

Teachers' Perceptions of a Learning Community

Na-Young Kwon

PhD Candidate, Mathematics and Science Education, University of Georgia,

Athens, Georgia, USA rykwon@uga.edu

Abstract

The purposes of this research were to understand the development of a professional learning community, to understand teachers and teacher educators in the context of community, and to help research on professional development using communities and a partnership between schools and a university. In particular, this paper aims to discuss teachers' perceptions of a learning community. This study was conducted as part of Partnerships in Reform in Mathematics Education (PRIME) 2005-2006, an NSF-funded professional development effort related to high school mathematics teachers in North East Georgia. A mathematics learning community consisting of three student teachers, three mentor teachers, and one university teacher in Norris High School met weekly and discussed pre-service teachers' teaching or their students' work during the 2006 field experience period. Data sources included observations, interviews, and written documents such as surveys and e-mail responses. The data were analyzed to examine how participant teachers perceived the learning community in which they worked together. The result showed that participant teachers showed different perceptions of their learning community by the group of teachers. By investigating teachers' perceptions about the context of professional development, this study can help the research and design of teachers' professional development.

Introduction

“Without professional development, school reform and improved achievement for all students will not happen (American Federation of Teachers, 2002, p.2).” With the increased recognition of teacher professional development, it is essential to understand how and what teachers learn from professional development activities. As one of the key elements, the context of communities has lately attracted attention from researchers and teacher educators. Grossman, Wineburg, and Woolworth (2001) found that teacher community offered an ongoing venue for teacher learning. Research on teacher community provides information about teacher learning so that teacher educators can design more effective professional development activities.

Studies about various “communities” are increasing in teacher education. In contrast to the traditional belief that teachers work individually, collegiality and collaboration are now emphasized so that researchers attempt to investigate the context of groups or communities in research on teachers. In spite of rising interest in professional learning communities, there is little empirical research about such communities and their members' learning in mathematics education. Therefore, this research focuses on a learning community in the area of mathematics

teacher development.

Briefly, I define a professional learning community as having the purpose of members' professional development through shared activities in regular meetings. In this research, I examine a learning community using a partnership between schools and a university to improve a professional learning community asking the question of how participant teachers perceived the learning community in which they worked together.

Wenger (1998) described the notion of "community of practice" within the broader context of learning. He considered a community as a component characterized by social participation for learning. He described the community as "a way of talking about the social configurations in which our enterprises are defined as worth pursuing and our participation is recognizable as competence" (p.5). The community that Wenger (1998) discussed is not merely an aggregate of people defined by some feature. Mutual engagement organized by members, a joint enterprise as a result of collective negotiation, and the development of shared resources among members are significant characteristics necessary to create the community of practice. He thought that people participate in various communities of practice; thus the community of practice is an important concept for learning because of its ability to initiate meaningful experience. Although there has been much research on individual teacher learning from psychological perspectives, according to Stein and Brown (1997), educators need to consider a sociocultural perspective, not to compete with psychological perspectives but to assist in understanding teachers' change. I would like to understand the process of teachers' learning and the development of teachers' community from the perspective of community of practice.

Grossman, Wineburg, and Woolworth (2001) proposed a model of teacher community through a professional development project. They used the definition of community of Bellan, Madsen, Sullivan, Swidler, & Tipton (1985): "a group of people who are socially interdependent, who participate together in discussion and decision making, and who share certain practices that both define the community and are nurtured by it" (p.333). By creating a community of teacher learners from two departments of history and English in a high school, Grossman and her colleagues attempted to discuss how a group of teachers form a community. They provided a schematic of community formation and of the growth of its members in four dimensions: (1) the formation of group identity and norms for interaction, (2) the navigation of fault lines, (3) negotiating the essential tension, and (4) the willingness of its members to share responsibility for colleagues' development. Grossman et al.'s study fully investigated the teachers' community evolution including both individual growth and community formation. They created a model of how teachers would develop in a teachers' professional community from the beginning to the mature stage. Based on this model, I investigated participant teachers' perceptions about their community.

Methodology

The project, Partnerships in Reform in Mathematics Education (PRIME), is a professional development effort related to high school mathematics teachers in the northeast Georgia region. From 2005 to 2006, PRIME aimed to build a learning community and to promote partnerships through interactions among in-service teachers, pre-service teachers, and university supervisors. With a cooperative effort between a university and local schools, PRIME researchers attempted to understand the role of professional learning communities in the professional growth of teachers who work with student teachers and to look at the construct of mathematical knowledge for teaching within the learning communities. For the purpose of the project, PRIME called the in-service teachers *mentor teachers*, pre-service teachers *student teachers*, and supervisors *university teachers*.

This study focused on a learning community including three mentor teachers from Norris High School, three student teachers and a university teacher from a university. All seven teachers met every Friday after school by their preference, and I always joined the cluster meetings as a researcher. In the cluster meetings, the members generally discussed student teachers' work or questions for one hour approximately. All the student teachers brought out copies of their work at each meeting and discussed what and how they did in class and how their students responded. The mentor teachers, university teacher, and I commented on the work or expressed our ideas about teaching and learning mathematics in the meetings. Student teachers also commented on each other's work.

Data sources included observations, interviews, and written documents such as surveys and e-mail responses. The data were analyzed using qualitative case studies and narrative analysis methods.

Findings

How do the members perceive their cluster meetings differently?

Professional learning community for student teachers: All the student teachers considered the cluster meeting itself a professional learning community. Although two student teachers said that the meetings were required for student teaching, they perceived the cluster meeting as a professional learning community consisting of mentor teachers, student teachers, and university teachers, having the activities of discussing teaching and learning mathematics for a shared vision, and having regular meetings. From the student teachers' perspectives, the cluster meeting was a professional learning community of the same professions, a shared leadership, and a shared vision.

According to Grossman, Wineburg, and Woolworth (2001), as a teachers' professional

community starts to form, individuals act as if they have a *pseudocommunity*—having shared values and common beliefs in the community. In Grossman et al.’s study, the pseudocommunity eventually showed conflicts of different tensions, knowledge, and beliefs. In the present study, however, the student teachers did not show those conflicts. Instead, they created a shared vision for their entire field experience by negotiating what they would do and how, and discussing teaching and learning mathematics in the cluster meetings. Thus, they may have passed over this stage of *pseudocommunity*.

According to Grossman et al.’s model of the formation of teacher professional community, the cluster meetings described by the student teachers in the present study are close to a mature level in the formation of group identity. Grossman and his colleagues’ study was conducted only for inservice teachers whereas this study included diverse members such as student teachers, mentor teachers, and university teachers. This difference in member organization may have prompted student teachers to have a clear identification of all the subgroups within the whole group: student teachers, mentor teachers and university teachers. This result implies that various groups of members help the formation of identity in a community.

Pseudo learning community for mentor teachers: Mentor teachers’ perceptions of their cluster meetings stayed in the stage of *pseudocommunity* that Grossman et al. discussed. The mentor teachers perceived the cluster meetings as having the goals of developing mentor teachers and student teachers and of discussing teaching and learning mathematics in regular meetings. Unlike the student teachers, they identified only student teachers and mentor teachers themselves as members of the cluster meetings. This means that they did not understand and were unable to identify all subgroups of the cluster meetings. As a mentor teacher stated, the cluster meetings were in the process of becoming a professional learning community. To summarize, mentor teachers’ perceptions of cluster meetings were evolving, but had not arrived at a mature level in the formation of group identity yet.

The mentor teachers’ response about who led in the cluster meetings was different from the student teachers’ response. The mentor teachers believed that the cluster meetings were led by the university teacher who designed the meetings, rather than by the members themselves. As time went by, the mentor teachers felt that they needed play more of a leadership role in the cluster meetings whereas the student teachers believed that they did play a leadership role. The mentor teachers suggested that they needed more open discussion about the agenda and norms. This shows the stage of *pseudo learning community*.

Early pseudo learning community for a university teacher: The university teacher perceived the cluster meetings as being in the early stage of a pseudo learning community. Grossman et al. (2001) discussed the lack of agreement over purposes in the beginning stage of the teacher professional community model. In the present study, like other members, the university teacher,

Gabby, also believed that the cluster meetings could be a professional learning community. However, since the cluster meetings had broad goals, Gabby thought that cluster meeting had not yet formed a professional learning community. She also disagreed with the “shared” vision that student teachers said they had. For her, there was a lack of discussion about vision and goals in this community. Moreover, she recognized herself as an outsider in this community because she believed that she was not a member of Norris High School. She perceived the cluster meetings as part of the school community. This expanded perception occurred only to her.

On the other hand, the university teacher perceived the community was in an evolving stage concerning the members’ contribution. She emphasized members’ activities and contributions in the cluster meetings. Among the members, it was she who most clearly talked about what the members did in the cluster meetings, who was there, and why she was there. When she talked about comparing last year’s cluster meetings with this year’s, she addressed the issues of differences in the number of members, personality, and contributions of individual members. She was aware of individual members’ contributions to the community and of her own learning from the members. According to Grossman et al, Gabby’s perception about members’ contribution was in an evolving stage.

Since the university teacher showed characteristics of being in both the beginning and the evolving stages that Grossman et al. (2001) discussed in perceiving the cluster meetings, I regard her perception of the cluster meetings as the early stage of pseudo learning community. The Grossman et al.’s model did not discuss this stage specifically; however, the present study showed an example of the early stage of pseudo learning community.

Conclusion

I believe that a community and its members are integrated, and the change of members shifts the community. In this study, the members showed different perceptions depending on their different levels of participation. The different perceptions can be evidence of changes of the community. For example, the university teacher perceived the cluster meetings as an early pseudo learning community, the mentor teachers perceived them as a pseudo learning community, and the student teachers perceived them as a professional learning community. The learning community in this study was in an evolving stage in general although the members’ recognitions of group identity or responsibility were different. The members’ perceptions on the community may not directly indicate the members’ changes in their practice. However, the perceptions imply a shift in their future practice in the community.

Sowder (2007) stated that the creation of teachers’ communities is intrinsically more difficult than the creation of communities of other professions because participation is voluntary.

However, participant teachers in this study acknowledged the need of finding professional

communities to improve their knowledge and practice in mathematics teaching. In this study, participant teachers experienced both how they could build a professional learning community and what they would need for a better community. From this experience, they were able to understand the possibility of change and then shifted their participation. This implies that professional development programs should make teachers take part in the programs themselves not just observe what others do. They should also have teachers reflect on their practice during and after the programs. In this sense, professional development designers should consider following up activities with on-site programs.

This study gave information about how a teachers' community can be formed and be perceived by its members. However, this teachers' community was a very special form of professional development, and there exist many other forms of teachers' communities inside and outside of schools. Further research on various forms of teachers' communities is needed to understand teachers' communities and teachers as members of those communities so that professional developers can use the research results for on-going teachers' development.

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