of Education) set the regulations for state certification. Her response was to post a hateful reply and to try and pick an on-line fight with me. Since I was the moderator for that forum, I deleted her initial post and PMed a warning to her about her language. She left the site and never came back.

According to Susan in Teacher Focus, several members have been very sensitive to the responses of others. They take responses to their posts personally and been hurt. She said, “One person has not come back here since. Another person deleted hundreds of posts made.”

Other interview participants also pointed out that some members’ arrogant attitudes made the communities less pleasant. Hannah said, “I have had some communication difficulties with some people who think they are god's gift to teaching, and anyone who has a bad day, makes a mistake, etc... they are horrible horrible people. They have no room for empathy, apparently.”

The results of this study reveal that the culture of a community and the characteristics of online environments affect teacher participation both positively and negatively. In addition to the treatment teachers receive within the community, the very nature of interacting online also provides benefits. The next two examples focus on the characteristics of online environments.

Safety: Preserving Anonymity vs. Sharing Personal Information in Public

Several participants of this study stated that anonymity encouraged them to participate. They explained how anonymity assisted them in two ways.

First, anonymity helps participants reflect on situations with objectivity. Amanda stated, “I have to say that I like not having LJ members know much about me... Sometimes my coworkers’ advice...has emotions and personal feelings tied to it. LJ members don’t have those preconceived notions influencing their comments.” Austin made a similar comment, saying, “I think WeTheTeachers is helpful because while your colleagues may say they like something you are doing just to be nice, people on this website tend to be straight forward and honest about their comments.”

Second, anonymity assists some teachers in sharing issues without fear of retaliation at school. Susan stated:

Teacher Focus is a good place to come to unwind after the stresses of the day. It is a way to share with others, both professionally and personally, and still keep some detachment from those I work with....I am able to vent and share about a specific colleague without repercussions in my work environment. The anonymity in cyber land allows that detachment without hurting anyone at school.

Susan’s argument was supported by Sydney. She said, “It is good to hear the perspective of faceless people, where you can even share about problems that occur within the local group of teachers, if that makes sense.”

However, a lack of security in online environments causes some people to leave the communities. Jessica said, “The hardest part about internet communities for me is confidentiality. I am careful to never declare my students names, my school, etc. But I have seen others do so. That makes me feel uncomfortable.” Below I provide one example of a teacher, Amanda, who left T-LJ due to her concern about publicly sharing students’ information online.

Amanda is a second grade teacher in a rural area. She is a member of T-LJ and the “2ndgradeteacher” community in LJ. Her experiences in those two communities had been great. She particularly appreciated other teachers’ help related to one of her students with autism. She received various support and ideas from teachers in the communities, which made the student’s learning more productive. However, she had a major concern about discussing issues about students in a public place. Her husband, the school technology coordinator, expressed his concerns about using LJ after he came back from training by the state with regard to online security from a student and school point of view. Moreover, the news that two prospective teachers were not offered contracts due to the content on their personal blogs on MySpace and LJ made her more careful about using LJ. She claimed:

I KNOW that my students' parents would never have a problem with me using LJ to help me teach him better. But I wondered if my discussions in LJ violated any privacy issues or confidential issues. All of my posts are positive and good. So I guess I am rather wondering just how LJ fits into the educational world. We are having to block it at school so students are not able to access it due to the easily available inappropriate subjects of some posts and communities. I also feel that the two educational communities I belong to are very professional for the most part.

One day I noted she left LJ. If a member cancels her account, the user name is crossed out from the member list. I emailed her and learned that she had to leave because of her concerns about public information sharing. She responded, “I did let the LJ go. It was more a matter of concerns over how some view such blogs. I miss it very much... I truly miss LJ, but interestingly enough, I have started keeping a hand written diary.” As soon as she left LJ, the “2ndgradeteacher” community also disappeared, meaning that people could no longer review the information and knowledge that was shared in that community.

Flexibility: Flexible Participation vs. Lurking

Interview participants claimed that they like participating in the communities because of the flexibility in time and participation. Dick said,

I like online communities because the communication isn't in real time. As I write responses to requests for advice or information, I read and edit what I've written. Sometimes I even think about them overnight. Since I am not responding in real time, I also have the option of responding at a time of my choosing.

The participants who responded to my short interview questions, in which I asked for the reasons why they infrequently visit the communities, also implied that flexibility helped them continue to come. T1 expressed, "I do still participate in WeTheTeachers. It's mostly a summer activity since I am very busy during the school year." In contrast, T2 claimed, "Since it is summer, I do not visit as frequently. I like to post any materials, lessons, etc because I know how helpful it can be." This implies that flexible participation influences teacher participation in the communities.

However, flexible participation also allows members to "lurk" without contribution, and some participants wish for more active participation from all members. Lurker is a term used in the online community as a whole to describe a person who may be a member of a community and monitors what happens there, but does not speak up or join any conversations. Sophia said,

With the local things we have more participation because you can meet face-to-face. You don't have a problem that you have in the forums where you have two or three people who do lots of responding. Lots of lurkers who are not participating... They allowed participants more flexibility which is not always an advantage to the participants. If they participate a little more, you know, they can get more out of it.

Active participants claimed that they do not like people who just want to lurk. On June 13, 2007, in Teacher Focus, one active teacher provoked, "Stop lurking and start posting more," but many teachers remain passive observers.

Teachers' Shared Values and Time: I Want To Help, But I Have No Time

The analysis of interview data suggested that teachers in this study have a shared value that teaching is partially defined as helping and sharing; therefore, they share and help each other in the communities. Judy explained, "I like sharing my own ideas when that is needed. Teaching is such a profession of sharing, and helping each other out. That's how we all learn so much and gather so many lessons, files, activities, etc." Experienced teachers claimed that they like to help new teachers who are struggling. Bob stated, "I like to read the new teacher threads and offer suggestions, because I had a rough first couple of years and I'd like a chance to help out somebody who might be struggling, if I have anything that could help." Ryan, a retired teacher, explained his participation in this way:

Generally, to read about the kind of problems that people are having and offer my suggestions. I feel good when I can help a struggling teacher. I think back to some of the errors I made when I was a beginning teacher. I would like to help teachers avoid those. Plus, I feel that I can help students if I can help a teacher understand something better.

Interview data, however, suggested that although teachers want to help and share, they frequently cannot because of a lack of time. Maria said, "I have not visited Teacher Focus in over two years. I've become just too busy." Amanda reflected on the challenges to her participation in this way: "Teacher's worst enemy, TIME. I actually have forgotten about it when I have been very involved with other things." All seven teachers who answered my short interview questions expressed that the reason they participate the communities infrequently was that they did not have enough time. T3 explained, "I taught 6 classes, 4 preparations, 150 students and was department chair so I was too busy to visit very often after school began this year."

Summary of Chapter

This chapter described the three online communities and presented the findings of data analysis related to the two research questions. First, the reasons for teacher participation in the three communities were investigated. The reasons included (a) sharing emotions, (b) exploring ideas, (c) seeking advice, (d) experiencing a sense of camaraderie, (e) combating teacher isolation, and (f) utilizing the advantages of online environments. Second, driving and restricting components affecting teacher participation in the communities were examined. The components included community culture, safety, flexibility, and teachers' shared values and time.

CHAPTER 5

DISCUSSION AND CONCLUSION

The purpose of this study was to examine methods of improving teacher professional development by investigating reasons for participation in online communities of teachers. In this chapter, I further examine the findings of this study, linking to previous research studies in order to draw useful implications for designing teacher professional development programs. The chapter concludes with suggestions for future research.

Examination of Findings

Research Question 1

The findings of this study indicated that there were six reasons why teachers wanted to participate in online communities of teachers: (a) sharing emotions, (b) exploring ideas, (c) seeking advice, (d) experiencing a sense of camaraderie, (e) combating teacher isolation, and (f) utilizing the advantage of online environments. However, based on analysis of the data, these reasons appear to be intrinsically connected to each other, rather than distinctly independent. Figure 6 illustrates the relationships among the six reasons for participation in the three communities.

Three major activities that teachers share in the communities are illustrated as circles in the figure: sharing emotions, exploring ideas, and seeking advice. The cloud shape, which overlaps all three circles, represents the sense of camaraderie that is developed in combination with the previous three activities. All four of these factors are connected to the two boxes below, which represent the other two reasons for teacher participation—combating teacher isolation and

utilizing the advantages of online communities. Below I briefly summarize each reason for participation separately, explaining how each reason is interrelated at the end of the section.

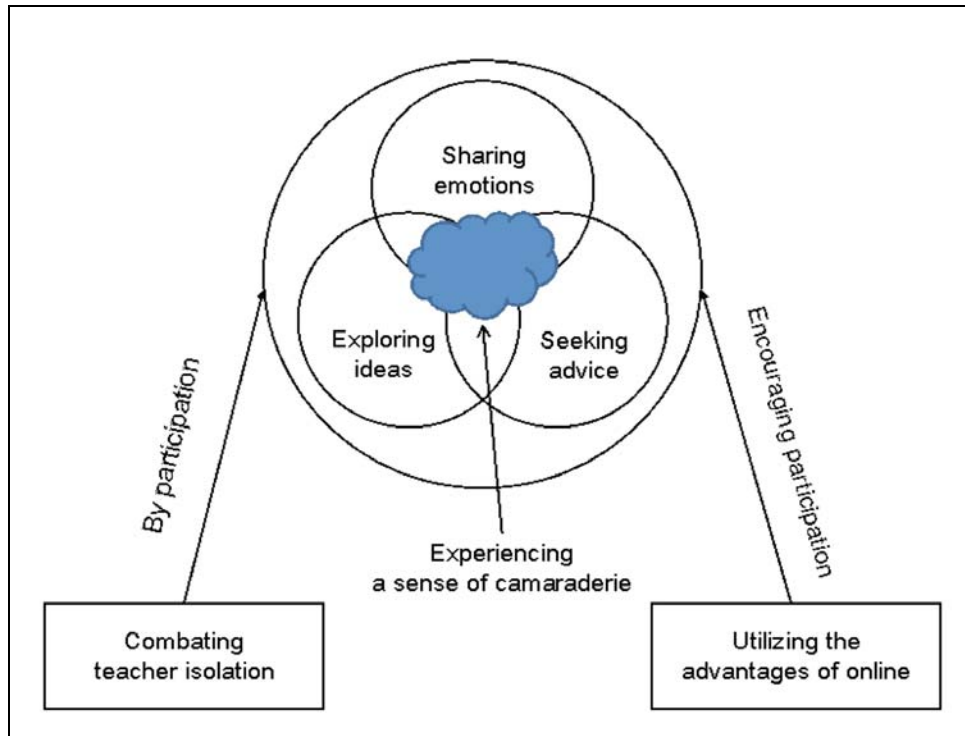


Figure 6. Relationships among the six reasons for participation

Sharing Emotions

Teachers in this study shared both positive and negative emotions related to teaching in the communities. Teachers' negative emotions were mostly related to three facets: students' behaviors, time management, and relationships with parents or administrators. Teachers shared negative emotions in the communities because sharing helped them not only receive emotional support and a variety of solutions to their problems, but it also assisted them in seeing situations from a different point of view. Teachers also shared positive emotions in the communities because those stories reminded themselves and others about the benefits and joys of being a teacher.

This finding is significant because despite the importance of emotional aspects in teaching, there is a lack of understanding of how teachers' emotions affect teaching and teachers' professional work (Sutton & Wheatley, 2003). The analysis of this study indicated that sharing emotions helped teachers strengthen self-esteem and develop a more thorough understanding of teaching. Nancy claimed:

Participation in the online community builds self-esteem, confidence, and morale. I mean this in regard to our profession as teachers. When we are in front of a group of students, feeling like a failure—which happens to every teacher—it is nice to approach other teachers throughout the country and realize we are not alone.

Previous research concerning online communities of teachers did not emphasize emotional aspects. Many studies (e.g., Hew, 2006, and Moore, 2003) described online communities as knowledge sharing places, yet they did not consider emotional sharing as a critical component. Researchers claim that even though teachers acknowledge their dissatisfaction regarding their teaching practices, they also need to feel that their teaching practice is acceptable overall; teachers do not expect their knowledge or expertise to be questioned (Bell & Gilbert, 1994; Fiszer, 2004; Wilson & Berne, 1999). One possible explanation for why teachers in this study freely shared emotions in the communities (whereas teachers in other communities did not) is that anonymous participation is allowed in the communities included in this study. Teachers stated that they feared being looked at as incapable if they shared problems or sought advice from others. Therefore, anonymity in the online communities assisted teachers in being more open to sharing emotions, discussing issues in schools, and asking for advice. From this finding, I can speculate that the reason teachers do not generally share emotions in other communities, such as those developed by university faculty, is that teachers may think that their discussion will be analyzed and evaluated for a research purpose or that faculty will consider them incompetent teachers if they continually ask for help.

Therefore, providing methods to strengthen teachers' self-esteem and support teachers' confidence is critical when designing teacher professional development programs.

Exploring Ideas

Teachers participate in online communities to explore new teaching ideas. The specific ideas that each individual teacher looked for varied depending on the teacher's unique teaching situations. Teachers stated that the reason they liked sharing ideas in the communities was that diverse ideas from teachers with different backgrounds who teach in different environments helped them acquire new and creative methods that were appropriate for their specific teaching situations. Moreover, reviewing other teachers' ideas assisted them in reflecting on their own teaching strategies and with examining techniques to modify their current teaching methods. These findings can be interpreted in the following two ways.

First, the results confirm the claim by Wenger (1998) that learning occurs through participation in communities. Social learning theorists propose that knowledge is the outcome of ongoing interactions with groups of people (Resnick, 1991; Lave & Wenger, 1991). This study demonstrated that sharing ideas and advice with other teachers in the communities assisted teachers not only in acquiring new ideas but also in reflecting on their own teaching strategies and examining ways to modify those strategies. In other words, teachers in this study continually learned during the process of participation in the communities.

The second interpretation is that because teachers' individual needs were met in the communities, they continued to participate. Results of this study indicated that everyone's opinions and experiences were respected, and each teacher was willing to share his or her ideas and experiences. In the communities, teachers were not identified as expert teachers or new

teachers. Every member's voice was valued regardless of teaching experiences, subjects taught, or age. This claim was supported by interview participants. Emily, the high school student, attested, "I'm not inhibited by my age or status." Both experienced teachers and new teachers appreciated the different insight that they could receive from teachers who had different experiences. Sophia, who has worked in the education field for more than 40 years, said, "There is always something to learn from these teachers—from the newest teachers to the oldest, it is wisdom on what is really important about teaching and learning." Ava, a first year teacher, said, "It's nice to hear things from people who have been teaching for years, or others who are just starting out."

The data above stresses the need to address issues related to teacher empowerment and autonomous participation. Allowing everyone to make his or her own voice heard is related to teacher empowerment. Furthermore, allowing teachers to explore ideas that best meet their own needs is related to autonomous participation. In the communities, every teacher's experiences, ideas, and opinions are valued and respected. There is no distinction between "knowers" who already acquired or developed knowledge and learners who need to learn from the knowers (Cochran-Smith & Lytle, 1999a). Everyone has the power to ask questions and share opinions, and teachers respond well to that freedom, thus implying that supporting teacher empowerment and autonomous participation is a key element in developing powerful, effective teacher professional development programs.

Seeking Advice

Both current teachers and potential teachers participated in the communities to seek advice on teachers' professional work. Other teachers' opinions helped them make informed

decisions on issues including relationships with parents and students as well as job searching. This finding implies that methods to support teachers' professional work outside of teaching also need to be considered. Teachers sought advice on a variety of issues, ranging from helping an individual student who has autism to dealing with school administrative work. Most teacher professional development programs have focused on acquiring specific knowledge or skills related to teaching (Borko, 2004). Methods that can support a variety of teachers' professional work need to be developed in coordination with the focus on classroom teaching skills and content knowledge.

It may also be advantageous to develop a teacher online knowledge base. These findings indicated that even though the answers and advice that each teacher sought from the communities were diverse, there were many commonalities as well. For example, many teachers wanted to know about job searching strategies, classroom management tips, effective means for assisting special education students, and online resources for teachers and students. These common topics imply that there is a need to organize information that is shared in the communities to help teachers search effectively for what they need, instead of asking the same questions again. Moreover, methods to preserve knowledge shared in the communities need to be examined. One problem of knowledge sharing through online communities is that if communities disappear, the knowledge created by the community disappears as well. As I previously pointed out, the "2ndgradeteachers" community in LiveJournal dissolved as soon as the creator of the community left the site. Accordingly, knowledge and information that had been shared in the community could no longer be accessed. Therefore, ways to organize and construct a teacher online knowledge base need to be further examined.

Experiencing a Sense of Camaraderie

The findings of this study demonstrated that teachers develop a sense of camaraderie while they share ideas, emotions, and advice. This sense of camaraderie encouraged teachers to continually participate in the communities. This finding is consistent with the study by Ellis, Oldridge, and Vasconcelos (2004) that the most crucial aspect of an online community is not the information shared in the communities; rather, it is the sense of belonging that participation engenders.

From a teacher professional development point of view, the development of relationships demonstrates the importance of teacher involvement. Teachers felt a sense of camaraderie in the communities because everyone did similar work and understood the difficulties and enjoyment of their shared profession. This also implies teachers wanted their voices and opinions to be understood and respected by people who understand teaching. Therefore, when designing teacher professional development programs, the teachers' own voices and needs should be considered first.

Combating Teacher Isolation

Some teachers in this study could not share emotions or seek advice from their local schools. Results of this study indicated that to counteract this isolation, these teachers participated in online communities. This study suggested that teacher isolation mostly stemmed from three components: (a) a lack of time to talk in schools, (b) a lack of support in schools, and (c) a lack of peers who understand teaching outside of schools. In online communities teachers had opportunities to share with sympathetic peers without time limitations. Online communities of teachers can be one way to overcome teacher isolation (Hur & Hara, 2007). This study,

however, suggested that school based teacher professional development programs (Lieberman, 2000) may not be effective in some schools. The results indicated that communication between teachers in local schools had several limitations including a lack of time and difficulty in finding people with similar interests. Moore (2003) partly supports this claim. She reported that some teachers disliked school based teacher professional development programs because those programs did not meet teachers' individual needs.

Utilizing the Advantages of Online Environments

The findings of this study indicated that online environments provide two unique advantages: protecting teacher confidence and communicating with a wider audience. The online communities enabled teachers not only to share issues that they might not be able to share in their local schools but also to communicate with teachers with wide range of experiences. These benefits of online environments encouraged teachers to participate in the communities. This finding is supported by Barnett (2002) who found that encouraging teachers to communicate through online communication technologies is particularly useful for reducing teacher isolation, fostering teacher reflection, and supporting formation of communities of practice.

The results suggest that online environments can provide various benefits that can support teacher professional development programs. Data from this study indicate three specific benefits in particular. First, online environments allow teachers who have different experiences to discuss and help each other without time and location limitations. Second, the environments provide a space where experienced teachers and new teachers assist each other while protecting their self-esteem. Third, knowledge can be accessed at any time, and new knowledge can be easily accumulated.

However, a new system by itself does not facilitate teacher professional development. Teachers' needs should be analyzed first, and teachers' voices should be considered throughout the teacher professional development process. Within these conditions, the utilization of online environments may provide great potential towards improving teacher professional development programs.

Communities and Individual Needs

As shown in Figure 6, all six reasons discussed above are inter-related. Sharing emotions is integrated with other reasons in that teachers seek ideas and advice on possible solutions to their problems. Allowing anonymous participation online encourages teachers to share problems that they may not be able to discuss in their local schools due to concerns about their self-esteem. Sharing ideas is related to the other reasons because teachers share negative emotions when classes do not go as planned. In contrast, they also share positive emotions with regard to pleasant classroom teaching moments. A large number of teachers participate in the online communities, so teachers can often acquire more diverse ideas from the teachers in the communities than from those in their local schools. This advantage may have encouraged them to participate in the communities. Similarly, seeking advice is directly related to the advantages of online environments. A wide range of teachers who have different opinions and experience levels participate in the online communities, so teachers can receive a variety of advice, which may help them make appropriate, informed decisions. A sense of camaraderie is also developed when teachers share ideas, emotions, and advice, showing how all of the components are related.

The above description indicated that teacher participation can be explained by multiple, inter-related reasons. For example, Susan claimed that she liked to share her negative emotions

related to parents because other teachers' advice assisted her in reflecting on the situations with objectivity. Online environments helped her share her emotions with a wider audience without the need to inform anyone at her school. She also found that applying various ideas acquired from the online community to her classroom was beneficial because those ideas assisted her in creating student-centered learning environments.

In contrast, the findings indicated that some teachers' participation could be accounted for by only one or two reasons, and the other reasons might not be related at all. For example, several interview participants stated that their interests were to share teaching ideas; they were less interested in sharing concerns and emotions related to teaching. Furthermore, some teachers were less interested in sharing teaching ideas; their participation was more related to a sense of camaraderie. For example, Anna stated, "I have been teaching 35 years. My participation is little related to teaching practice. It is more in the area of the commonality of experiences and the ability to share." These two contrasting examples indicate that examining both specific reasons for participation and their relationship to other reasons is critical to fully understand reasons for teacher participation in the communities. When educators more fully understand reasons for participation in the communities, support systems that best meet teachers' unique needs can be designed and implemented.

Research Question 2

The second research question was, "What are the driving and restricting components affecting teacher participation in an online community of teachers?" Four components were found, and each component was divided into driving and restricting factors.

Community Culture: Respectful Culture vs. Offensive Culture

The data of this study indicated that teachers were more likely to share ideas and emotions when a community culture was respectful. In addition, disrespectful attitudes toward others' opinions decreased the likelihood of participation or even caused teachers to leave the communities. This finding can be discussed in the following two ways.

First, developing community norms that emphasize respectful attitudes and helping members buy into those established norms is important. Preece (2002) claims that enforcing community rules is crucial to fostering sociability. Results of this study indicated that all three communities clearly addressed community rules. Thus, their problem is not whether they provide clear rules; rather, it is a matter of whether or not the members buy into the rules. Most members understood the importance of respecting others' opinions, but a small number of people did not seem to be aware that their disrespectful comments could hurt others' feelings. This lack of awareness may be related to the fact that people cannot recognize others' facial expressions or tones of voices in online environments. From a teacher professional development point of view, one way to address this issue may be to provide netiquette education so people are more likely to consider how their imprudent remarks can negatively affect other participants.

Second, this study demonstrated that content moderation was important in online communities. One way to create respectful environments is to have a moderator review postings and delete or edit inappropriate messages. As discussed in the previous chapter, the core members of Teacher Focus came from the ABC community because they did not like the fact that postings were not moderated there. They therefore appreciated that all postings were well monitored in Teacher Focus. The importance of moderation online has also been attested by many researchers, such as Gray (2004) and Salmon (2004).

Safety: Preserving Anonymity vs. Sharing Personal Information in Public

The second component is related to the safety of sharing personal stories. Teachers can freely share their problems and concerns and seek advice because of the anonymity of online environments. More importantly, teachers can share objective and critical comments that are not tied into personal relationships because the parties do not know each other offline. However, some teachers do not protect others' personal information; a lack of confidentiality may prevent participation.

Anonymity can be linked to teacher self-esteem. Teachers want their self-esteem to be respected (Bell & Gilbert, 1994; Fiszer, 2004; Wilson & Berne, 1999), so they prefer anonymous participation when they share emotions or ask for help. However, that does not mean they do not want to receive constructive advice. The interview data clearly demonstrated that teachers appreciated other teachers' critical perspectives. Therefore, when designing teacher professional development programs, methods should be incorporated that help teachers not only share critical comments but also protect their self-esteem.

The findings indicated online privacy concerns affected teacher participation. O'Neil (2001) claims that online privacy concerns will continue to be considerable issues for Internet users. One of the reasons teachers were concerned about security in the communities was that anyone could join the communities; members do not need to be teachers. Teachers in T-LJ particularly expressed concern about postings because even students or parents could easily access the community. These issues imply that methods to assist teachers in sharing without concern about security issues need to be further examined.

The confidentiality issues indicate that Internet security education is also necessary. This study found that postings that revealed school names or students' real names made teachers

uncomfortable. This reaction implies that emphasizing Internet security issues in technology classes is important.

Flexibility: Flexible Participation vs. Lurking

The findings indicated that teachers were allowed to share what they wanted to share in the communities; flexibility in terms of time and topics of discussion encouraged teachers to participate actively in the communities. However, flexibility also allowed people to lurk without contributing to the communities.

This finding can be interpreted from teachers' informal learning point of view. Internet technologies enable teachers to learn at any time and at any place. Teachers can acquire massive amounts of information from various sources, including online communities. This study demonstrated that teachers gained a variety of practical and experiential knowledge from the communities, which formal classes may not be able to provide in terms of the amount and diversity of knowledge. However, one problem of informal learning is that people learn only what they want to learn. New knowledge development may be limited if teachers do not reflect on the learning processes (Dewey, 1938). Lurking is problematic in this regard. If teachers simply find information without reflecting on that information in relation to their own classrooms, they may not be able to learn to their maximum potential. Formal education is thus important because educators can provide an impetus that helps teachers reflect on their learning and develop new knowledge. Consequently, it is important to find a link between formal education and informal education, such as learning through participation in online communities. More studies should be undertaken concerning how teachers' informal learning occurs and what

knowledge is shared in online communities of teachers to examine better means to link formal learning and informal learning.

Teachers' Shared Values and Time: I Want To Help, But I Have No Time

The results indicated that teachers' shared values foster teacher participation in the communities. Teachers believe that teaching is defined as helping and sharing, so they answer to others' postings and voluntarily make new postings. However, despite the shared values, teachers cannot frequently participate because of a lack of time. Issues with time appeared as a restricting factor in several other studies, including Baek (2002) and Moore (2003). Researchers claim that having a shared goal is a basis for creating communities of practice (Wenger, 1998; Hara, 2000). The phenomenon of teacher isolation indicated that teachers could not have many opportunities to share, although they wanted to share. Utilization of online environments is thus important because it can provide many opportunities for teachers to share with each other. The findings of this study demonstrated that it is important for every teacher to share, regardless of their levels of experience, implying that equal relationships among learners should be created.

Implications

By investigating the two questions above, this study examined methods to improve teacher professional development. Both practical and theoretical implications are provided below.

Practical implications

Creation of Online Learning Environments

The results of this study indicated that teachers wanted to share both knowledge and emotions. The online communities provided opportunities to do that within respectful and open learning environments. Respect and openness encouraged many teachers to participate actively in the communities. In order to help design effective online learning environments for teachers (referred to below as systems), teacher educators need to consider several conditions:

- Providing spaces in which teachers can share both knowledge and emotions: Systems should address both. If systems focus solely on either knowledge or emotions, meeting teachers' diverse needs may be difficult.
- Creating open learning environments: Systems should allow everyone to share ideas, regardless of levels of teaching experience. This condition implies that educators should not lead teachers' learning processes; rather, teachers themselves must take control of their own learning processes.
- Inviting diverse participants: Systems should be designed to invite a wide variety of participants to share ideas and experiences. Diverse participants include teachers who have different experiences in terms of subject and grade level taught, all sharing together.
- Fostering autonomous participation by teachers: Systems should be developed based on teachers' needs, not educators' interests. Teachers should be given many

- opportunities to choose topics that they want to share and discuss. Teachers' new needs should be continually examined and reflected upon in order to improve the systems.
- Protecting teacher self-esteem: Systems should provide the means to protect each teacher's self-esteem. One way to address this issue may be to provide an option for anonymous participation.
 - Moderating the discussion and protecting online security: Systems should include strategies to moderate discussions and protect members' personal information.

Further Research Suggestions

The findings of this study identified several research areas that warrant further investigation. First, more research should be conducted to understand teachers' emotions and the impact of those emotions on job satisfaction and student learning. Even though the results of this study demonstrated that teachers' emotions affected how teachers viewed teaching, it is not clear how teachers' emotions are related to student learning and job satisfaction. Further research may help teacher educators better understand how to support teachers' emotions.

Second, informal learning in online communities of teachers should be further examined in relation to formal learning. Teachers learn informally while participating in online communities of teachers. In order to explore the means to improve formal learning, more research should examine what and how teachers informally learn in online communities.

Third, the means to develop a teacher online knowledge base should be further examined. An online knowledge base might help teachers effectively utilize knowledge that has been accumulated, and as more people added new knowledge and updated existing ideas, the

knowledge base could be constantly evolving. Strategies to organize massive amounts of knowledge in online communities need to be investigated first, and ways to provide a variety of search functions that help teachers find diverse ideas then need to be examined.

Theoretical Implications

Although the results of this study suggest that social learning theory, proposed by Lave and Wenger (1991), is a useful framework to address social aspects of learning, the analysis of this study indicates that the theory may need to be extended. As a result, I propose a new learning model called “community learning model.” Below I first briefly explain the social learning theory proposed by Lave and Wenger (1991) and then explain the characteristics of community learning model in comparison with social learning theory.

Lave and Wenger (1991) claim that newcomers acquire knowledge by observing how masters utilize knowledge in real contexts. Their initial participation in a community is peripheral in that they passively observe what masters do. However, through observations and engagement with practice, the newcomers gain new knowledge and eventually become the center of the community. Lave and Wenger, then, view learning as an apprenticeship. I illustrate the learning process that Lave and Wenger (1991) suggest in the left side of Figure 7, and community learning model in the right side of Figure 7.

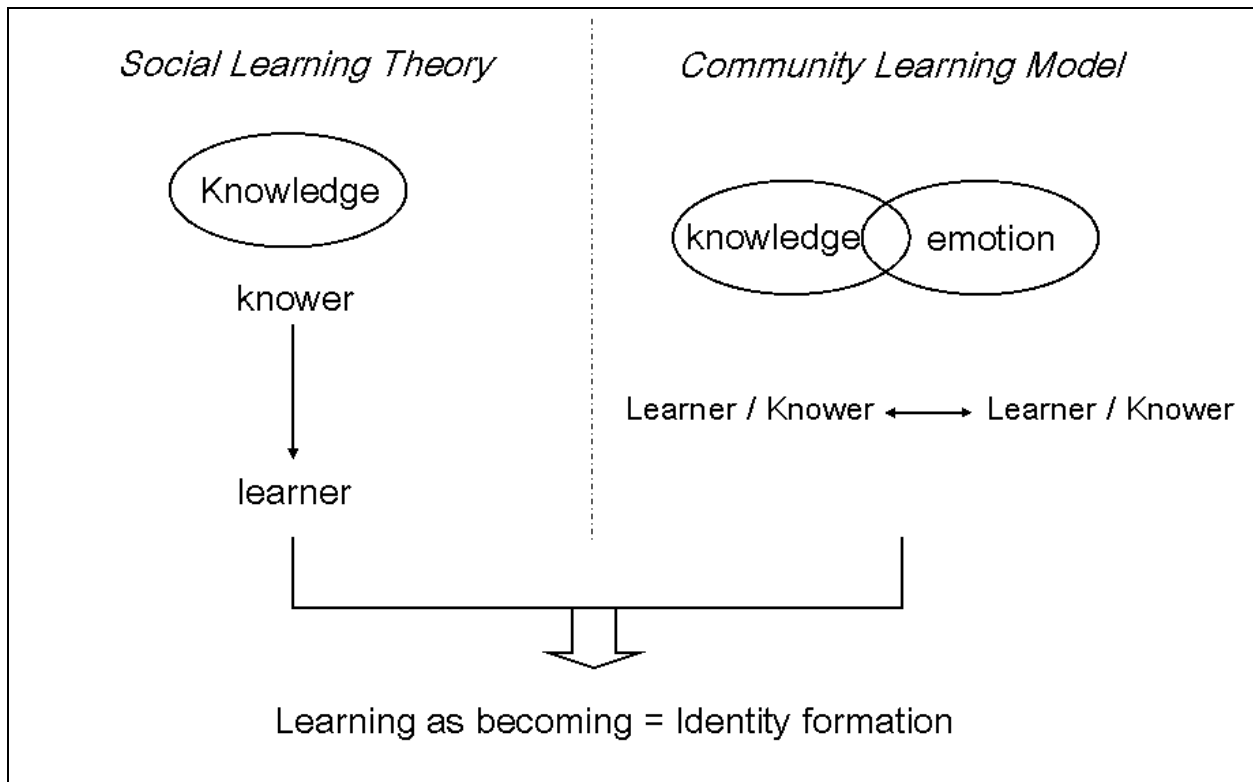


Figure 7. Comparisons between social learning theory and community learning model

Community learning model has two primary characteristics. First, community learning model emphasizes both knowledge and emotions, whereas social learning theory describes knowledge acquisition in communities of practice but does not address the emotional aspects of learning processes. The findings of this study demonstrate that emotions and knowledge are inter-related, and understanding both aspects as a whole is important. An increasing number of researchers claim that the field of education mainly focuses on cognitive aspects of learning and fails to take into account the influence of emotions (Beatty, 1969; Sutton & Wheatley, 2003; Hargreaves & Fullan, 2000). Scholars also attest that emotions affect how people learn (Norman & Hyland, 2003).

Second, there is a reciprocal relationship between learners and others in community learning model, while the relationship in social learning theory is hierarchical. Social learning

theory implies that there is a distinction between knowers and learners. Knowers are the people who have already acquired knowledge, such as experts in a particular field of study. Learners are expected to learn from the knowers by observing and practicing what knowers are doing.

However, the findings of this study suggest that participants help each other to learn without distinguishing knowers and learners in online communities. A teacher can be both a learner and a knower, depending on the topics of discussion. Each participant's knowledge and experience are valued and different perspectives are respected. In other words, everyone learns from each other, so the relationships are reciprocal. Consequently, community learning model includes both knowledge and emotions and explains the reciprocal relationship between learners and knowers.

Both social learning theory and community learning model view learning as a process of identity formation. While communicating with others in communities of practice, members understand who they are, what they can do, and what is familiar or unfamiliar (Wenger, 1998). The findings of this study suggest that both knowledge and emotion shared in the communities affect teachers' identity formations. Sharing ideas and advice helps teachers acquire new knowledge concerning teaching, and expressing emotions assists them in better understanding why they do what they do. In other words, teachers continually develop their own identities in the process of participation in the online communities of teachers. Consequently, both social learning theory and community learning model highlight learning as identity formation. However, the role "emotion" plays in identity formation has not been emphasized in the literature. This dissertation underscores the importance of studying the role of emotion.

Recommendations for Further Study

The findings from this study suggest several ways in which this line of research can be expanded:

First, comparing reasons for participation between self-generated online communities and university faculty-driven online communities could provide more insightful suggestions regarding teachers' professional needs. I speculate that teachers may have a more definite purpose when they participate in online communities that are designed by university faculty. The findings from such a comparison may provide new insights into methods for improving teacher professional development programs to better fulfill teachers' needs.

Second, comparing online communities of teachers in different countries could provide a new perspective of understanding teacher needs, teachers' culture, and communication patterns online. For example, online communities of teachers in South Korea, in which I participated for several years, and similar communities in the United States could be compared. An understanding of the similarities and differences in terms of teachers' culture and teacher needs in two countries could provide useful insight into how different educational systems affect teachers' professional work and provide practical strategies to designing better education systems in both countries. Furthermore, the comparison study could also assist in exploring effective methods to help teachers from all over the world communicate through online communities of teachers. As this study indicated, some teachers are interested in communicating with teachers from different countries. Comparing communication patterns of teachers in different online communities can provide interesting insight into how to design online environments where teachers from different countries could communicate effectively.

Third, a similar study could be conducted with face-to-face interviews or telephone interviews in order to examine the quality of email interviews. Comparisons of the findings from

the two different methodologies could shed light on the potential of email interviews as an alternative way to collect data for qualitative study.

Fourth, communication patterns in forums and blogs could be further examined. The analysis of data in this study indicated that teachers communicated differently depending on the technology provided. For example, it appeared that new knowledge was continually added to the postings in forums as compared to the more static postings in blogs. One possible explanation is that postings are organized by topics in forums, so it is easy to search postings that match teachers' interests. In contrast, postings are organized by dates in blogs, so teachers need to review all entries, making it hard to find relevant postings and add new input into the existing entries. Another phenomenon that I noted was that teachers tended to reply more to postings in blogs than those in forums. This behavior can be explained because there is no category in blogs, so it is easy to skim through every posting, providing more opportunities to respond. In contrast, teachers visit only certain categories in forums, providing fewer chances to review all messages posted in other categories. These differences may help educators decide which technology to select to meet their specific purpose. Further research may explain the differences with supporting data.

Finally, an online survey can be conducted with a larger number of participants. An online survey might be a good way to invite infrequent participants and lurkers in order to represent their opinions. The findings from an online survey will also help generalize the findings to a larger population.

Conclusion

The findings of this study indicated that there were six reasons why teachers participated in the online communities of teachers: (a) sharing emotions, (b) exploring ideas, (c) seeking advice, (d) experiencing a sense of camaraderie, (e) combating teacher isolation, and (f) utilizing the advantages of online environments. While knowledge sharing aspects in online communities of teachers have been discussed, the emotional sharing aspects have rarely been examined. This study demonstrated how teachers supported each other by providing emotional support and by sharing a variety of ideas in the online communities. The findings suggested components that should be considered when teacher educators create learning environments in which teachers can freely share both emotions and knowledge. Consequently, the results of this study are important by suggesting additional guidelines for developing teacher professional development programs that can better meet teachers' diverse needs.

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APPENDIX A

THE INITIAL INTERVIEW PROTOCOL

Introduction: Thank you so much for agreeing to this interview, it is very helpful to me and my work. I will be asking you some very general questions that I think will lead to some helpful conversations between us, but first I would just like to ask some basic questions about your career and yourself, okay?

Demographic information

- Could you briefly introduce your teaching experience?
- Could you tell me about your school environment and students?

Topic Domain One: Beliefs about teaching and local school culture

Lead-off question

“Can you describe your typical day? Let’s say students just came in your classroom.”

[Covert categories: teaching styles, attitude toward teaching, beliefs about teaching, relationship with other teachers, perspectives of communication with other teachers in local school, what were the initial experiences like and how do they compare with later experiences? What are good things? What are bad things? Teacher challenges?]

Possible follow-up questions:

1. What is a good teaching day like?
2. What is a bad teaching day like?
3. Can you compare the early days with how teaching is going for you now?
4. It sounds like things have changed. What brought about those changes?
5. What do you do when you are facing challenges?
6. Do you go to the staff room? Can you describe what the staff room look like?
7. How often do you meet other teachers in your school?
8. What do you discuss when you meet them?
9. Let’s suppose you have a lot of free time in your school. Do you want to spend the times in your own classroom or do you prefer communicating with other teachers during your free time? Why?
10. I felt that there might be some differences that teachers could share in local school communities and online communities. What do you think? Do you feel that what you share with teachers in your school is different from what you talk with teachers in TF?

Topic Domain Two: Teacher learning and participation in the online community

Lead-off question

“You know, one of my main interests in doing this interview is to find out about the online community you participate in. Tell me how you got involved.”

[Covert categories: How found out about it, motivation for getting involved, how long involved, is it a good resource? How? Identity issues pertaining to the online community. What do teachers want to accomplish in the process of participation? How do teachers apply ideas from the community to classrooms? What and who helps teachers solve day-to-day practices? How do teachers perceive the usefulness of participation in the community in terms of helping student learning and dealing with their own professional practice? What are the limitations of online communities in terms of teacher professional development?]

Possible follow-up questions

1. It seems that you like reading various postings because you gained very interesting teaching ideas from the postings. Am I correct? Did you apply the ideas to your classroom? Oh, you did... Can you tell me how you applied the ideas to your class?
2. How did the class go? Did your students enjoy the activity?
3. It sounds like you are not one hundred percent satisfied with your class. What worked and what did not work?
4. Could you share one posting that you found very useful for your work?
5. Do you often apply teaching ideas or resources that you find in the community to your class? Oh, you do. What ideas or resources do you like to apply to your class?
6. Oh, you made a post related to one of your students and other members gave good advice to you. Could you tell me more about the student's situation? How is the student doing these days?
7. If you have questions related to work in your school, how do you usually find answers?
8. Are there questions that you would like to find in the community but cannot find? What are they?
9. Do you remember how you first got to know this community?
10. Do you feel like a different person when participating in the community than you do in other parts of your life?

Topic Domain Three: Reasons for participation

Lead-off question

“So far we have talked about the community quite a bit, but now I am interested in the details of participation. Can you tell me what you do from when you first log in to the site, and then take me through all your activities one by one? I am interested in every activity, so please do not be afraid of giving me too much detail.”

[Covert categories: How do teachers participate in the community (how to find and respond to postings), what discussion forums do they visit the most, and why do they like those forums? What information do teachers look for in the community? How do teachers become members of the community? How do teachers perceive the purpose of the community? Different roles in different forums? Do the particular other participants make a difference? Internet friends? Internet people you don't like?]

Possible follow-up questions

1. Oh....you looked through topics first and chose what you wanted to read. What kind of postings are you most interested in?
2. It sounds you really like to know more about reading strategies. Am I correct? Do you often find information related to reading strategies in this community?
3. I found it was very interesting that most people who I have talked to said that they first checked out who replied to their posts. Do others' responses affect how you participate in online communities of teachers? If so, in what ways?
4. I found you have posted over 1000 times. It is amazing. What makes you most excited participating in this community?
5. When do you visit this community? Do you come here when you have questions to ask or do you just regularly come here?
6. If a teacher who does not know this community is asking about it, how would you introduce it to the teacher?
7. What would be three most challenging components of being a teacher?
8. Who do you ask for help when you face challenges related to your students?

Topic Domain Four: New tools or activities

Lead-off question

“Now I'm interested in ways the community could be improved. Are there any things you would change if you could?”

[Covert categories: anything about commands, format, displays, options, help features, rules?]

Possible follow-up questions

1. Have you encountered any difficulties when you logged in to the site or read and responded to postings? Can you tell me what happened?
2. Have you noticed anyone else having difficulties in participating in the community? Could you tell me what happened?
3. It sounds that you could not access the message that you have read before. So, what happened next? Did you just give up finding the message?

Interview with initiators

Topic Domain: Perspectives of the online community

Lead-off questions

“Could you describe what motivate you create the community?”

[Covert categories: motivation for the creation of the community, ideal online communities, challenges of maintaining the communities, development process, and desire for new direction]

Possible follow-up questions

1. What do you hope that teachers who join the community take out from or contribute to the community?
2. How do you describe an ideal online community of teachers?
3. What are you most proud of your community?
4. Are there anything you want to improve? If so, in what ways?
5. Who has helped you developed the site and maintained it?
6. In terms of technology structures what changes has been made for over the last five years?
7. What challenges have you encountered while you have monitored the community?

APPENDIX B
THE FIRST EMAIL INTERVIEW QUESTIONS

1. How did you get involved in the Teacher Focus community?
2. What aspects of Teacher Focus community do you like?
3. What aspects of Teacher Focus community do you dislike?
4. What forum topics do you like to read or respond to?
5. Can you describe what you do when you come to the Teacher Focus community? Please start from first logging in to the community and then explain all your activities, as best you can, one by one. I am interested in every activity, so please do not be afraid of giving me too much detail.
6. In what ways does participation in Teacher Focus community help your teaching practice, if at all?
7. Have you noticed other members having difficulties (e.g., technical or communication difficulties) in participating in the community? If so, could you tell me what happened?
8. If a teacher who does not know this community is asking about it, how would you introduce the community to the teacher?
9. If every wish could come true, what online activities or technology tools would you want to have available through the Teacher Focus community?
10. Could you briefly describe your teaching career and the school environments in which you work?

APPENDIX C
AN INVITATION EMAIL EXAMPLE

Dear ***,

My name is Jung Won Hur, and I am a doctoral student in Instructional Systems Technology at Indiana University. I am emailing you to ask whether I could talk with you about your experience in the Teacher Focus community.

As a former elementary school teacher, my dissertation topic is to understand teachers' perspectives on participation in online teacher communities. I noticed that you have extensively shared your experience and expertise with other teachers in the community and I would love to hear your perspectives of participation.

If it is okay with you can I give you a call at the time of your convenience and listen to your experience? An interview will take no more than one hour.

I appreciate your time and I will provide a small gift card (\$12 Amazon gift card) after the interview.

Thank you so much for your help and I am looking forward to hearing from you,

Sincerely,

Jung Won Hur

APPENDIX D
FOLLOW-UP INTERVIEW QUESTION EXAMPLES

Q1. From your answers I would say that the reasons you participate in online communities of teachers are:

- 1) to explore new teaching ideas
- 2) to reflect on your own teaching based on other teachers' teaching strategies
- 3) to find ways to improve your teaching skills

Is my interpretation right? If not, could you correct me? Is there anything you want to add or delete?

Q2. I found it was very interesting that most people who I have talked to said that they first checked out who replied to their posts. Do others' responses affect how you participate in online communities of teachers? If so, in what ways?

Q3. If you do not mind, could you tell me what kind of lesson ideas you got from WeTheTeachers and how you applied them to your classroom? I would like to also hear how the class went.

Q4. Does it mean the class you taught went very well and you felt confident about your teaching? Could you explain to me what this sentence means? I think it implies something very important but I did not fully understand it.

Q5. I think that you used the word "stolen" in a positive way? Am I correct? It sounds like you believe that sharing ideas and lesson plans among teachers are very important. How about your school? Do teachers in your school also share like WeTheTeachers community or your MySpace community?

JUNG WON HUR

EDUCATION

Ph. D. in Instructional Systems Technology 2007

Indiana University, Bloomington, IN

M.Ed. in Elementary Computer Education 2001

Seoul National University of Education, Seoul, Korea

B.A. in Elementary Education 1998

Seoul National University of Education, Seoul, Korea

TEACHING EXPERIENCES

Assistant Professor

Auburn University, Auburn, AL

August 2007- present

Associate Instructor

School of Education, Indiana University, IN

January 2006 – May 2007

- Taught and co-coordinated W401— Integrating Technology in Teaching Part II

Elementary School Teacher

Seoul Gu-am Elementary School, Seoul, Korea

March 2000 - July 2003

- Taught 2nd, 5th, and 6th grade students

Seoul Dung-chon Elementary School, Seoul, Korea

May 1998 - February 2000

- Taught 4th and 5th grade students
- Trained fellow teachers in basic computer skills (e.g. MS Excel, the school database system)
- Managed the school database system

Tutor

May 1994 - August 1997

- Taught Math and English to middle school and high school students
- Taught Math to elementary school students

PROFESSIONAL EXPERIENCES

Research Assistant

Persistent Issues in History Network (PIHNet) project

January 2004 – July 2007

- Conducted usability tests for PIH-LVFE (PIHNet Laboratory Virtual Field Experience)
- Developed online video database (editing the videos and creating images representing each video case)
- Managed the PIHNet website

- Designed teacher online tools
- Conducted interviews and surveys with PIHNet fellow teachers
- Project funded by National Endowment for the Humanities (NEH) and Fund for the Improvement of Postsecondary Education (FIPSE)

IT/ PT curricula analysis & online survey projects

April 2004 – July 2004

- Conducted content analysis of IT (Instructional Technology) and PT (Performance Technology) curricula
- Conducted an online survey with regard to ISPI members' salaries
- Project funded by ISPI (International Society for Performance Improvement)

Distance education research project

September 2001 - February 2002

- Designed a distance education model for elementary school teachers
- Project funded by Korea Ministry of Education

Website development project for student teachers

July 2001 - August 2001

- Designed and developed a website for guiding student teachers' practical activities
- Project funded by Seoul National University of Education

Mathematics website development project

June 2000 - December 2000

- Analyzed the content and organization of curriculum in elementary mathematics
- Developed online materials and instructions for the website
- Project funded by mathpia.com

Instructional Consultant

Instructional Consulting, School of Education, Indiana University, IN

July 2004- June 2006

- Developed various multimedia resources (videos, websites, and DVDs) to help faculty with research and teaching
- Developed illustrations for faculty publications
- Provided workshops on topics related to learning new technologies
- Assisted instructors develop online class syllabi and evaluation plans
- Designed various posters for faculty presentations

Computer Consultant

STC computer labs, Indiana University, IN

January 2004 – June 2004

- Provided support to students regarding software, hardware and computer peripheral equipment
- Maintained computer labs, printers, papers and other equipment

PUBLICATION AND PRESENTATION

Publication

- Hur, J., & Hara, N. (2007). Factors Cultivating Sustainable Online Communities for K-12 Teacher Professional Development. *Journal of Educational Computing Research*, 36 (3), 245-268.
- Hur, J, Tan, A., Chen, L. Brush, T., & Saye, J. (2005). Redesigning the persistent issues in history network (PIHNet) online forum and journal to promote interactions and reflection. *TechTrends*, 49(6). 63-68.
- Hur, J. (2001). Learner diagnosis system for individual learning. *Unpublished Master Thesis*, Seoul National University of Education, Seoul, Korea.

Manuscript in progress

- Hur, J. & Brush, T. (in preparation). From Learning to Application: How to assist pre-service teachers with technology integration in actual classrooms.

Grants/Submitted

- Education Grants Program, Coca Cola Foundation. June 2006
Creating the KITE (Korean Interactive Technology Environment) site: A cultural exchange for Korean kids around the globe (\$100,000 proposed as one year project, not funded).

Presentations

- Hur, J. & Brush, T. (2007). *From learning to implementing technology: Helping pre-service teachers with technology integration*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Kale, U., Hur, J. , Yerasimou, T., & Brush, T. (2006). *A model for video-based virtual field experience*. Paper presented at the 7th International Conference of the Learning Sciences 2006, Bloomington, IN.
- Hur, J., & Hara, N. (2006). *Fostering online communities for K-12 teacher professional development*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

- Essex, C. Hur, J., & Millard, M. (2005). *Digital video production at the postsecondary level: Supporting college faculty initiatives*. Paper presented at the Association for Educational Communications and Technology annual meeting, Orlando, FL.
- Hur, J. & Essex, C. (2005). *Building an online virtual community of K-12 educators in Korea*. Paper presented at the Association for Educational Communications and Technology annual meeting, Orlando, FL.
- Kale, U. & Hur, J., & Dysard, G. (2005). *Increasing Teachers' Participation in an Online Forum*. Paper presented at the Association for Educational Communications and Technology annual meeting, Orlando, FL.
- Hur, J., Brush, T., Kim, K.J., Tan, A., Dysard, G. Liu, X. Feng, Y., Kale, U., Chen, L. & Saye, J. (2005). *Online forum: a tool that can foster teachers' collaborative reflection*. Paper presented at the annual meeting of the Society for Information Technology and Teacher Education, Phoenix, AZ.
- Kew, F. H., Hur, J., Jang, H., & Tian, L. (2004). *The eight events of instruction: An instructional method based on the constructivist paradigm*. Paper presented at the annual meeting of the Society for Information Technology and Teacher Education, Atlanta, GA.
- Hur, J., Kim, K., & Lee, S. (2001). *A design of mathematics diagnosis system*. Paper presented at the spring conference of Korea Information Science Society, Kyung-gi-do, Korea.
- Hur, J. & Kim, K. (2000). *A Design of MAX (Mathematics Analysis system based on XML)*. Paper presented at the summer conference of Korea Association of Information Education, Gong-ju, Korea.
- Yeum, Y., Hur, J., & Kim, K. (2000). *A Design of EMC DTD (Elementary Mathematics Contents Document Type Definition) for making XML document*. Paper presented at the summer conference of Korea Association of Information Education, Gong-ju, Korea.
- Kim, H. , Hur, J., & Kim, K. (2000). *A Design of web-based instructional model for mathematics*. Paper presented at the spring conference of Korea Information Science Society, Seoul, Korea.

- Hur, J., Kim, H., & Kim, K. (2000). *A Design of DAP (Diagnosis, Analysis, Problems Providers) model to support self-directed learning*. Paper presented at the winter conference of Korea Association of Information Education, Che-ju-do, Korea

WORKSHOPS

- Podcasts, Blogs and Wikis: New Tools for Education: Presented information about a wiki, March 2006
- iLife '06 for Educators: New Features, New Functions: Demonstrated new features of iMovie and iDVD. April 2006
- R341, Multimedia in Instructional Technology: Presented multimedia projects that Instructional Consulting office provided. October 2005

AWARDS

- Larson Award, April 2007
Awarded for presenting research findings at the 2007 AERA & AECT conference
- Sponsored student to attend the AECT symposium, June 2006
Invited to the symposium, Bloomington, Indiana University
- Honorable Mention Award 2004
Awarded for customer service, professionalism and dedication in the job as a UITS consultant. Student Technology Consulting, Indiana University
- Outstanding Trainee Award 2002
Elementary English teaching method training
Seoul Education Training Institute
- Graduate school scholarship 1999-2001
- Excellent Educational Material Award 1998
Won educational materials design contest
Gang-seo district officer of Education, Seoul, Korea
- University scholarship 1994-1997

COMPUTER SKILLS

- Graphic design : Photoshop CS2 , Illustrator CS2, Fireworks 8
- Website design : Dreamweaver 8, Frontpage 2003
- Digital video production : iMovie HD 6, FinalCut pro HD
- Animation production: Flash 8
- Application software : Microsoft office (Word, Excel, PowerPoint, Access), SPSS 14
- Programming (HTML, XML, Visual Basic, Perl)
- Operating System: Windows XP , Macintosh, UNIX

SERVICE**Graphic design**

- Volunteer graphic designer for the book:
Januszewski, A. and Molenda, M. (Ed's). *Educational Technology: A Definition with Commentary*. Mahwah, NJ: Lawrence Erlbaum Associates and Association for Educational Communications and Technology

Conference Proposal Reviews

- Reviewer, (Division K: teaching and teacher education – section 7 and section 9) proposals for Annual Meeting of the American Educational Research Association (AERA), Chicago, IL, 2007
- Reviewer, (teacher education division) proposals for Annual Meeting of the Association for Educational Communications and Technology (AECT), Dallas, TX, 2006

Judging

- Judge for the International Student Media Festival 2005, 2006 AECT conference

PROFESSIONAL AFFILIATIONS

- Association for Educational Communications and Technology (AECT)
- American Educational Research Association (AERA)
- Society for Information Technology in Teacher Education (SITE)

COMMUNITY SERVICE

- Treasurer, Korean percussion ensemble, IU samulnori 2004- present
- Korea Boy Scouts leader 2000-2003
- Korea Girl Scouts leader 1998-2003
- A member of Red Cross in Seoul National University of Education (SNUE) 1997
- President of Department of Elementary Science Education, SNUE 1996
- Student Council member at Seoul Nation University of Education, 1995