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ABSTRACT

This study is based on a survey of classroom teachers who identified themselves as having served at least once as a cooperating teacher for a student teacher and at least once as a mentor for a beginning teacher in a formal mentoring program for beginning teachers. Analysis of the study data, based on 157 usable surveys and follow-up interviews with 19 teachers, indicated that the roles of cooperating teacher and mentor are important ones for classroom teachers who have served in both capacities--study participants had served in these roles almost 10 times by mid-career. This pattern also suggests that limited extrinsic incentives for cooperating teachers and mentors may be more than offset by intrinsic incentives. These teachers also claimed to understand the roles of cooperating teacher and mentor, and generally felt prepared and supported in carrying them out, in spite of the fact that only about two-thirds of them had received any formal training. Study findings suggested that being a cooperating teacher and a mentor makes a substantial positive difference in the careers of teachers. (Contains 32 references.) (ND)

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ED 408 279

# The Contribution of Service as a Cooperating Teacher and Mentor Teacher to the Professional Development of Teachers

Tom Ganser

University of Wisconsin-Whitewater

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Reactions to this paper are invited.

Tom Ganser, Director
Office of Field Experiences
University of Wisconsin-Whitewater
800 West Main Street
Whitewater, WI 53190
Office: (414) 472-1123
Fax: (414) 472-5716
E-mail: gansert@uwwvax.uww.edu

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# The Contribution of Service as a Cooperating Teacher and Mentor Teacher to the Professional Development of Teachers

Cooperating teachers and mentor teachers are a prominent feature of the landscape of teaching. Serving as a cooperating teacher is the most common additional professional role for hundreds of thousands of teachers (Ganser, 1996) and large numbers of teachers are also being called upon to serve as mentors in formally established mentoring programs (Furtwengler, 1995). As the number of teachers entering the profession increases during the next decade and beyond due to increased student enrollment, a wave of teacher retirements, and continued effort to reduce teacher to pupils ratios, so too will the need for teachers taking on additional responsibilities as cooperating teachers and mentors (Bradley, 1996; Darling-Hammond and Sclan, 1996; United States Department of Education, 1996).

The interest in the roles of cooperating teacher and mentor reflects not only concerns about quality teacher preparation and induction but also interest in how serving in these roles can contribute to the professional development of experienced teachers (Clinard, Ariav, Beeson, Minor, & Dwyer, 1995; Ganser & Wham, in press; Grossman, 1992; Price, 1996; Tauer, 1996). This comes at a time when teacher professional development has gained national attention, evident, for example, in the recent report of the National Commission on Teaching & America's Future (1996),

What Matters Most: Teaching for America's Future.

The on-going, critical re-evaluation of professional development policies and practices has yielded several far-reaching portrayals of what professional development for teachers might look like. For instance, Corcoran (1995) suggests that good starting points for reinvigorated professional development might include: (1) Joint Work and Job Enrichment, (2) Teacher Networks, (3) Collaboration Between Schools and Colleges, (4) Professional Development (or Practice) Schools, (5) National Board Certification, and (6) Teachers as Researchers. A report prepared by the Danforth Working Group on Professional in Education (1995) highlights four national trends that underscore the need to improve dramatically the professional development of educators:

> a new agenda for learning that projects more ambitious goals for all students; the increased diversity of children that impels educators to learn more about their students' backgrounds and lives; the escalating needs of many children in our society that require new responses from schools in collaboration with families and communities; and the ferment around school governance, organization, and management leading to a range of experiments in American education including choice plans, site-based management, and many others. (p. i)

Ironically, results from the same research agenda focusing on how children learn best are being turned to the issues of how

teachers learn best (Danforth Working Group on Professionalism in Education, 1995; Novick, 1996; Sparks, 1996). In this regard, Lieberman and Grolnick (1997) argue:

> The education we want for students--a wide array of learning opportunities, engagement and commitment to inquiry, access to real problems to solve, learning that connects to their prior experiences, opportunities to work with others--can be provided to teachers when they are learners. (p. 193)

That the professional development of teachers is a very important matter is clear when one considers how directly it is linked to other prominent issues, including teacher development (Lieberman, 1996; Sprinthall, Reiman, & Thies-Sprinthall, 1996), teaching as a career (Fessler & Christensen, 1992; Huberman, 1996), teacher leadership (Katzenmeyer & Moller, 1996; Walling, 1994), schools as learning communities (Jenlink, Kinnucan-Welsch, & Odell, 1996), and school reform (Darling-Hammond, 1995; Hargreaves, 1997; Lieberman, 1995).

In brief, investigating how teachers view the impact of serving as a cooperating teacher and mentor on their own professional development is critical, not only because these roles are central to the preparation and induction of teachers but also because understanding teacher development is an essential key to improving schooling.

## Method

### Participants

This study is based on a survey of classroom teachers who

identified themselves as having served at least once as a cooperating teacher for a student teacher and at least once as a mentor for a beginning teacher in a formal mentoring program for beginning teachers. "Formal program" refers to programs sponsored by a school district or by a university. This study is also based on interviews with a portion of the survey respondents.

Survey participants.

Seven school districts in Wisconsin (enrollments under 2,000 to over 100,000) and one university mentoring program were requested to provide the names of teachers who had served as mentors at least once during the 1992-93, 1993-94, and 1994-95 school years. A two-page survey (and a follow-up survey) was subsequently mailed to 230 teachers in March, 1996, and resulted in 157 useable surveys (68.3%); 10 returned surveys were eliminated because they were completed because the respondents had never served as a cooperating teacher or as a mentor.

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Insert Table 1 about here.

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Ninety-four of the 157 respondents (59.9%) self-reported having served as a cooperating teacher and as a mentor. Information about these 94 survey respondents is provided in Table 1; this group is identified as "All respondents."

Interview participants.

Among the 94 survey respondents, 23 indicated a willingness

to participate in a follow-up interview. Interviews were conducted in April, May, or June, 1996, with 19 of these respondents. Information about these 19 respondents is provided in Table 1; this group is identified as "Respondents Interviewed." Information is also provided in Table 1 about the 75 survey respondents who indicated having served as a cooperating teacher and as a mentor but who were not interviewed; this group is identified as "Respondents Not Interviewed."

## Procedures

### Survey procedures.

The survey included several demographic items:

(1) a question asking respondents if they had served as a cooperating teacher and as a mentor,

(2) number of student teachers served,

(3) number of beginning teachers served,

(4) years of teaching experience,

(5) description of teaching assignment,

(6) category of school (rural/small town, suburban, urban),

(7) gender,

(8) age range (up to 29, 30-39, 40-49, 50-59, 60 or more)

(9) formal preparation for serving as a cooperating teacher, if yes, briefly described, and

(10) formal preparation for serving as a mentor, if yes, briefly described.

Individuals completing the survey were also asked to respond to

the following question:

(11) If you were only able to serve as a cooperating teacher OR as mentor, which one would you select?

The survey also included ten statement which respondents were asked to rate on a seven-point Likert-scale (7=agree to 1=disagree) from their perspective as a cooperating teacher and then from their perspective as a mentor. These items are found in the Appendix.

The survey data were analyzed using SAS (Statistical Analysis System).

Interview procedures.

Interviews were scheduled for 21 of the 23 survey respondents who indicated a willingness to be interviewed. Nineteen interviews were conducted at a time convenient to the participants, generally at their school; one person was called away from school due to a family emergency and one person failed to appear for an interview (reason unknown).

The major topics of the interview protocol were provided in advance. The topics were:

(1) what professional growth/professional development as a teacher means,

(2) influence of serving as a cooperating teacher on one's own professional growth/professional development,

(3) influence of serving as a mentor on one's own professional growth/professional development,

(4) any surprising or interesting differences in the

influence of serving as a cooperating teacher and serving as a mentor on one's own professional growth/professional development,

(5) differences as a teacher today if one had never been a cooperating teacher or mentor,

(6) choice if one could serve only as cooperating teacher or as mentor,

(7) which service is a greater contribution to the profession of teaching,

(8) how serving as a cooperating teacher and mentor has fit into one's career,

(9) comparing service as a cooperating teacher and mentor teacher to other forms of professional development (e.g., graduate courses, inservice education, professional reading), and

(10) other comments.

During the interviews it was evident that most of the participants had read the information and five glanced at notes during the interview.

The interviews averaged 24 minutes in length (range = 11 to 44 minutes, median = 22 minutes, standard deviation = 9 minutes) and were tape-recorded. Moderately verbatim transcriptions were prepared and sent to participants for clarification or additional comments. Four respondents provided feedback; three provided clarification for portions of the transcriptions that were unclear and two indicated discomfort at reading the

transcriptions ("I was uncomfortable reading the transcript - I certainly did "ramble"! and "Does everyone sound like a babbling idiot? I may never be interviewed again.")

Interview data were analyzed for emergent categories (Goetz & LeCompte, 1984). A computer program was used to facilitate data management, retrieval of coded segments, etc. (Seidel, Friese, & Leonard, 1995). Two peer debriefers (Guba & Lincoln, 1989) were used in developing categories, formulating conclusions, etc.

## Results

### Survey

The results of the ten Likert-type items are displayed in Tables 2, 3 and 4. Table 2 indicates how the respondents rated the ten items from their perspective as a cooperating teacher and Table 3 from their perspective as a mentor. Table 4 displays the

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Insert Tables 2, 3, and 4 about here.

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mean difference between how the respondents rated an item as a mentor and how they rated it as a cooperating teacher. In Table 4 the difference (Diff) for an item equals the rating as a mentor (MT) minus the rating as a cooperating teacher (CT).

#### Ratings as cooperating teacher.

The last three columns of Table 2 summarize the ratings of all 94 teachers from their perspective as a cooperating teacher for the ten items. In general, they indicated moderately strong

agreement with each statement (mean rating of 5.38). Their ratings ranged from a high of 6.11 for CT 2 (Understanding) and 5.97 for CT 3 (Preparation) to a low of 3.86 for CT 1 (Incentives), 4.82 for CT 4 (Support), and 4.83 for CT 10 (Most Teachers). The ratings for these items suggests that the respondents believe that they understand the role of cooperating teacher adequately and that they are adequately prepared to serve in that role, but that the incentives for serving as a cooperating teacher are somewhat weak and that some teachers would not benefit by being a cooperating teacher.

It should also be noted that the mean ratings of 3.86 for CT 1 (Incentives), 4.82 for CT 4 (Support), and 4.83 for CT 10 (Most Teachers) were the lowest ratings for any item from the perspective of cooperating teacher or the perspective of mentor. Two other findings are worth noting. First, the respondents indicated having served as a cooperating teacher for about six or seven student teachers on average, and second, a third of them indicated not having participated in a course, workshop, or seminar in the supervision of student teachers (Table 1).

Ratings as mentor.

The last three columns of Table 3 summarize the ratings of all 94 respondents from their perspective as a mentor teacher for the ten items. The mean rating of 5.69 for the ten items indicates a moderately strong level of agreement with the statements. The strongest agreement statements is 6.19 for MT 2 (Understanding) and 6.16 for MT 3 (Preparation), whereas the

weakest agreement is 4.96 for MT 1 (Incentives) and 5.03 for MT 10 (Most Teachers). This suggests that the respondents believe they adequately understand and are prepared for the role of mentor, but that they find the incentives to be somewhat weak and believe mentoring will not benefit some teachers. It should also be noted that the ratings of 6.19 for MT 2 (Understanding) and 6.16 for MT 3 (Preparation) are higher than the ratings for any other item. In addition, it should be noted that the respondents had served as a mentor about three times on average and that slight more than half of them (54%) had received some formal mentor training or preparation.

Differences in ratings.

As displayed in Table 1, 56 (60%) of all survey respondents indicated a preference for serving as a mentor over being a cooperating teacher, if forced to chose; 35 (37%) of all survey respondents selected being a cooperating teacher over being a mentor. A comparison of the ratings given by the respondents to the ten items from the perspective of cooperating teacher and from the perspective of mentor, as displayed in Table 4, supports this finding, though perhaps suggesting a somewhat weaker preference for being a mentor over being a cooperating teacher.

Overall, the respondents rated all 10 statements higher from the perspective of a mentor than from the perspective of a cooperating teacher. The mean difference in rating was 0.31 points, ranging from the highest difference of 1.10 for Diff 1 (Incentives) and 0.68 for Diff 4 (Support) to a low of 0.06 for

Diff 8 (Development) and 0.09 for Diff 2 (Understanding). This suggests that the respondents felt quite strongly that the incentives for mentoring and the support for serving as a mentor are greater than they are for serving as a cooperating teacher. At the same time, the findings suggest that the respondents find relatively little differences in the rest of the items based on their experiences as cooperating teachers and as mentors, especially reflected in the very slight differences of 0.06 for Diff 8 (Development) and 0.09 for Diff 2 (Understanding).

Comparing ratings of interviewed respondents to non-interviewed respondents.

The 19 teachers who were interviewed in this study constitute an subgroup, and their comments and perspectives should be taken in that context. The first three columns of Table 1, presenting information about the 19 teachers interviewed, and the second three columns of Table 1, presenting information on the 74 teachers note interviewed, offer data for comparison. The teachers interviewed indicated about four fewer years of teaching experience than the teachers who were not interviewed; they also indicated have worked with slightly fewer student teachers as a cooperating teacher and slight more beginning teachers as a mentor than the other 74 teachers. It is also important to note that this study include date on six teachers who worked as full time mentors and who indicated having served as a mentor for an average of 14.5 beginning teachers; the three of these six mentors interviewed indicated having worked

with an average of 10.7 beginning teachers.

Compared to the survey respondents who were not interviewed, the 19 teachers interviewed included fewer elementary and more middle and high school teachers, and more of them were regular education teachers than the other 74 respondents. A slightly larger portion of the interviewed respondents claimed to have taken part in preparation for mentoring, whereas about the same portion of interviewed respondents and non-interviewed respondents claimed preparation for mentoring.

In addition to these demographic differences, differences also emerge between the respondents interviewed and those not interviewed with respect to how they rated the ten items. In general, the interviewed respondents agreed with the ten statements slightly more strongly than did the respondents who were not interviewed, especially as mentors. Their mean rating for the statements from the cooperating teacher perspective was 5.46, compared to 5.36 for the other respondents (Table 2) and their mean rating for the statements from the mentor perspective was 5.91, compared to 5.64 for the other respondents (Table 3).

In rating the items as cooperating teachers (Table 2), the greatest differences were in terms of CT 1 (Incentives), where the average rating of the interviewed teachers was 0.57 points higher than for their counterparts, and CT 9 (Career), where the average rating of the interviewed teachers was 0.25 points higher. Although there were three items which the interviewed respondents rated lower, the difference in mean ratings was

slight, with the greatest difference emerging for CT 10 (Most Teachers) which received a rating 0.19 points less than that assigned by their counterparts.

In terms of rating the items from the perspective of mentor, the differences between the two groups was more evident (Table 3). For example, the interviewed teachers rated MT 9 (Career) 0.65 points higher and they rated MT 4 (Support) 0.43 points higher than the respondents who were not interviewed. In fact, there were only two items rated lower by the teachers who were interviewed: MT 8 (Development), rated 0.26 points lower, and MT 5 (Effectiveness), rated 0.07 points lower.

The information displayed in Table 4 indicates that the teachers interviewed rated the items from the mentor perspective 0.45 points higher than they rated them from the cooperating teacher perspective, whereas the difference for the non-interviewed teachers is 0.28 points higher from the mentor perspective compared to the cooperating teacher perspective.

Taken altogether, the survey data suggest that the 19 survey respondents who were interviewed have a more positive view of serving as a cooperating teacher, and ever more so as a mentor teacher, than the 74 survey respondents who were not interviewed.

## Interviews

### Professional growth and development.

In describing professional growth and development, the 19 survey respondents who were interviewed referred to a total of 63 elements. Traditional college or university graduate courses,

conferences, workshops, and inservice training were referred to nine times. In seven instances, participants talked about learning that was self-directed (e.g, reading professional materials). Somewhat more frequently (12 times) they referred to working with others (peers, school committee members, student teachers, beginning teachers). For example, Jim, a 5th grade teacher, said, "Professional growth can come in many ways. I don't think it's necessarily going to school and taking a class. Professional growth can come from talking with other people, not even in your profession." (Note: Pseudonyms are used for all names and different names are used for each participant.) Similarly, high school math teacher Lois commented, "Even what I pick up myself talking to other teachers is a kind of professional growth."

Participants referred 18 times to learning new skills, techniques, or materials as central to professional development, often declaring that this was essential to keep from becoming stagnant as teachers. After describing professional development as including skill and content knowledge improvement, learning about instructional strategies and curriculum integration, working better with faculty, and improving school climate, Sara, a 7th and 8th grade language arts teacher, said this was necessary to assure that "you're not doing the same thing year after year after year after year. To achieve this, she added, "You experiment, and you explore, and you try new things."

The participants referred 13 times to learning from their

own experience as a critical part of professional growth and development as a teacher. Pete, a former upper elementary teacher now working full time as a mentor, emphasized that the best kind of experiential learning also involves an element of challenge or risk: "being placed in situations where I can take a little risk, knowing that there is some risk but no so much risk that I could get hurt . . . being challenged to do things I've not done before."

Serving as cooperating teacher.

The participants readily discussed their ideas about how service as a cooperating teacher had been an influence on their work as a teacher. The analysis of their remarks yielded 39 elements which can be broadly categorized as sources of new ideas (16 references), stimulus to reflection (11), opportunity to talk with someone about teaching (7), and rejuvenation (5).

It was most common for participants to highlight how working with education majors in field experiences provided them with exposure to new, fresh ideas about teaching. The comments of Jane, a 4th grade teacher, are typical in this regard:

> They come by and it makes a teacher right in the actual teaching position to think about what's new and coming. These people come to us with a great deal of information that they've been taught . . . and so I find them as the carriers of what's going on now in the colleges.

Pam, a middle school language arts teacher, described working with a student teacher as "kind of getting some graduate [school]

experience free." Some participants suggested that they were quite assertive in seeking information from their student teachers, as evident in the comments of Rita, a 9th grade math teacher:

> Every time I have a student teacher I'll say to them, "Now I want to learn as much from you as you're going to learn from me." And I will really pick their brains about different topics that we might be covering.

Having served as a cooperating teacher early in her career, Carrie, a 5th grade elementary teacher, noted that the experience "made me grow quicker and faster. I had to."

Most participants suggested that being a cooperating teacher promoted on-going reflection about their work. This reflection, which Sara repeatedly described as "soul searching," sometimes focuses on their own experiences as a student teacher. Tina, a middle school foreign language teacher, commented, "I see some of the mistakes that they [student teachers] make and look back and think, `I must've made those same mistakes.' And what other dumb mistakes did I make that my cooperating teacher didn't point out to me?" Likewise, Sara said, "I'm watching them [student teachers] and being somewhat critical, I'm thinking, `Geez, do I do that?" or `What ways can I improve?' It really helps you focus on your own strengths and your own weaknesses."

Some remarks suggested that working with a student teacher encouraged participants to analyze their own of teaching and to be sensitive to "how times have changed" in approaches to

teaching. "I didn't want to be an old-fashioned teacher," commented Rita, "so it [being a cooperating teacher] really opened the door for me to keep myself current." Being selected as a cooperating teacher had a similar effect on Pete, who noted,

> When I had student teachers, I kind of had to prove to them that I was a good teacher and [that] I was abreast of the latest in the field and [that] I had knowledge of what was going on in research and development.

Serving as a cooperating teacher also provided a degree of professional validation for some participants. For instance, Fran, a cross-categorical special education middle school teacher, characterized her professional growth less in terms of learning new ideas and more in terms of "combining what I already know with what they [student teachers] may have that may be a little bit different. . . not changing everything just because something is new, but showing how some of the things I do still incorporate this new stuff." In fact, some participants interpreted being selected as a cooperating teacher as an important, external validation of their work. "I myself had a principal, said Jane, "who maybe recognized things in me I wasn't even aware of."

In many instances, participants described the benefits of being a cooperating teacher in terms of learning new ideas, reflection, and general rejuvenation as a direct outcome of having access to someone to talk with about teaching. "A student teacher gives you that opportunity to talk at a teacher level

with another person, on a daily basis," remarked Jim. At the same time, Don, a high school math teacher, pointed out that interacting with a student teacher also caused him to be explicit in talking about teaching: "I think I've been learning that you have to be more exact in what you're saying." Another high school math teacher, Cindy, viewed her student teachers as a "captive audience":

> If I wanted to discuss left or right brain, if I wanted to discuss manipulatives of some sort, if I want to discuss anything, I have a captive audience because they almost have to listen to me and talk to me.

Janet, a high school social studies teacher, emphasized the benefit of interacting with student teachers and beginning teachers: "I think when you work with another teacher [as] a cooperating teacher or as a mentor, you always have a better approach with, `Geez, we need that.' Instead of `I' or `me' it becomes a `we' situation in both roles."

Among the 19 participants, two admitted that their experiences as a cooperating teacher had not been productive. Peggy, a full time mentor who formerly had taught at the elementary and middle school levels, reported, "I can't see that it [being a cooperating teacher three times] gave me the opportunity for growth. I didn't have very good experiences." Mark, an elementary and middle school teacher, also indicated that serving as a cooperating teacher had not been a positive experience. Still, Mark admitted that talking with "some of the

people at the university" about the student teacher was beneficial and allowed him to interact with teacher educators in a new fashion.

Serving as a mentor.

The participants generally had less to say about being a mentor than about being a cooperating teacher, perhaps reflecting their more limited experience as a mentor (See Table 1). This is reasonable in light of the fact that nine of them had served as a mentor only once or twice, whereas three participants (Paul, Connie, Penny) had served worked as full-time mentors for eight to 15 beginning teachers in a mentoring program sponsored by their large urban school district (Freiberg, Zbikowski, & Ganser, in press; Ganser, Freiberg, & Zbikowski, 1994). Except for the full time mentors, time for mentors to meet with their protégés was far more limited than it was for them to meet with student teachers as cooperating teacher; the same pattern was true in terms of classroom observations.

The respondents comments about mentoring included 27 elements, classified into comments about learning as a mentor (15) and reflection promoted by mentoring (12). In terms of learning, the participants generally talked more about schools as organizations than about skills, strategies, and techniques of teaching. One example is found in Don's remarks. Although a math teacher in a large high school, Don had served as a mentor to beginning teachers in other content areas as well and he was a good friend of another math mentor who had mentored "out of

area." Don's emphasized the value of mentoring out-of-area: "You find out what's going on in other disciplines and you know more what's going on within the building." Janet directly attributed her willingness to take a professional risk by becoming part of an integrated curriculum team to her earlier experiences in mentoring beginning teachers who taught outside her area of social studies.

The most notable emphasis on the way in which mentoring can expand the vision of teachers in terms emerged in the comments of the three full time mentors. Each of them was assigned to work with beginning teachers in several schools in the district, most of which were unfamiliar to them. One of them, Penny, formerly a middle school teacher and now a full time mentor, suggested that "by being a full time mentor, you get a much more global view of the [school district] system. You get a better understanding of the issues."

As in the case of serving as a cooperating teacher, the participants suggested that an important professional benefit of mentoring was the opportunity it afforded to discuss one's work with another teacher. Tina's comments are representative:

> It was interesting to be able to sit down and talk one-on-one with another teacher who had been through some of the [same] things and just talk about ways to handle things in class, discipline, ways to present subject matter. Just having the time to sit down and talk with another teacher that we don't get to do too often.

The participants also emphasized how service as a mentor promoted their reflection on a number of topics, often related to their own career. In working with new teachers, Fran observed, "You see how you yourself have changed since you were that beginning teacher." With an eye to self-assessment, Pete said, "I can see strengths and weaknesses in my mentees that I have perceived about my own self." Respondents also suggested that serving as a mentor, like serving as a cooperating teacher, required them to view their work from the perspective of someone unfamiliar with it. "Being a mentor teacher," noted Jane, "means you have to pay attention to the little things that become automatic as a teacher."

Finally, a few participants indicated that work as a mentor boosted their ego. According to Fran, "They [beginning teachers] respect me so it builds up my own self-esteem." Reflecting on her experience as a mentor, Rita commented, "Two years ago I was a mentor to a young lady, and I'm really proud of her. And I want to take just a little bit of credit for how well she's turned out."

Differences in roles.

In general, it was more difficult for the respondents to discuss interesting or surprising differences between their experiences as cooperating teachers and as mentors. The analysis of the transcript indicated 28 different elements that can be categorized as those focusing on the cooperating teacher/student teacher and mentor/beginning teacher relationship (11), those

focusing on the intensity of the experience (7), and those focusing on the influence of the student teaching and mentoring experiences, primarily on the student teacher or beginning teacher (7) but also on the cooperating teacher or mentor.

Three participants suggested seeing no surprising or interesting differences between serving as a cooperating teacher and serving as a mentor. However, this is not to say that they believed the experiences were unimportant. For example, Lucy, a 7th grade English and math teacher, said, "I don't see any [interesting differences]," but then continued, "They both made me feel a little more of a leader and then I behaved more as a leader." Jim and Steve, a 9th grade physical science teacher who had taught longer than any other participant, also suggested that there were no surprises for them in being a cooperating teacher or a mentor.

More typically, participants did mention differences, though seldom as great as those expressed by Cindy: "I would say that there's very little similarity between the two [roles], other than the chance to sit down and talk." In some cases, the differences cited tended to emphasize the mentoring relationship as more intense than the student teaching relationship. This was true for Helen, an 8th grade general science teacher, who said, "There was one [difference] that kind of stuck out in my head. With my mentee I developed a close bond, both personal and professional." Moreover, although claiming to have more time available to meet with student teachers than with beginning

teachers (a claim made by all participants except two of the full time mentors), Helen also emphasized that she kept her relationship with student teachers "on a very professional level," one that may have reduced the personal dimension of their relationship.

It was more common among the participants to suggest that their relationship with beginning teachers was less intense than it was with student teachers. Limited time to meet was frequently mentioned. For example, Lucy suggested that the influence of serving as mentor on her own career was less than the influence of serving as a cooperating teacher because as a mentor, "There's not as much time spent with that person [beginning teacher]."

A second reason cited for viewing the relationship with beginning teachers as less significant than that with student teachers emphasized the fact that beginning teachers are employed, licensed professionals. In comparing her role as a mentor to her role as a cooperating teacher, Sara remarked:

> With another teacher [i.e., a beginning teacher], the role is not the same. Because I don't feel like I can just walk into their classroom and observe them and make all these grandiose suggestions. Because we're colleagues, which I guess you are with a student teacher, too, but it's a little bit different. They [student teachers] are not hired for that position. These people [i.e., beginning teachers] are members of the staff, on equal footing with me. And when do

you cross that? Particularly if they don't ask you? Pete made a similar point when he said, "With my mentees, I'm not in control at all." Cindy described being a cooperating teacher as a significant experience because "It's such a time consuming thing" and because, as a cooperating teacher, she found herself "Sharing all my stuff. And sharing my space."

More often than not, the participants suggested that being a cooperating teacher involved more effort on their part compared to being a mentor. The difference, for Fran, lay in the challenge of preparing student teachers for unknown jobs in the future. She said:

> I think being a cooperating teacher is a lot more work. Being a mentor is a lot more sit down, talk, help find materials, because the [beginning] teacher is already working. As a cooperating teacher, you don't know where they're going to be working when they leave, so you want to hit a lot more variety of techniques, a lot more variety of modification. . . . A mentor is a lot more on the spot problem-solving. [As] a cooperating teacher, you're trying to show her or him all the things that might happen.

At the same time, some respondents suggested that not needing to be concerned about comprehensive preparation in working with a beginning teacher as a mentor allowed for more depth instead. "I think the person [i.e., beginning teacher], for the most part, has background knowledge where you [i.e., mentor] can talk about things at a higher level." The view that

the work of mentoring is much more focused than the work of being a cooperating teacher was often emphasized. For example, Helen said,

> I look at student teachers as needing a much broader field of information when it comes to being in front of a classroom, whereas as a mentor, I really get specific. Their job is specific. They know exactly what they're going to do, whereas student teachers, once they leave, who knows what they're going to be doing?

Another interesting difference sometimes mentioned was the difference in flexibility between student teachers and beginning teachers. Jim referred to the beginning teacher's "style of teaching, which is more ingrained already. They're pretty much set in a style." Rita pointed out another important factor. As the mentor of a first year teacher, Rita observed:

> I felt really an obligation because, after all, I may get her students. In fact, I did get some of her students this year. So there was definitely a vested interest that she get her act together and become a pretty good teacher. I pushed her a little bit, too, because I knew that if she didn't cover more material I was going to have one heck of a time this year.

Finally, a few participants stressed that their responsibilities are more to their own pupils than to their student teachers, unlike the situation in mentoring. "When I have a student teacher," commented Cindy, "I really feel the

strongest obligation to my own students." Being even more explicit, Pam said, "As the cooperating teacher, it's still my room. It's still to a degree my way. I'm the one who's accountable to the students' parents." Among all the participants, Pam was the only one to refer to another obvious difference between being a cooperating teacher and being a mentor: student teaching "ultimately is a graded activity. As a cooperating teacher you tend to hold their ability to get a job in your hands." Still, even without the "threat" of a grade, Mike indicated a higher level of commitment of beginning teachers to the mentoring relationship than of student teachers to student teaching. He said,

> When you're into mentoring, they've [beginning teachers] really decided that they really do want to give this a shot. They've had a chance to bail out if they wanted; they've chosen not to. They're in it, and they're in it on a full-time basis. So I think you have a bit more commitment from them. It's more real life.

<u>How different as a teacher.</u>

With rare exception, the respondents emphasized that their career as a teacher had been affected by their work as a cooperating teacher and mentor. Even Steve, who said he could think of no "obvious ways" in which he had changed as a teacher due to service as a cooperating teacher and mentor, indicated that the experiences did give him "some new ideas" and helped to prevent him from becoming "closed and narrow in my [career] path,

as I'm walking down." Cindy suggested that it was difficult for her to guess how she may have been different. "That's so tricky," she said. "It's just like imagining you'd never been a mother."

An analysis of the interview transcripts produced 48 elements related to the participants' perceptions about how being a cooperating teacher and mentor has made a difference in their career. These elements can be further separated into four broad categories: source of pride (6 elements), an expanded view of teaching (9), enhanced knowledge and skills (17), and professional rejuvenation (16).

For many participants, being a cooperating teacher and mentor instilled in them a sense of pride about being a teacher. While they sometimes linked this directly to their role in preparing prospective teachers or helping new teachers, they also related it to their own work. "It really makes me very proud to be a teacher," Helen said, "and sometimes you don't get that in a classroom when kids are beating on you all day." Other respondents viewed validation of their skills as one of the outcomes of these relationships, as evident in Jim's observation:

> Every time I work with a student teacher or in a mentor/mentee situation, it kind of lifts me up and lets me know that what I'm doing is not wrong, and that what I'm doing is not old-fashioned or 'the way they used to do it back in the ol' days.

A strong message communicated by many of the participants

was that serving as a cooperating teacher and mentor took them beyond their classrooms. In this regard, Sara commented, "It makes you think beyond your classroom" and Penny said, "It sure has opened my horizons." For Don, serving in these roles effectively short-circuited a pattern he saw among colleagues: "I see people start putting up walls around them. When you put up walls around your room and you kind of hide in there and you perform for the administrator once a year, once every three years." A full time mentor and former middle school teacher, Connie, made a similar observation: "You get in your classroom and you do your thing and you just teach and you teach and you think the whole world revolves around your classroom, but there's a different world out there beyond your classroom."

Some participants also indicated that moving out of their own classroom was also threatening. Janet viewed leaving the security of her own classroom as a good challenge, but also one of her "biggest fears." Still, for Janet and for others, the stimulation was worth the risk. As a full time mentor nearing the end of first year in this position, Penny had to decide if she wanted to return to her former teaching assignment or to continue as a mentor for two more years, after which she would probably be reassigned to a different school. She decided to continue as a mentor:

> I don't think I'm going back to that same niche again. . . . I'm not looking for that safe place, that convenient place. Whatever comes will be fine. I'm not sure what that is

> right know, but it'll be OK. . . . And I'm willing to make more risks now.

Among the participants, only Sara suggested that being a cooperating teacher and mentor she had caused her to consider a significant career change:

> It's made me think about other options. . . . It's made me think that [it] might be kind of fun, too, to do something professionally where you're helping to train adults. I'm not sure that I want to go back for the Ph.D., at this point, to do that, but at least it's made me think, "Hey, this might be a possibility." Whereas before I thought I wanted to be with kids. But I can see there's some things that I'd like these people to get before they get into the classroom.

Some participants suggested that they became more tolerant of alternative approaches to teaching as a result of being a cooperating teacher or mentor. According to Rita, serving in these roles "Forces you to reread and investigate and look at things from another point of view." Without having worked with student teachers and beginning teachers, Fran noted:

> I probably would not be as open as I am. I probably would not be as confident because I haven't shared my techniques with other people. I probably would not have the knowledge base that I have received from my student teachers and mentees. So I think I would be a very different kind of teacher.

Tina suggested that being a cooperating teacher and mentor has made her more tolerant of mistakes:

> I think I'm more tolerant of maybe some mistakes that I might not have tolerated if I hadn't served as a cooperating teacher. . . . I think maybe I'm a little bit more tolerant, that that [serving as cooperating teacher and as mentor] has taught me, "OK. Everybody needs time to learn."

Carrie suggested that serving in these roles has increased her empathy for teachers at the beginning of their career: "With not being a cooperating teacher or a mentor, you don't have that understanding of what those people [student teachers and beginning teachers] go through. You're more one dimensional." She went on to indicate that as a result of being a cooperating teacher and mentor, "I feel I'm much more understanding . . . and I've grown from knowing the needs of another person."

Many of the participants stressed that interacting with student teachers and beginning teachers generally enhanced their work in terms of content area knowledge, teaching techniques and strategies, and approaches to classroom management. For example, Sara indicated that the pressure to help student teachers "to see the bigger picture" forced her to engage in more long range planning. The participants often stressed that being a cooperating teacher or mentor encouraged them to be much more reflective about their work and about themselves. "I think whatever I do well is partly because of both experiences," commented Pam. "I've learned a lot of things about me." For

Don, assisting a student teacher or beginning teacher prevented him from "losing sight of some things that you need to be reminded of. And if you're not reminded of them, they get lost." Interestingly, Mark found himself modeling teaching, rather than talking about it, with his mentee:

> It's actually caused me to do a lot more thinking about teaching through example rather than telling. I found that there were a number of things I could say or suggest, but there wasn't always time to follow though with everything that goes on. It caused me to be more visual in what I've done, hoping that by being observed doing these things, then they would sink in with the mentee. And from what I could see, they did.

Beyond acquiring new information, learning new skills, and becoming more reflective about teaching, the very positive influence of serving as a mentor or cooperating teacher on a teacher's own career emerged in many of the participants' comments:

> "By being a mentor just this one year, this is the most exciting part of my teaching career, right now, working with all these people" (Pete)
>
> "I think both roles provide you with an opportunity to grow and to experience some different things. If you never did either of those things [i.e., serve as cooperating teacher or mentor], I don't think you would've had as full or rich a career. . . . And when you bring someone else in, you don't

know what's going to happen" (Pam)

"My life is enriched for having served in both capacities" (Connie)

"I guess in mentoring I've taken paths I never would've thought of going down" (Penny).

For some participants, it was easy to envision the difference in their work had they never been a cooperating teacher or mentor. Without these experiences, Pete said, "I think that I would have been doing the same thing today as I was doing during my first week of school." Janet's comments create an even stronger impression about how working with prospective and beginning teachers had affected on her career. Imagining the course of her career without having ever been a cooperating teacher or mentor, she commented:

> I'd be a very good mediocre teacher. I would be very uncreative. I would have a very clean classroom. I would have my desks in rows. And I wouldn't have the load that I have today. I would not worry about curriculum revision. I'd be less stressed. [laughs] Everything would be neat and orderly. Yes. I would be mediocre, though.

<u>Forced choice: cooperating teacher or mentor?</u>

When asked to choose between being a cooperating teacher or being a mentor, several participants indicated that this was a difficult choice them to make. For example, Helen said, "I hated this question. It is a great question and I hated it," and Steve commented, "I gave this a lot of thought when I read that

question." In giving their responses, some participants prefaced their remarks with words or expressions like "definitely" (Carrie, Mark), "no question" (Pam), or "isn't a doubt" (Penny). However, more commonly the participants qualified their comments: "prefer" (Jane, Jim, Janet), "rather" (Fran), "I think" (Lois), or "lean toward" (Lucy).

Among the participants, 12 indicated a preference for being a cooperating teacher over being a mentor. Nine of them indicated the same choice on their survey, whereas three of them (Carrie, Helen, and Don) had selected mentor on the survey. The six other respondents who selected mentor on the survey also indicated that their choice was for mentor during the interview. Only Rita refused to make a choice during the interview, whereas she indicated cooperating teacher on the survey.

Participants provided several reasons for their choices during their interview, often with reference to the role they had not selected. Some of the participants who selected mentor indicated that it was the easier of the two roles. For example, Lois selected being a mentor "basically because the demands on my time are a lot less." She also added a second important reason, "And with a student teacher, I have to give up my class, maybe to someone who doesn't understand geometry as much as I do, or who doesn't explain it the same way I do." Several respondents argued that being a mentor was simply a better experience for them. Penny cited mentoring as "a great learning experience for both parties, the mentee and the mentor," Janet characterized

mentoring as having "more of an equality" (i.e., between the experienced teacher and the new teacher) and "more of a payback for me," and Connie considered her influence greater as a mentor than as a cooperating teacher, commenting that "As a mentor teacher I'm not only touching the lives of ten first year teachers, I'm touching the lives of hundreds of students." Only Pete, among all 19 participants, argued that although he preferred being a mentor, he also viewed being a cooperating teacher as an essential prerequisite for effective mentoring. He said, "If I had not been a cooperating teacher at all any of those years and all of a sudden this [full time] mentor job became a possibility, I would question myself, 'Are you ready to mentor other people?'"

In selecting to be a cooperating teacher over being a mentor, Jane and Fran suggested that they engage in mentoring informally anyway. According to Jane, "Mentoring I do on my own. Nobody has to say, 'This person is your mentee.'" In a similar fashion, Fran commented, "Mentoring to me is not really a job description or a job title, as much as it is just being a help." Other participants made similar observations, but extended them to suggest that the assistance of a person formally identified as a "mentor" is less important than the assistance provided by a cooperating teacher because there are other people in a school who function as a mentor without being so identified. According to Helen, "That person [beginning teacher] could probably get that same help from anybody on the staff. It wouldn't

necessarily have to come from me." Sara noted that "often times when I've been a mentor, they've [beginning teachers] sought out other people besides me anyway. There are a lot of resources."

Several respondents indicated they preferred being a cooperating teacher because they would rather work with student teachers than with new teachers. "I would prefer being a cooperating teacher," commented Jim, "simply because you have a person who's ready to jump in and get their feet wet." Lucy characterized student teachers as "a little bit needier" and Rita described them as "so green, so innocent, and they know so little." Conversely, Jim observed that, unlike student teachers, beginning teachers "have their self-confidence already there, and they're just asking legal and technical questions." Jane made a similar comment:

> I think once you get the teacher who's a first year teacher, they already have some set ways. I can still model for that person, but it's different than taking them right in that formative time. That's what's important to me.

Some participants who opted to be a cooperating teacher over being a mentor nevertheless indicated that mentoring was in fact an easier role for them. "Being a mentor is easier, definitely," commented Tina, "because you're working with a teacher, a professional." She also added that as a mentor "You still get to work with your kids." Cindy selected being a cooperating teacher, but only if she had enough time for it; otherwise, she chose to be a mentor. Don acknowledged that he viewed mentoring

as easier and more socially rewarding than serving as a cooperating teacher, and as "very valuable to the atmosphere of the high school in general. But Don also candidly admitted:

> From a more selfish standpoint, doing a student teacher would be better for me to do, because I think I would get my lesson planning and preparation for class down better . . . and I'd probably choose a student teacher because I haven't done it recently.

Finally, Jim and Pam suggested that their preference for being a cooperating teacher was influenced by the opportunity it afforded them to witness an important transformation. "It just is more enjoyable for me," noted Jim. "I see a person grow from being shy and timid in front of people or a classroom to becoming a very good teacher. A mentee already has those things." Having admitted to a bad experience as a mentor, Pam noted, "As a cooperating teacher you are allowing a student to use your room to become a teacher. They come in as students, they go out as teachers."

Contribution to the profession.

With the exception of Jane and Fran, the participants were even more tentative about identifying service as a cooperating teacher or as a mentor as the important contribution to the profession of teaching than they were about indicating which role they preferred. Their comments were prefaced with qualifiers like "I guess" (Tina and Lucy), "probably" (Lois and Cindy), "I'm not quite sure" (Pete), or "That's kind of tricky" (Rita). Twelve

of the 19 participants selected being a cooperating teacher, including Connie and Lois who switched from selecting being a mentor if forced to choose a role. Four participants selected mentoring as being a more significant contribution to the profession, including Cindy and Don, who opted for being a cooperating teacher when forced to choose. Among the three other participants, Pete was too unsure to make a choice, Carrie felt both roles contributed equally, and Janet differentiated between the contribution of each role.

Among the participants who indicated that being a mentor was a more important contribution to teaching than being a cooperating teacher, some attributed their decision to the fact that beginning teachers were clearly more commitment to teaching as a profession and that they were, in fact, a part of the profession. As a result, Mark observed, "They [beginning teachers] are going to listen to you and hopefully learn. And it's going to be definitely more of the real life situation than with student teaching." Don suggested that as a mentor he too is more committed, viewing the one year "formal" program as the beginning of a professional relationship with a beginning teacher that can last for as many years as he and the beginner are teaching in the same school. Cindy argued that being a mentor was more important for the profession for two reasons: first, because "so few of my former student teachers have gone into teaching" and second, because the beginning teacher is part of the school staff ("He's in your union, he's in your district.").

Janet indicated that being a cooperating teacher is important for the profession, but in a more abstract, distant way, than being a mentor. From a local perspective, she said that being a mentor is more important than being a cooperating teacher because "it's better for my building to have mentor support for the growth of my district."

Among the three full time mentors, only Penny chose mentoring as the more important contribution to teaching, primarily because it is non-evaluative and engenders more trust between the experienced teacher and the newcomer. Connie opted for the importance of being a cooperating teacher because student teaching provides the cooperating teacher with a vital role in guiding prospective teachers' "first outlook on what the career's going to be like." Finally, Pete was unsure about his effectiveness and influence as a mentor: "I'm not quire sure if I'm as effective as a mentor. I don't know if I'm as influential because these people I'm working with have a support system to some degree in the school."

The majority of participants viewed serving as a cooperating teacher as a more important contribution to teaching than serving as a mentor. Some of them linked their decision to where student teachers are in the career cycle and to viewing themselves as an important gatekeeper to the profession. For example, Jim commented: "I feel it's a greater contribution if I can work with these kids and encourage them and help them to make that decision that 'Yes, this is what I want to do.' Because we need good

teachers."

In selecting being a cooperating teacher as more important to the profession than being a mentor, participants repeatedly suggested that they can have more influence on a student teacher than they can have on a beginning teacher. At the same time, they suggested that with this influence comes some responsibility for the ultimate success of the student teacher later as a teacher. Lucy, who views student teachers as "a little bit needier, a little bit more to learn" when compared to beginning teachers, expressed this perspective:

> I could be a factor in whether or not they succeed. If mean, if I did a lousy job as a cooperating teacher, they make not get the skills that they need to be successful. If they're capable, they'll probably pick it up somewhere along the line, but it would put them at a disadvantage.

In fact, Sara argued that mentors are almost unnecessary cooperating teachers are effective:

> Serving as a cooperating teacher would make the greater contribution, because if we send these people out strong, there wouldn't be as much need for a mentor. If we have them ready to come into a classroom with a bag of tricks developed, to get off on a good foot, I don't think the other [mentoring] would be as important. It's [mentoring] showing them where all things are in the building, all those little odds and ends. I didn't have a mentor when I started here, and I survived. It just look a little breaking in

period.

Participants suggested that student teachers are more responsive to cooperating teachers than beginning teachers are to mentors. "I guess maybe they're just younger and less knowledgeable about things," commented Rita. After characterizing mentoring as just helping new teachers in the process of "settling into the building and [learning] the policies of the school," Tina stressed that being a cooperating teacher was ultimately more important than being a mentor because "working as a cooperating teacher you have more influence actually on the educational process." Steve made a similar point, due in part to simply having less opportunity to spend time with a beginning teacher than with a student teacher: "I think you have more influence [on a student teacher] because you're simply with the person more and exchange ideas as a cooperating teacher."

In suggesting that being a cooperating teacher is more important to the profession than mentoring, some participants indicated that their influence on a new teacher was limited. "Mentoring is almost too late," stated Fran, "and so you're kind of helping to fix something after it's already started happening." For Pam, the fact that a beginning teacher already has a license is significant:

> When you're a mentor all you're really doing is guiding someone through their first year in a profession they're already a part of. And their success or failure or

> abilities don't really rely on what you do. They have a license. They are teachers. Whether you as a mentor or an outside person see them as being good or bad doesn't matter because they already have the license.

Only two participants who selected being a cooperating teacher as more important to the profession than being a mentor also stated that they view working with prospective teachers as a professional obligation, not just a matter of choice or altruism. For teaching as a profession to "survive" and to remain "credible," Pam stated "we have to be producing people who are credible, who know what they're doing. And sometimes this means giving up what you want to do to be available to someone who needs some guidance." Sara described this obligation as personal and professional:

> I consider myself in some ways to be a fairly strong teacher with something to share. I think that people like me need to be doing this. We can't leave it to whomever you can find to do that. And I think I'm making a commitment, considering doing it in the future, because somebody's got to do it, and it's got to be people that I think have something to offer. . . . I think you've got to help the profession, and I look at teaching as a profession, and I'd like to protect the profession. . . . If you want knowledge to grow, and if we want to get better people working in the profession, we all have to contribute.

How being a cooperating teacher and mentor fits into career.

As part of the interview, participants were asked to reflect about how serving as a cooperating teacher and as a mentor had fit into their own career. The analysis of the responses to this question yielded 36 elements which can be classified as those focusing on career timing issues (15 elements), professional expectations (13), and professional benefits (8).

Among the participants, two indicated that an experience had not been a positive one and therefore did not fit in at all with their careers. For Pam, it was in the case of serving as a mentor; for Penny, it was serving as a cooperating teacher. Penny commented: "The cooperating teacher thing truly didn't fit into my career because it never had a good start. It never had a good end. It wasn't good in the middle." On the other hand, Mark approached the topic very differently than any other respondent. He said, "If it's something you're interested in, and want to do, then you make it fit in."

More generally, the respondents seemed to believe that there could in fact be a right time for working with student teachers or first year teachers. This was Pam's perspective, and she extended the benefit of correct timing to the student teachers she had worked with. She commented:

> I think it came in at a good time because I had been doing English myself long enough so that I thought I could help someone else. I wasn't still learning a day ahead of them [i.e., her pupils]. And so I was ready to help someone

> else. I didn't need every minute of my time for me. . . . I think the time table, the settling yourself careerwise, is very important before you can really provide a quality experience. I think when you accept being a cooperating teacher, you are accepting a lot more work and a lot more responsibility. And if you're not ready for that, if you're too buried under what you have to do, that person [i.e., student teacher] suffers.

Alternatively, Jim noted that serving as a cooperating teacher or mentor can come at a good time for the experience teacher for more selfish reasons. He noted:

> I think it does a veteran teacher good. It gives them an uplifting when they can work hand-in-hand with a fellow colleague, a student teacher, or a mentee. And in my career it seems like these people have come along at the right time when I was feeling a little burned out. I was feeling, 'Maybe what I'm doing isn't what we should be doing in education today.' These people have come along and through working with them, it has enlightened me also. It has give me another boost of energy.

Several participants described service as a cooperating teacher or as a mentor as a professional obligation, something to be expected. "I always thought of being a cooperating teacher as being part of it [her career]," stated Pam. "I assumed that was an expectation. . . . I just figured that was part of it." Viewing these roles from a slightly different angle, Cindy

stressed, "I view it as an integral part of my professional development, I really do." In reference to his work as a full time mentor, Pete said, "Absolutely, positively, without any reservation, yes, it's been a very important part of my professional development."

Participants offered other thoughts on how being a cooperating teacher and a mentor had fit--or not fit--into their careers. For example, Janet admitted that her first opportunity to be a cooperating teacher happened "quite accidentally." On the other hand, Lois recalled that she became a mentor because "I was asked to volunteer" and because "it fit easily into my schedule." Don and Connie admitted to getting involved in serving as a cooperating teacher after being encouraged by their principal, and both admitted to having been flattered by the request. Don viewed the request as "a compliment . . . and you take it as such" and Connie commented, "I'm very modest. And so I felt honored and I didn't take it lightly."

Respondents cited several benefits for their careers in working with student teachers and beginning teachers. With only three years of teaching remaining for her before retirement, Rita admitted that working as a cooperating teacher and mentor "helped me meet some really nice people [and] made me feel really proud of some of the things I've done, a good feeling" and Fran stressed that "what keeps you young is having people come in with the new ideas." She also viewed student teachers as another pair of helping hands, saying, "I've been able to use student teachers

not only to train them to work with these kids but also as a helpmate to me." Similarly, Lucy said that good student teachers enabled her to get "a lot of my own curriculum work in while they're teaching" and to improve her own lessons based on her student teachers' input.

Comparing being a cooperating teacher or mentor to other professional development activities.

This topic had not been in the original protocol but was added during the first interview as an appropriate topic and subsequently included in all other interviews. Seventeen of the 19 the respondents felt more favorably about serving as a cooperating teacher or mentor as a professional development activity than about any of the other more traditional forms of professional development for teachers, including graduate courses, inservice training or workshops, and reading professional publications. An analysis of their comments about this topic revealed 25 elements that can be categorized as negative opinions about graduate courses (8 elements), the "hand-on" nature of serving as a cooperating teacher or mentor (7), the verbalizing/reflecting aspect of serving as a cooperating teacher or mentor (5), and the human dimension of working with a student teacher or beginning teacher (3).

Unlike the other respondents, Cindy and Lucy preferred other professional development activities over being a cooperating teacher or mentor. Cindy gave as an example attending National Science Foundation summer institutes. She also opted for

reading: "My favorite building's the library. And I just love reading. And I'm really into that kind of thing. And I would take that any day over being a cooperating teacher." Lucy indicated a preference for the courses she was taking for her master's degree and the local school district's inservice program. She said, "I guess I get a lot more new information from those types of things."

Several participants voiced negative opinions about the value of graduate courses and inservice activities. Pam, for example, said that "inservices, even graduate classes, are more theoretical. They are not practical." Carrie said, "I don't feel that any of the classes I took ever contributed" to her work as a teacher, and describing education courses generally, Jim stated, "I've not really gained anything that I could take back to my classroom and really put to use." Finally, Pete stressed that "working with student teachers was far more beneficial because I was actually doing, working, rather than sitting and absorbing something like a sponge." Flora went so far as to say, "I think that cooperating teaching is probably one of the best ways to grow professionally and it's probably one of the least identified ways of growing professionally because you don't get graduate credit for it."

If a lack of practicality is what several respondents criticized about graduate courses and inservice activities, it was the central role of the practical and the immediately applicable that they relished in their work as cooperating

teachers and mentors. For instance, Jim indicated that as a cooperating teacher or mentor, "You pick little things up that are useable, that you can put to use right away the next day, right away that same day." Mark and Lois referred to being a cooperating teacher or mentor as a "hand-on" professional experience. "As a mentor teacher I think it's more like hand-on information," stated Lois. "It's information I can use right away. It's giving an idea for him and seeing how it works in his class, and I can transfer that to my class and I can try it." Pam used "relevant" to describe what she gained by working with student teachers or beginning teachers:

> I think being involved either as a mentor or as a cooperating teacher teaches you so much more than you learn in an all day inservice. It's simply--it's more relevant. And it's immediately relevant to your discipline, your grade level, where you are at a given moment in time.

There were two other general explanations why many participants viewed being a cooperating teacher or mentor as a very worthwhile professional activity. One was that serving in either role forced them to reflect on their activities and especially their decision making processes as a teacher. In this regard, Helen stressed, "Having a mentee or a student teacher forces a discussion and you have to justify what you do and what you say, whereas in inservices you usually just sit and listen and very little is ever implemented."

The second, related explanation for preferring being a

cooperating teacher or mentor over other professional development activities was that serving in these roles enabled them to work closely, sometimes daily, and occasionally intimately with another person. For this reason, Jane described serving in either role as "much more precious than going to a workshop or reading a book." Similarly, Jim noted that "There's a world of difference when you're working directly with someone everyday and when you're taking one class one night a week, for 18 weeks." "It's incomparable," exclaimed Connie. She continued, "I mean you can read all the education journals you want. You can even take every inservice. But to have a direct [pause], to get directly involved with another adult, there's nothing like it."

## Summary

This study shows that the roles of cooperating teacher and mentor are important ones for classroom teachers who have served in both capacities. This is evident inasmuch as they had served in these roles almost 10 times by mid-career. This pattern also suggests that limited extrinsic incentives for cooperating teachers and mentors may be more than offset by intrinsic incentives.

These teachers also claimed to understand the roles of cooperating teacher and mentor, and generally felt prepared and supported in carrying them out, in spite of the fact that only about two-thirds of them had received any formal training. In general, they found service as cooperating teacher and mentor to be both personally and professionally fulfilling and to have a

positive effect on their careers. At the same time, they felt less strongly that being a cooperating teacher or a mentor is appropriate for all teachers, perhaps suggesting that the isolation in teaching that is eliminated when one is working with a student teacher (especially) or a beginning teacher is in fact valued by some teachers.

The generally more favorable regard for mentoring over serving as a cooperating teacher, evident in the survey data, was somewhat reversed during the interviews. By and large, when engaged in conversation about these roles, the teachers communicated that they preferred being a cooperating teacher and that they viewed serving in that role as more important for themselves and for their profession than serving as a mentor. This may reflect the fact that schools as organizations generally do not recognize mentoring as formally as they recognize being a cooperating teacher.

The information derived from the interviews suggests that being a cooperating teacher or mentor can be vitally important to teachers. With rare exception, they find serving in the roles to be more important to their own professional development than anything else because it is focuses on practice and not theory, and because it allows them to interact with prospective and beginning teachers in a powerful way.

This study suggests that being a cooperating teacher and a mentor makes a difference--a big difference--in the careers of teachers. It is reasonable to view this as evidence that efforts

to promote schools as professional learning communities where the work lives of teachers intersect regularly and meaningfully are well taken.



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References

Bradley, A. (1996, September 4). Class-size cuts set off hiring spree in California. Education Week, pp. 1, 29.

Clinard, L. M., Ariav, T., Beeson, R., Minor, L., & Dwyer, M. (1995). Cooperating teachers reflect upon the impact of coaching on their own teaching and professional life. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Corcoran, T. B. (1995). Helping teachers teach well: Transforming professional development. (Policy Brief RB-16-June 1995). Consortium for Policy Research in Education. Carriage House at the Eagleton Institute of Politics. New Brunswick, NJ: Rutgers, The State University of New Jersey.

Danforth Working Group on Professionalism in Education. (1995, October). Practical professionalism: Support for student learning through professional development. St. Louis, MO: Danforth Foundation.

Darling-Hammond, L. (1995). Policy for restructuring. In A. Lieberman (Ed.), The work of restructuring schools: Building from the ground up, pp. 157-175. New York: Teachers College Press.

Darling-Hammond, L., & Sclan, E. M. (1996). Who teachers and why: Dilemmas of building a profession for the twenty-first century. In J. Sikula, T. J. Buttery, & E. Guyton (Eds.), Handbook of research on teacher education (2nd ed.) (pp. 67-101). New York: Macmillan.

Fessler, R., & Christensen, J. C. (1992). The teacher career

cycle: Understanding and guiding the professional development of teachers. Boston: Allyn and Bacon.

Freiberg, M., Zbikowski, J., & Ganser, T. (in press). Promoting mid-career growth through mentoring: Suggestions for staff developers. Journal of Staff Development.

Furtwengler, C. B. (1995). Beginning teacher programs: Analysis of state actions during the reform era. Education Policy Analysis, 3(3). Available World Wide Web: http://seamonkey.ed.asu.ed. /epaa/

Ganser, T. (1996). The cooperating teacher role. The Teacher Educator, 31(4), 283-291.

Ganser, T., Freiberg, M., & Zbikowski, J. (1994). The perceptions of school principals about a mentoring program for newly hired urban school teachers. The Teacher Educator, 30(2), 13-23.

Ganser, T., & Wham, M. A. (in press). Voices of cooperating teachers: Professional contributions and personal satisfaction. Teacher Education Quarterly.

Goetz, J. P., & LeCompte, M. D. (1984). Ethnography and qualitative research design. New York: Academic Press.

Grossman, P. L. (1992). Teaching to learn. In A. Lieberman (Ed.), The changing contexts of teaching (91st Yearbook of the National Society for the Study of Education, Part 1), pp. 179-196. Chicago: University of Chicago Press.

Guba, E. G., & Lincoln, Y. S. (1989). Fourth generation evaluation. Newbury Park, CA: Sage.

Guskey, T. R. (1996, October 23). To transmit or to "construct": The lure of trend infatuation in teacher professional development. Education Week, 16(8), p. 34.

Hargreaves, A. (1997). Rethinking educational change: Going deeper and wider in the quest for success. In A. Hargreaves (Ed.), Rethinking educational change with heart and mind, pp. 1-26. Alexandria, VA: Association for Supervision and Curriculum Development.

Huberman, M. (1996). Professional careers and professional development: Some intersections. In M. W. McLaughlin & I. Oberman (Eds.), Teacher learning: New policies, new practices, pp. 193-224. New York: Teachers College.

Jenlink, P. M., Kinnucan-Welsch, K., & Odell, S. J. (1996). Designing professional development learning communities. In D. J. McIntyre & D. M. Byrd (Eds.), Preparing tomorrow's teachers: The field experience, pp. 63-86. Thousand Oaks, CA: Corwin.

Katzenmeyer, M., & Moller, G. (1996). Awakening the sleeping giant: Leadership development for teachers. Thousand Oaks, CA: Corwin Press.

Lieberman, A. (1995). Restructuring schools: The dynamics of changing practice, structure, and culture. In A. Lieberman (Ed.), The work of restructuring schools: Building from the ground up, pp. 1-17. New York: Teachers College Press.

Lieberman, A. (1996). Practices that support teacher development: Transforming conceptions of professional learning. In M. W. McLaughlin & I. Oberman (Eds.), Teacher learning: New

policies, new practices, pp. 185-201. New York: Teachers College.

Lieberman, A., & Grolnick, M. (1997). Networks, reform, and the professional development of teachers. In A. Hargreaves (Ed.), Rethinking educational change with heart and mind, pp. 192-215). Alexandria, VA: Association for Supervision and Curriculum Development.

National Commission on Teaching & America's Future. (1996, September). What matters most: Teaching for America's Future. New York, NY: Author.

Novick, R. (1996). Actual schools, possible practiced: New directions in professional development. Education Policy Analysis Archives, 4(14). Available http://seamonkey.ed.asu.edu/epaa/

Price, J. R. (1996). Teachers' professional development: An interview study. Paper presented at the annual meeting of the Midwestern Educational Research Association, Chicago, IL.

Seidel, J., Friese, S., & Leonard, D. C. (1995). The Ethnograph (Version 4.0) [Computer software]. Amherst, MA: Qualis Research Associates.

Sparks, D. (1996, March). Reformed teaching requires refored staff development. The Developer, 2,4.

Sprinthall, N. A., Reiman, A. J., & Thies-Sprinthall, L. (1996). Teacher professional development. In J. Sikula, T. J. Buttery, & E. Guyton (Eds.), Handbook of Research on Teacher Education (2nd ed.), pp. 666-703. New York: Macmillan.

Tauer, S. M. (1996). The mentor-protégé relationship and its impact on the experienced teacher. Paper presented at the meeting

of the American Educational Research Association, New York, NY.

United States Department of Education. (1996, August). A back to school special: The baby boom echo. Available http://www.ed/gov/NCES/bbecho/

Walling, D. R. (Ed.). (1994). Teachers as leaders: Perspectives on the professional development of teachers. Bloomington, IN: Phi Delta Kappa.

## Appendix

Directions: Please indicate how much you agree with each of the following statements in your role as a cooperating teacher and in your role as a mentor by circling the appropriate number on the scale (where 7 = agree and 1 = disagree).

| Item | |
|---|---|
| 1 | There are adequate incentives for me to want to serve in this role. |
| 2 | I adequately understand this role. |
| 3 | I am adequately prepared for this role. |
| 4 | I am adequately supported in carrying out this role. |
| 5 | I am effective in carrying out this role. |
| 6 | This is a personally satisfying role for me. |
| 7 | This is a professionally satisfying role for me. |
| 8 | Serving in this role has had a positive influence on my professional development as a teacher. |
| 9 | Serving in this role has had a positive influence on my career as a teacher. |
| 10 | I believe that most teachers would benefit by serving in this role. |

Note: In the text of this paper, each of these items is referred to as indicated below.

| | |
|---|---|
| Item 1 | Incentives |
| Item 2 | Understanding |
| Item 3 | Preparation |
| Item 4 | Support |
| Item 5 | Effectiveness |
| Item 6 | Personal Satisfaction |
| Item 7 | Professional Satisfaction |
| Item 8 | Development |
| Item 9 | Career |
| Item 10 | Most Teachers |

Table 1

| Factor | Respondents Interviewed n | per cent | Respondents Not Interviewed n | per cent | All Respondents n | per cent |
|---|---|---|---|---|---|---|
| ***Gender*** | | | | | | |
| Male | 14 | 74% | 60 | 80% | 74 | 79% |
| Female | 5 | 26% | 15 | 20% | 20 | 21% |
| ***Education*** | | | | | | |
| Bachelor's | 4 | 21% | 20 | 27% | 24 | 26% |
| Master's | 15 | 79% | 53 | 71% | 68 | 72% |
| Doctorate | | | 2 | 3% | 2 | 2% |
| ***Level*** | | | | | | |
| Elementary | 6 | 32% | 37 | 49% | 43 | 46% |
| Middle School | 6 | 32% | 15 | 20% | 21 | 22% |
| High School | 6 | 32% | 12 | 16% | 18 | 19% |
| Other | 1 | 5% | 9 | 12% | 10 | 11% |
| Not reported | | | 2 | 3% | 2 | 2% |
| ***Assignment*** | | | | | | |
| Regular Educ | 16 | 84% | 53 | 71% | 69 | 73% |
| Special Educ | 3 | 16% | 13 | 17% | 16 | 17% |
| Other | | | 8 | 11% | 8 | 9% |
| Not reported | | | 1 | 1% | 1 | 1% |
| ***CT[1] Preparation*** | | | | | | |
| Yes | 14 | 74% | 49 | 65% | 63 | 67% |
| No | 5 | 26% | 26 | 35% | 31 | 33% |
| ***MT[2] Preparation*** | | | | | | |
| Yes | 10 | 53% | 41 | 55% | 51 | 54% |
| No | 9 | 47% | 34 | 45% | 43 | 46% |
| ***Role Preference*** | | | | | | |
| Prefer CT | 9 | 47% | 26 | 35% | 35 | 37% |
| Prefer MT | 10 | 53% | 46 | 61% | 56 | 60% |
| Not reported | | | 3 | 4% | 3 | 3% |

[1] Cooperating Teacher
[2] Mentor Teacher

| | Respondents Interviewed n | M | sd | Respondents Not Interviewed n | M | sd | All Respondent n | M | sd |
|---|---|---|---|---|---|---|---|---|---|
| Years of teaching experience | 19 | 17.68 | 8.27 | 75 | 21.77 | 8.03 | 94 | 20.95 | 8.20 |
| Student teachers served | 19 | 6.21 | 7.35 | 75 | 6.81 | 8.17 | 94 | 6.69 | 7.97 |
| Beginning teachers served | 19 | 3.53 | 3.72 | 75 | 2.92 | 4.51 | 94 | 3.04 | 4.35 |

Table 2

| Item | Respondents Interviewed | | | Respondents Not Interviewed | | | All Respondent | | |
|---|---|---|---|---|---|---|---|---|---|
| | n | M | sd | n | M | sd | n | M | sd |
| CT 1 | 19 | 4.32 | 2.16 | 75 | 3.75 | 1.89 | 94 | 3.86 | 1.95 |
| CT 2 | 19 | 6.05 | 1.58 | 75 | 6.12 | 1.17 | 94 | 6.11 | 1.26 |
| CT 3 | 19 | 5.89 | 1.76 | 75 | 5.99 | 1.34 | 94 | 5.97 | 1.43 |
| CT 4 | 19 | 5.00 | 1.91 | 75 | 4.77 | 1.88 | 94 | 4.82 | 1.88 |
| CT 5 | 19 | 5.95 | 1.35 | 75 | 5.92 | 1.23 | 94 | 5.93 | 1.25 |
| CT 6 | 19 | 5.68 | 1.70 | 75 | 5.49 | 1.51 | 94 | 5.53 | 1.54 |
| CT 7 | 19 | 5.84 | 1.61 | 75 | 5.75 | 1.40 | 94 | 5.77 | 1.43 |
| CT 8 | 19 | 5.63 | 1.92 | 75 | 5.61 | 1.50 | 94 | 5.62 | 1.58 |
| CT 9 | 19 | 5.58 | 1.95 | 75 | 5.33 | 1.65 | 94 | 5.38 | 1.70 |
| CT 10 | 19 | 4.68 | 1.86 | 75 | 4.87 | 1.76 | 94 | 4.83 | 1.77 |
| Grand mean | | | | | | | | | |
| CT 1-10 | | 5.46 | 0.59 | | 5.36 | 0.72 | | 5.38 | 0.69 |

Table 3

| Item | Respondents Interviewed | | | Respondents Not Interviewed | | | All Respondent | | |
|---|---|---|---|---|---|---|---|---|---|
| | n | M | sd | n | M | sd | n | M | sd |
| MT 1 | 19 | 5.21 | 1.72 | 75 | 4.89 | 1.88 | 94 | 4.96 | 1.84 |
| MT 2 | 19 | 6.42 | 0.84 | 75 | 6.13 | 1.24 | 94 | 6.19 | 1.18 |
| MT 3 | 19 | 6.37 | 0.90 | 75 | 6.11 | 1.38 | 94 | 6.16 | 1.30 |
| MT 4 | 19 | 5.84 | 1.38 | 75 | 5.41 | 1.66 | 94 | 5.50 | 1.61 |
| MT 5 | 19 | 6.00 | 0.75 | 75 | 6.07 | 1.14 | 94 | 6.05 | 1.07 |
| MT 6 | 19 | 6.00 | 1.37 | 75 | 5.87 | 1.39 | 94 | 5.89 | 1.38 |
| MT 7 | 19 | 6.21 | 1.32 | 75 | 5.89 | 1.45 | 94 | 5.96 | 1.42 |
| MT 8 | 19 | 5.89 | 1.45 | 75 | 5.63 | 1.59 | 94 | 5.68 | 1.56 |
| MT 9 | 19 | 6.05 | 1.13 | 75 | 5.40 | 1.65 | 94 | 5.53 | 1.58 |
| MT 10 | 19 | 5.11 | 1.45 | 75 | 5.01 | 1.77 | 94 | 5.03 | 1.70 |
| Grand mean | | | | | | | | | |
| MT 1-10 | | 5.91 | 0.44 | | 5.64 | 0.45 | | 5.69 | 0.44 |

Table 4

| Item | Respondents Interviewed | | | Respondents Not Interviewed | | | All Respondent | | |
|---|---|---|---|---|---|---|---|---|---|
| | n | M | sd | n | M | sd | n | M | sd |
| Diff[1] 1 | 19 | 0.89 | 2.00 | 75 | 1.15 | 2.08 | 94 | 1.10 | 2.05 |
| Diff 2 | 19 | 0.37 | 1.86 | 75 | 0.01 | 1.29 | 94 | 0.09 | 1.42 |
| Diff 3 | 19 | 0.47 | 1.98 | 75 | 0.12 | 1.56 | 94 | 0.19 | 1.65 |
| Diff 4 | 19 | 0.84 | 2.32 | 75 | 0.64 | 1.84 | 94 | 0.68 | 1.93 |
| Diff 5 | 19 | 0.05 | 1.65 | 75 | 0.15 | 1.62 | 94 | 0.13 | 1.62 |
| Diff 6 | 19 | 0.32 | 2.03 | 75 | 0.37 | 1.89 | 94 | 0.36 | 1.91 |
| Diff 7 | 19 | 0.37 | 1.89 | 75 | 0.15 | 1.94 | 94 | 0.19 | 1.92 |
| Diff 8 | 19 | 0.26 | 2.23 | 75 | 0.01 | 1.68 | 94 | 0.06 | 1.79 |
| Diff 9 | 19 | 0.47 | 1.90 | 75 | 0.07 | 1.70 | 94 | 0.15 | 1.73 |
| Diff 10 | 19 | 0.42 | 1.22 | 75 | 0.15 | 1.66 | 94 | 0.20 | 1.58 |
| Grand mean | | | | | | | | | |
| Diff 1-10 | | 0.45 | 0.25 | | 0.28 | 0.36 | | 0.31 | 0.33 |

[1]Diff 1 equals the result of MT 1 minus CT 1, Diff 2 equals the result of MT 2 minus CT 2, etc.

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Organization/Address:

TOM GANSER
*Office of Field Experiences*
University of Wisconsin-Whitewater
Whitewater, WI 53190-1790

Telephone: (414) 472-1123

FAX: (414) 472-5716

E-Mail Address: ganser@uwwvax.uww.edu

Date: 3/30/97

(over)