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# Table of Contents

<b>COMMENTS FROM THE EDITOR</b> .....	1
Angela T. Barlow, <i>Middle Tennessee State University Murfreesboro, Tennessee</i>	
<b>LEARNING TO LEAD PROFESSIONAL LEARNING COMMUNITIES IN MATHEMATICS</b> .....	2
Karin Brodie, Nicholas Molefe, Flouencia Lourens <i>School of Education, University of the Witwatersrand, Johannesburg</i>	
<b>ESTABLISHING A COMMUNITY OF PRACTICE FOR COOPERATING TEACHERS</b> .....	12
Theresa Gurl, Ph.D., <i>Queens College of the City University of New York</i>	
<b>PROFESSIONAL DEVELOPMENT MODELS AT SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS (STEM) FOCUSED HIGH SCHOOLS</b> .....	22
Catherine Scott, Ph.D., <i>University of North Carolina at Chapel Hill</i>	
<b>TEACHERS' PERCEPTIONS OF OBSERVING REFORM-ORIENTED DEMONSTRATION LESSONS</b> .....	35
Angela T. Barlow, <i>Middle Tennessee State University</i> Sydney M. Holbert, <i>Mississippi College</i>	
<b>DEEPENING TEACHERS' UNDERSTANDINGS OF MATHEMATICAL AND PEDAGOGICAL CONNECTEDNESS: THE WALK-ACROSS TASK</b> .....	50
Gabriel Matney, <i>Bowling Green State University</i>	
<b>INFORMATION FOR REVIEWERS</b> .....	60
<b>NCSM MEMBERSHIP/ORDER FORM</b> .....	61

## Establishing a Community of Practice for Cooperating Teachers

Theresa Gurl, Ph.D.

*Queens College of the City University of New York*

**S**tudent teaching experiences in the field are often considered the most influential aspect of teacher preparation. Due to recent calls for residency programs, these experiences are likely to become more intensive, with a greater portion of teacher training taking place in schools (Duncan, 2009; Shulman, 2005). Often, student teaching placements can be inconsistent in quality and sometimes counterproductive (Field, 1994), with much of the onus of working with student teachers in the field placed on cooperating teachers (also known as mentor teachers), with varying requirements and varying amounts of training, if any. This suggests that cooperating teachers need training and support in order to improve their interactions with and impact on their student teachers. Communities of practice have been seen as a successful approach to the preparation of teachers (Levine, 2010). The premise underpinning this study is that many of the tasks cooperating teachers undertake with their student teachers are indeed the practice of a form of teaching (i.e., teaching future teachers) that needs to be learned, and that cooperating teachers would benefit from reflective inquiry within a community of practice. *Teacher learning* for the purpose of this study is defined as the cooperating teachers learning how to work with and develop student teachers.

The benefits of learning to teach in a community are echoed by many researchers (Frykholm, 1998; Loucks-Horsley, Stiles, & Hewson 1996; Stigler & Hiebert, 1999). Loucks-Horsley and colleagues stated, “Collegiality and collaborative professional exchanges [should be] valued and promoted. Too often, teaching is a lonely and insulated

profession. Teachers need to support each other and enrich each other’s work” (p. 2). A review of literature revealed only minimal evidence of the formation of communities of practice consisting only of cooperating teachers (Arnold, 2002).

The present study explored the establishment of a community of practice among a group of cooperating teachers in secondary mathematics. In particular, this study examined the interactions among the cooperating teachers with the goals of (1) examining the development of the community among the cooperating teachers; (2) gaining insight into the working relationship between the cooperating teachers and their student teachers, particularly, how cooperating teachers connected what student teachers learned in their on-campus programs and the realities of working with students in the classroom; and (3) determining what the cooperating teachers believed they needed in order to be successful in working with their student teachers. With these goals in mind, the research questions that guided this study were:

1. How does a community of practice develop among a group of cooperating teachers in secondary mathematics?
2. How do the cooperating teachers describe the working relationship with their student teachers?
3. What do cooperating teachers in secondary mathematics believe that they need in order to successfully work with student teachers?

This paper first provides background literature for the study, describes the procedure and participants, and then shares and discusses the findings of the study, including the establishment of the community among the participants, description of the nature of the participants' interactions with student teachers, and what the participants believed they need in order to be successful. Recommendations are made based on the findings.

## Background

The typical preservice teacher education program culminates with a student teaching internship (Veal & Rikard, 1998), in which preservice teachers work closely with inservice teachers in the classroom, often taking full responsibility for a class. Teachers have considered the student teaching internship to have been the most helpful phase of their preservice teacher education programs, and it is often viewed as a rite of passage (Koerner, 1992; Graham, 2006). The student teaching site and the cooperating teacher with whom a student teacher works are recognized as critical components of the success of the internship experience. The characteristics of an effective cooperating teacher, however, have been difficult to ascertain. Furthermore, it has been noted the role of the cooperating teacher is not well understood (Graham, 2006).

Research has begun to reveal various practices of effective cooperating teachers. One practice consistently identified is that the most effective cooperating teachers do not require student teachers to emulate their own teaching practices, but rather encourage student teachers to be independent and take varying approaches to instruction (Graham, 2006; Killian & Wilkins, 2009). Graham (2006) made particular note of the "importance of cooperating teachers conceptualizing their role as one of providing a scaffold for teacher candidates during the practice rather than as one of supervising the intern" (p. 1120). Moreover, the approach taken by cooperating teacher may have a sustained effect long after the student teaching internship is completed, since cooperating teachers have the opportunity to encourage a student-centered approach in the classroom (Peterson & Williams, 2008).

There are often problems within the mentoring relationships, including conversations dominated by the cooperating teacher, lack of open discourse, and a failure to acknowledge differences between university and school perspectives (Haggarty, 1995). Some have suggested that student teachers be introduced to a variety of mentoring

styles and asked to consider how they might learn from each style so as to allow for a better match (Hawkey, 1998). All of the above conclusions point to the necessity for greater understanding of the relationship and interactions between cooperating teachers and student teachers.

Hammerness and colleagues (2005) discussed that communities of practice are not a new idea, noting that the idea can be traced back to scholars such as John Dewey. They also emphasized the value of a community of practice in "developing and transmitting knowledge from practice to research and back again" (Hammerness et al., 2005, p. 383). This notion can be particularly key when working with student teachers, who, under the influence of their university preparation programs, are often attempting to integrate the theoretical standpoint of their university programs into their teaching.

Frykholm (1998) advocated for communities of learning for preservice teachers in which cooperating teachers and preservice teachers have "the opportunity to grapple together with the deep and perplexing challenges of mathematics teaching" (p. 306). He also noted the importance of community and reflection in the process of learning to teach. The present paper asserts that cooperating teachers as a group would benefit similarly from participation in a community of practice as they develop the practice of working with student teachers. This is particularly salient given the problem that cooperating teachers are asked to carry out the responsibilities of educating preservice teachers while also maintaining the full responsibilities of their teaching jobs, often with the idea that they are simply required to provide a place for student teachers to practice with little or no preparation (Zeichner, 2010).

## Methodology

### RESEARCH CONTEXT

This qualitative study was conducted during the spring 2009 and spring 2010 semesters at a large urban northeastern public university, which serves a highly diverse student population, more than half of whom are members of minority groups. During these semesters, the cooperating teachers were actively working with student teachers preparing to be secondary mathematics teachers.

### PARTICIPANTS

The participants in this study were secondary mathematics teachers serving as cooperating teachers for the aforemen-

tioned student teachers. The participants were located at two different schools. Table 1 provides the teachers by school along with the semester(s) in which the participants engaged in the community of practice and the number of previously supervised student teachers.

As described by Levine (2010), a community of practice allows for the learning and development of shared practice over time, as well as the transmission of the practice with newcomers to the community. The participants had varying levels of experience with working with student teachers, and allowed for the least experienced participants to gain insight and suggestions from the more experienced participants. In this way, the participants somewhat fit Levine’s (2010) description of “old timers’ [who] support newcomers who are on a trajectory into skilled participation in the practices of teaching” (p. 121), where *teaching* for the purposes of this study is the mentoring and cultivation of student teachers. Although there were no participants in this study who had enough experience to be considered *old timers*, there were participants with varying levels of experience involved in the study.

Table 1. Participants by school

	Adams School	Franklin School
Spring 2009	Lisa (1) Julia (1)	John (0) Caroline (0)
Spring 2010	Julia (2)	John (1) Caroline (1) Gwen (0)

Note: All names are pseudonyms used to protect the identity of the schools and the teachers.

It should also be noted that although the participants all came from the same undergraduate preparation program for secondary mathematics teachers, as did the student teachers with whom they worked, the participants from the two different schools did not know each other. The commonality of undergraduate experience was mentioned as being beneficial to the participants since they were familiar with the programmatic philosophy and student teaching requirements for the student teachers.

## PROCEDURES

To develop a community to support the participants and to provide them with a forum for sharing ideas, the researcher initially planned to meet with the participants

via online meetings. The participants later expressed that they would prefer face-to-face meetings. The problems with online meetings will be discussed in greater detail in the Results section. During the spring 2009 semester, online discussions, interviews, and one face-to-face meeting at the end of the semester with four participants (i.e., two participants from Adams and two from Franklin) occurred. During the spring 2010 semester, three face-to-face meetings took place with four participants (i.e., one participant from Adams and three from Franklin). A total of four face-to-face meetings were held over the course of two semesters.

## MEETING STRUCTURE

All of the meetings took the form of semi-structured group interviews. The questions that guided the interviews and group discussion were as follows:

1. Describe what, in general you felt was successful about working with this student teacher.
2. In what two areas do you feel she made the most growth? How do you feel that you contributed to this growth?
3. In what two areas do you feel she made the least growth, and still needs to work? Do you feel that you attempted to work with her in these areas? Was she receptive?
4. What support would you like to have from the college in order to be a successful cooperating teacher?
5. What support would you like to have from your school in order to be a successful cooperating teacher?
6. What problems do you anticipate will arise as you help teachers fully implement standards-based lessons and teaching? What might you need to learn more about in order to address these problems?
7. How are you working with the student teacher to meet the requirements and philosophy of the program?

These questions were used as a guide, but other issues were brought up by the participants, as was encouraged by the researcher in the interest of building a community. The researcher acted mainly as a facilitator during the meetings, and when a participant raised questions,

responses came from other participants in the group, not the researcher. This format allowed the researcher to engage in ethnographic observation of the workings of the group. The researcher took field notes during meetings.

### ROLE OF THE RESEARCHER

The researcher served as university supervisor for the student teachers working with the cooperating teachers in the study. As such, the researcher was required to observe each student teacher a total of four times over the course of the semester. In addition, the researcher served as the facilitator of the participants' meetings. These meetings were structured around a set of interview questions provided by the facilitator.

### Data Analysis

The qualitative data collected in this study were analyzed using constant comparative methods as described by Charmaz (2006), specifically, initial incident-by-incident coding with subsequent focused coding as various themes emerged from the data. The initial codes that emerged from the data were:

- wanting to know what the student teachers need in order to be successful;
- wanting to help the student teachers;
- an effort to incorporate the programmatic requirements of the program;
- a desire to share ideas among the group; and
- the benefits they felt they received from working with a student teacher.

The following themes emerged from focused coding of the data:

- a variety of ways to give feedback to the student teachers;
- classroom management was more important to a successful student teaching experience than content knowledge;
- conflict with the philosophy of the teacher education program and the realities of day-to-day teaching;
- a reminder of the idealism they themselves had as student/novice teachers;

- grateful to hear ideas from other members of the group;
- agreement that online discussion was not productive;
- wanting a guide for interactions with student teachers;
- wanting student teachers to be receptive to their feedback; and
- indication of what support they feel they need to successfully work with student teachers.

Data analysis concluded with a categorization of the coded text by research question. The results and discussion follow.

### Results

The results of this study will proceed by discussion of the results for each research question. Specific text that supports the results will be shared.

### THE EMERGENCE OF A COMMUNITY OF PRACTICE

As mentioned previously, in an effort not to burden the participants with face-to-face meetings, the initial plan was to conduct discussions online. An online group was formed and the researcher posted questions that were intended to prompt discussion. There was a mixed level of response to the questions. Some of the participants needed to be sent the questions several times, although all eventually responded meaningfully. The participants, however, did not initiate discussion on their own, and in only one case posted a question to the rest of the group. Later in the semester, the researcher interviewed each of the participants, who mostly indicated that they did not like the online structure. Lisa described the online group as "tough" and John stated, "I am not that good online." Lisa continued, "There is a big benefit to one-on-one, face-to-face conversations. I think they are more real time and interactive than they are online." In a separate interview, Julie expressed a similar sentiment:

[Face-to-face meetings] are more beneficial because everyone gets to discuss the current topic instead of waiting two weeks for someone to respond to something. You're like 'What was the question? What were we talking about?' I think we would benefit more from meetings than on-line. We would get more out of it.

As a result, the researcher made the decision to have an in-person meeting with all of the participants at the end of the spring 2009 semester. This meeting as well as those that occurred during the spring 2010 semester took the



form of semi-structured group interviews. Discussion during these meetings offered evidence of the emergence of a community of practice among the participants.

The researcher utilized the semi-structured group interview questions to facilitate the group meetings. At each meeting, participants shared the techniques and approaches that they used to plan with the student teachers and provide feedback to the student teachers about their teaching. Participants asked each other questions, and provided constructive feedback to each other. In one case, Julia and Caroline shared the different ways in which they provided feedback to their respective student teachers. Julia sat in the back of the classroom and took copious notes that she would share with her student teacher. The notes might have different foci on different days. For example, one day they might focus on board work. The next, they might focus on questioning and discourse. In contrast, Caroline described sitting with a group of students to see how they responded to and interpreted the actions of the student teacher. After hearing Julia's feedback process, Caroline thought that she might be not providing her student teacher with quality feedback. After some discussion, however, the group determined that both participants were both providing valuable feedback using different styles. Julia and Caroline both determined that they would try each other's approach in the future. In addition, Gwen, who was serving as a cooperating teacher for the first time, indicated that she planned on using ideas from both of these participants in order to provide feedback to her student teacher, evidencing Levine's (2010) notion of transmitting knowledge to newcomers in the community.

### **INTERACTIONS WITH THE STUDENT TEACHERS**

Over the course of several meetings, the participants discussed the benefits they felt they reaped as a result of interacting with a student teacher. Caroline mentioned that although she hoped that the experience was beneficial to the student teacher, it was beneficial to her as well due to the advantages of collaboration. John indicated that working with a student teacher reminded him of some the ideas he had as a new teacher.

It's really beneficial for me because I forgot a lot of things that I came [to teaching with] when I was a first year teacher. I had so many ideas and I had so many things going on, and I forgot them because you know, you get into 'your own thing.' And now, when [my student teacher] came [to my classroom] with all these

ideas, and I remember, I had these ideas, why don't I apply them too? So I am applying things that I always had in mind also, but now that I have more classroom management experience and better things like more strategies at hand now I can apply those ideas that I had before. So it's really beneficial for me, too.

Julia and Lisa reported a similar experience. Julia shared, "I think, like John said, they bring these ideas that we probably had our first year as well, like I DO remember that, and they do bring out that creative side of us too." Other participants agreed, indicating that working with a student teacher is "reenergizing and reinspiring." Julia felt that it "put that little fire back in us to say 'wow, I remember that.'"

The participants agreed that it was advantageous that they all came from the same undergraduate preparation program, noting that they remember "what [the student teachers] are going through." This idealism, however, was tempered by a realism that they tried to impart during interactions with the student teachers. As Julia described in the first meeting during the spring 2010 semester,

I know that the [undergraduate] program encourages, you know, student-student interaction and all those things. But I don't think we are there yet . . . As far as short term, I think she needs to take more control of the classroom setting, and then think about implementing these great ideas. Because, you know, I told her, it's heartbreaking when you spend this quality time on this awesome lesson, and only you will appreciate it. Because when you come in these kids could not care less about what you are trying to teach them.

In addition to, and perhaps in conflict with the inspiration to remember some of the ideas and ideals with which they entered the profession, the participants indicated an ongoing conflict with what they and their student teachers had learned in their education program and the reality of working in the classroom. Participants also reported a loyalty to the program from which they graduated. Julia voiced her concerns by stating, "It's always in the back of your mind, you don't want to disappoint [the professor]. What would she say if she walked in right now?" This concern was not only in reference to their work with student teachers, but was a reflection on their own teaching practices.

Observations of the student teachers by university supervisors took place four times for each of the student teachers.

When asked during the middle of the semester whether the observed lessons were different from the day-to-day lessons, the participants agreed with Julia's comment: "Yes. Everytime we talk about . . . an observation, it's not what we talk about every day. We do make it what you guys want to hear." The participants also admitted that, if the lesson that fell on an observation day did not lend itself to innovative teaching, they changed the order of the lessons so that they could help the student teacher incorporate some of the techniques that they felt that the university supervisor "expected" the student teachers to incorporate into their teaching. Gwen shared,

I think that . . . the message they need here [is] that in a perfect world that you can do all of this every single day, but it is understandable if you don't. I think that is the part that is not really getting to student teachers in general.

Gwen is referring to cooperative learning, real-life applications, and other innovative mathematics teaching strategies.

By the end of the semester, planning for observed lessons seemed to have changed.

*Julia:* It's like a term paper. You have a rough draft and your final submission. They're going to give you [the observer] their final submission. We talk about the lesson plan, we tweak it, we tweak it and we tweak it [to a greater extent that "regular" days].

*Gwen:* I think it's pretty much what is going on now, and that is great. She might be a little bit more upbeat, but . . . that's probably the only difference. The prepared work is the same.

*John:* It's obviously going to change. We [as classroom teachers] do it all the time [when an administrator enters the classroom].

*Caroline:* It's pretty much the same. We might try to fit a little more into an observation but mostly the same amount of planning goes into each lesson. . . . Its really the same thing that goes on daily.

#### **WHAT COOPERATING TEACHERS WANT AND NEED**

**Student teacher qualities.** Consistently, and within individual and group interviews, all participants expressed that they expected the student teachers to be receptive to their suggestions and constructive criticism. This seemed to be

the most consistent comment from all of the cooperating teachers over both semesters of this study. Defensiveness and not being receptive to suggestions were the most undesirable qualities in a student teacher. Further, there was some evidence that the attitude of the student teacher impacted the attitude of the participant, and not vice versa. Lisa described how the positive attitude of her current student teacher "rubbed off" on her, in contrast to the poor attitude of a student teacher with whom she had worked in the past.

You see that [teaching] is in them, it's what they want to do. And so, because of that, they you want to put more into it too. When you get someone like we had last year, it's so hard to be enthusiastic with that type of person but this year it's very easy to see them and say 'yeah, what are we doing tomorrow, what are we doing today. Let's look at that lesson plan for next week' or whatever. So, just their attitude and approach is very encouraging.

Additionally, the other qualities that were desirable in student teachers were being a hard worker, taking initiative, and being punctual.

**Support from the district and university.** The participants reported that they wanted more time to meet with their student teachers. The participants from Adams School, where teachers were required to have a duty (e.g., hall or cafeteria duty), suggested that working with a student teacher fulfill the semester requirement for a duty, although they acknowledged that this was unlikely to happen. Lack of time for meeting with student teachers resulted in participants communicating with their student teachers via text messaging, email, and telephone.

The support participants reported wanting from the university involved structure and guidance for their interactions with their student teachers. John described the support needed.

Maybe the expectations that I should have for her. Not too structured because I believe in giving freedom to the student teacher, if it is a good student teacher. If she is always prepared and has good ideas I believe in giving freedom. . . . But something like . . . what I should look for.

The notion of "what should we look for" was something that was often discussed by each of the participants. They discussed being able to pick apart a lesson and being able



to find “everything” wrong with it, but not wanting to overwhelm the student teacher with too many suggestions at once. They suggested a written guide to structure the interactions with their student teachers, with expectations and benchmarks so they could see that their student teacher was making progress.

## Discussion

The need to transmit knowledge of practice to newcomers in the community is evidenced by the lack of training and protocol for interactions between student teachers and cooperating teachers. For better or worse, teachers generally come into the profession with an image of what it means to be a teacher, gleaned from the many years logged in classrooms as students of various levels, often known as the “apprenticeship of observation” (Lortie, 1975). Cooperating teachers, having themselves only been student teachers for one semester in most cases, do not seem to have an internalized image to build upon for their practice of working with student teachers. Lisa shared, “I didn’t have a very structured student teaching experience. I wasn’t sure what I could provide for my student teacher.” Gwen agreed.

I feel like I don’t know what it is like to be a cooperating teacher. I was a student teacher *once*, so I can only tell you what happened with my cooperating teacher, but I don’t know what it is supposed to be like.

It is evident that the participants involved in this study benefited, both from being cooperating teachers and from being involved in the community of practice. The community gave the participants an opportunity to develop an image of what student teaching should be, and the benefit of working with others with whom they could share ideas, concerns, and different approaches to working with student teachers. This suggests that such communities for cooperating teachers should continue to be examined and developed on a wider scale.

Although the participants all stated that they liked the semi-structured nature of the meetings, it was unclear what the participants might have discussed without the structure of interview questions and without the presence of a facilitator, particularly a facilitator who had additional roles of researcher and university supervisor. Some of the important discussion was sparked by the interview questions, but some was sparked by the related topics that the participants brought up themselves. Without the presence

of a facilitator, it might be necessary to have a more experienced member of the group become a leader, so that the conversation stays on topic, and does not simply become only an opportunity for venting about their difficulties. This role might rotate among the members of the community so that responsibilities are shared. Further, the group, not just the facilitator, might generate the questions for discussion either at the beginning of the meeting, or remotely before the meeting, perhaps via email. Part of the responsibilities of the group leader could also include scheduling the meetings, so that meetings do, in fact, take place.

The participants indicated that working with student teachers “reenergized” their teaching, but at the same time, indicated that they were having difficulty reconciling what they perceived to be the idealism of the university program and the reality of the classroom and the students with whom they worked. This issue suggests that cooperating teachers lose some of their idealism as they partake in the teaching environment. Simultaneously, cooperating teachers need help in creating a focus for their student teachers. At times, it seemed that the participants needed permission to focus less on alternative approaches to teaching with their student teachers (e.g., cooperative learning) and work on what they seemed to perceive as the prerequisites to such approaches, such as classroom management and development of discourse.

The participants indicated that they wanted some type of written guide for their work with their student teachers, beyond the general information provided by the college. A guide might include weekly goals, as well as long-term goals upon which the pairs could focus. Further, the participants indicated that they wanted a variety of suggestions for providing feedback for the student teachers, as well as what they referred to as “benchmarks” which would allow them to determine the growth of the student teacher.

Participation in the community also allowed a glimpse of the participants’ beliefs about teaching, and the reform approaches recommended by their undergraduate program. Although participants agreed that it was important to try new approaches to teaching, they alluded to the fact that “strategies for teaching” and the establishment of classroom management were necessary before reform strategies are applied in the classroom. According to John, “The first thing I wanted her to do was get control of the classroom. Because after that you can do anything you want.”

The participants in this study exemplified many of the characteristics of effective cooperating teachers discussed earlier. In particular, the participants gave the student teachers a good deal of freedom. It was evident, however, that the participants struggled with how much freedom to give their student teachers, as expressed by John:

I want to give the student teacher a lot of freedom to do what [they want] because when you're going to enter the classroom you're not going to have anyone [to guide you]. So I kind of want to let them go a little bit. I just want to give them the freedom to do whatever they need to do. I don't step up and tell her 'you know you should change this' unless I feel it's like critical for her to do it, you know, unless I feel like a kid is going to fail because of something she's doing. I give her advice . . . and I have conversations with her, but I let her do her own thing. I pretty much give her freedom. But I think . . . sometimes I forget that I am being a mentor and that I should share my experiences with her, like my strategies that I know of and that I don't talk about with anybody, like classroom management strategies or like when you . . . discourse strategies.

Julia agreed, saying:

I know where you're coming from. We talk about our lesson plans at least three days before the lesson. I have found that I'll sometimes look at the lesson plan and . . . I'll feel like the example is okay, but I feel like something is going to happen here. But it's not bad enough that it is going to throw her completely off, so I leave it alone. I've left it alone, and then when we discuss it I say 'so why do you think that happened?' . . . There have been instances where I think 'this may not be the way to go but I am going to leave it this way.' And then it's a learning experience for both of us. Sometimes it didn't even go the way I thought it would and it went well, and it worked out. And sometimes it has gone the way I thought it would go, and we talk about it.

This struggle regarding how much guidance to give the student teachers was a recurrent theme of the discussion among the participants.

## Conclusion

The current inclination to move teacher education into field placements to a greater degree than in the past will put cooperating teachers in the "front lines" of teacher education, a role for which they have often had no formal preparation. The results of this study suggest that the establishment of communities of practice could facilitate the process of integrating new cooperating teachers into the practice of working with student teachers, while allowing the exchange of ideas among more experienced cooperating teachers.

This study provides evidence that cooperating teachers can benefit from working within a community of practice in order to define and improve their practice of working with student teachers, distinct from their practice of working with their own students. Experienced teachers agree to serve as cooperating teachers without a clearly defined image of what their role should be and need more structure and guidance for their work with student teachers. The structure of the community of practice allowed for less experienced cooperating teachers to gain suggestions and feedback from more experienced cooperating teachers.

Schools of education might consider these findings when setting up field placements for student teachers. Creating small groups of cooperating teachers where informal exchange of ideas and suggestions can take place would likely improve the field placements for student teachers. With the recent calls to move teacher preparation into the classrooms of experienced teachers, the experienced teachers serving as cooperating teachers would benefit from participation in such a community, and experienced teachers who are new to the practice of serving as a cooperating teacher would have a support system to facilitate the process of becoming an experienced cooperating teacher.

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