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# Teaching with a peer: a comparison of two models of student teaching

Robert V. Bullough Jr.<sup>a,\*</sup>, Janet Young<sup>a</sup>, James R. Birrell<sup>a</sup>, D. Cecil Clark<sup>a</sup>,  
M. Winston Egan<sup>a</sup>, Lynnette Erickson<sup>a</sup>, Marti Frankovich<sup>b</sup>, Joanne Brunetti<sup>b</sup>,  
Myra Welling<sup>b</sup>

<sup>a</sup>Department of Teacher Education, Brigham Young University, Provo, UT 84602, USA

<sup>b</sup>Salt Lake City School District, USA

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## Abstract

Two models of student teaching were compared: the traditional model of placing one student teacher with a mentor teacher and a peer teaching model, where two student teachers worked with one mentor. While the peer teaching model involved some trade-offs, the model was found to have a positive impact on children and to offer several important advantages for student teachers including increased support, the opportunity for on-going conversation about teaching, and experience in learning how to collaborate to improve practice. Mentor teachers found much of value in the model and support its continued use.

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## 1. Introduction

Increased field experience has become a centerpiece of teacher education reform over the past several years. In Europe and North America there is a veritable “celebration of experience” (Buchberger, Campos, Kallos, & Stephenson, 2000, p. 14); the value of school experience to teacher education is, as Johnston argues, “accepted almost on blind faith” (Johnston, 1994, p. 199). At the same time there is growing recognition of the

shortcomings of traditional patterns of field experience, particularly of student teaching, and awareness of how little is known about what is actually learned in the field (see Wilson, Floden, & Ferrini-Mundy, 2001). The typical pattern of student teaching has remained little changed for 50 years: A teacher education student is placed in a classroom with a single cooperating teacher for varying lengths of time, a term or perhaps a semester. As quickly as possible the student assumes complete responsibility for classroom instruction and management and, while soloing, “practices” teaching. “The university provides the theory, the school provides the setting, and the student teacher provides the effort to bring them

\*Corresponding author.

E-mail address: bob.bullough@byu.edu  
(R.V. Bullough Jr.).

together” (Wideen, Mayer-Smith, & Moon, 1998, p. 152). Not surprisingly, this model gives co-operating teachers tremendous power over teacher education students’ learning (Wilson et al., 2001). The challenge for student teachers is clear: “survival appears uppermost in their minds, with risk taking being minimal and the need for a good grade essential” (Wideen et al., 1998, p. 156). While the model has remained essentially the same, the challenges of teaching have dramatically increased.

There is a growing need to rethink student teaching and to generate alternative models of field experience (Bullough et al., 2002). In particular, given the increasing difficulty and complexity of teaching, there is need for models that enhance teachers “collaborative problem-solving capacity” (Buchberger et al., 2000, p. 49). As Howey and Zimpher (1999) argue, “Most fundamental to the improvement of teacher education is addressing how all teachers are prepared to work with one another” (1999, p. 294).

## 2. The study

In the light of these considerations, and following a careful examination of our own institution’s approach to student teaching, which stresses solo teaching, we made a proposal to one of the urban school faculties associated with the university to explore an alternative model: rather than place one student teacher with a single cooperating teacher we suggested placing two student teachers together in one classroom and with one teacher. Approval came. We then set out to answer the general question, “What are the benefits and possible shortcomings of partnered student teaching as an alternative model of practice teaching?” To begin to answer this general question, we posed a set of more specific questions which we use to organize our findings: (1) What kind and quality of relationships will develop in the two models of student teaching between mentors and student teachers and, in the partnership model, between student teachers? (2) What differences in roles and responsibilities will emerge for mentors and student teachers in the two models of student

teaching? (3) What value will the student teachers and mentors find in their experience? What impact will the student teachers have on the classroom, the mentors (including their workload), and pupil learning? To answer these questions, it was necessary to create a research design that enabled comparison of single placement and paired student teaching experiences.

### 2.1. School context and participants

Western Horizon Elementary School and the University have been linked together in a wider school/university partnership since the school’s opening, and there is a very positive working arrangement. The school has been open 3 years and has a student population of 670 students of which two-thirds qualify for free or reduced lunch. Western Horizon is located in a very diverse section of Salt Lake City and nearly half the student population is categorized as either non-English speaking or limited English speaking. Forty-three percent of the students are Hispanic.

Teachers and student teachers from a cohort volunteered to participate in the study. Placements were made randomly. Similarly, students were placed in partnerships randomly. No effort was made to match partners. Of the ten BYU students who participated in the study, all female, four were assigned to single student teaching placements and six were paired then placed with a mentor teacher. Each of the participating mentor teachers had previously served as a mentor, all were veteran teachers, and all agreed to work with either a single or a pair of student teachers. Pairs of student teachers were assigned to teach in the 2nd, 4th, and 6th grades thus allowing for the possibility that younger and older children might have different experiences with partnership teaching. Singly placed student teachers taught in the 2nd (two classes), 3rd and 6th grades, but we draw upon data from only one of the second grade and the third grade classes for reasons that will shortly be noted.

Mentors were given few directions about how they should work with the student teachers. Mentors were encouraged to develop their own way of working that made sense to them and that would be beneficial to the student teachers and

children. In part this decision was justified by knowledge that mentoring is highly idiosyncratic (see [Martin, 1997](#)), and in fact diverse approaches to mentoring did emerge.

During student teaching, two of the four single-placed student teachers were necessarily reassigned to different mentors. Reassignment came in one instance because the mentor teacher completely disengaged from the classroom to work on a district assignment leaving the student teacher without any assistance and only minimal guidance. In the second instance, a change was made because the mentor teacher had serious difficulties with classroom management herself as well as with organizing a program of study for the children. This mentor was an experienced teacher who had returned to teaching after a long break from the classroom. Had additional teachers volunteered to participate in the study, it is likely that this initial placement would not have been made. Data from these two student teachers are not used in this report. All collaborative teaching pairs remained together in their original assignments throughout the 8 weeks of student teaching.

## 2.2. *Data gathering and analysis*

Data were gathered using a variety of sources. Time logs allowed comparison of the activities of the student teachers. Student teachers turned in all literacy and social studies lesson plans. This source of data proved to be of little value, however, as no clear differences in planning emerged between the two groups. Planning meetings were taped early and late in the term. Unfortunately some teams failed to tape both meetings. Nevertheless some useful information emerged from meeting transcripts. A set of interview questions was developed to examine the children's attitudes about having multiple student teachers in their classroom. Children from each of the classrooms within which pairs of student teachers taught gathered in small groups around a tape recorder and a member of the research team asked them questions about the advantages and disadvantages of having multiple student teachers.

Interview protocols for the mentors and student teachers were developed (See Appendix). Ques-

tions asked of the student teachers varied slightly depending upon the nature of their placement. Interviews were conducted early (second week) and late in the term. Each interview was recorded and transcribed for analysis. Interviews were conducted by members of the research team who had no formal connection to Western Horizon or to the mentor or student teachers. Each student teacher or partnership was observed teaching a minimum of 12 hours, four half day observations, two early and two later in the term, by a member of the research team who also was responsible for interviewing that mentor and student teacher(s).

Data analysis consisted of calculating from the logs the kinds and amounts of time spent in various teaching activities by the student teachers. Single and partner placement comparisons were then made. Interviews, including group interviews of the children, were transcribed and analyzed first through open and then axial coding ([Strauss & Corbin, 1990](#)). Similar questions were asked in each interview. Drawing on these data sources and observation notes, case studies were independently written by the research team member who conducted the observations for each partnership and each individually placed student teacher. The cases were written explicitly to give a sense of development over time and to capture the nature of the participants' experience and the sense they made of that experience. The attempt to portray development in the cases and to make certain that differences were not lost when comparing single and partner-placed student teachers resulted in some variation in the organization of the cases. In order to address the general and specific questions underpinning the study, a cross case analysis ([Yin, 1984](#)) was conducted and themes and shared patterns were identified for each of the two models of student teaching.

Two cases follow. The story of the singly placed student teachers is mostly a familiar tale but it is told here because it enables comparison and discussion. Although independently written, the partner teaching cases proved to be remarkably similar. To simplify our findings and to better enable comparison of the two models of student teaching, the decision was made to present the most representative case, that of the sixth grade

partnership, and to note within this case consequential differences among the cases where they emerged. Attention will be drawn to similarities across the cases when they have particular importance to our questions.

### 3. Single placement cases

#### 3.1. *Single placement participants*

Both mentors, Mr. Oakes and Ms. Gardiner, were experienced teachers. Recently named the teacher of the year in his school district, Mr. Oakes had taught young children for nearly three decades and mentored over that time at least ten student teachers. Ms. Gardiner had mentored three student teachers over her 19 years of teaching. Characterized as “soft-spoken and just easy going,” Ms. Gardiner believed that mentoring student teachers was “important for [teachers] to do as part of [their] professional responsibility.” Both mentor teachers had school-related assignments in addition to their role as classroom teachers. Mr. Oakes served on a district team responsible for observing and assisting a struggling, senior-level teacher on probation. This responsibility required him to be absent from the classroom on a regular basis. Ms. Gardiner was the school technology specialist, and was therefore called upon from time to time to help other teachers in the school with computer problems. Mr. Oakes described Jerriann, his student teacher, as “very easy to get along with. I think [she wants] to please others.” She was also fiercely independent. He noted that “a lot of times, I’d just ask, ‘are you ready for the day? What can I do to help you?’ and I know she had things to do.... I got the same answer all the time, ‘No problem.’” In addition to doing her student teaching, Jerriann was still completing some of her course work on campus, so she often had to hurry off at the end of the school day to make the hour-long drive to the university for a late afternoon class. She was also engaged to be married at the end of the semester. These circumstances, coupled with Mr. Oakes’s frequent absence from the classroom, framed Jerriann’s student teaching experience, severely

limiting opportunities for Mr. Oakes and Jerriann to plan for upcoming instruction or engage in any sort of dialogue about teaching.

Like Mr. Oakes, Ms. Gardiner found her student teacher, Joni, to be “easy to work with.” From the beginning, Ms. Gardiner saw Joni as one who was “very receptive to ideas... always taking initiative and [being] prepared.” Although Joni’s prior teaching experience had been in upper-grade classrooms and she was initially concerned about her ability to teach younger children, by the end of her student teaching she was cautiously optimistic about her capability. “I feel like I’ve ended with a better experience than I started with.”

#### 3.2. *Relationships*

The relationships that developed between the student teachers and their mentors differed considerably in these two single placement classrooms. In Ms. Gardiner’s classroom, Joni felt supported at every turn, and spent extended periods of time planning and reflecting with her mentor. Even toward the end of Joni’s student teaching, after Ms. Gardiner had withdrawn from the classroom for the majority of the day, interaction continued.

This sense of support was not as strong for Jerriann. Almost from the beginning of the semester, even when he was in the school, Mr. Oakes was generally not in the room when Jerriann taught. Rather, he moved in and out, spending much of his time in the office area adjacent to the classroom. Opportunities for communication were at a premium. Jerriann said, “One of us was always rushing someplace, so we did not get to spend a lot of time planning.... It was always a fight for us to meet together to talk about things.” When they did plan together they usually focused on the upcoming week’s teaching activities and their scheduling, Mr. Oakes making suggestions about activities and materials, or occasionally critiquing Jerriann’s teaching. Mr. Oakes and Jerriann’s relationship was pleasant and professional, but could not be described as particularly close. As Mr. Oakes remarked, “[Looking] at the perspective of student teachers that I’ve had in the past, we were just acquaintances instead of really working together.”

Jerriann described her relationship with Mr. Oakes in this manner: “We got along fairly well. I think we struggled with communication... but generally speaking, we got along.”

The conditions within these two teams contrasted in some important ways, most notably the time available for conversation. Opportunities to interact were far more common for Joni than for Jerriann, so the relationships that developed within the teams were quite different. Additionally, there was some difference between the two mentor teachers’ confidence that their student teacher would prepare adequately to carry out instruction. Both found it easy to get along with their student teachers, but Ms. Gardiner saw Joni as well-prepared and on top of things. Mr. Oakes did not share that same confidence in Jerriann. It is not surprising to find variation in the quality and depth of interpersonal relationships, and these two cases likely exemplify rather typical relationships that develop between mentors and student teachers (see McNally, Cope, Inglis, & Stronach, 1997).

### 3.3. *Roles and responsibilities*

The roles enacted by the two single placement mentors were very similar. Both shared a view that the role of a mentor was to provide a classroom where the student teacher could practice teaching, and to give some support in the form of feedback and guidance in planning. They also shared the view that their role included helping the student teacher locate instructional materials. Both considered it appropriate for the mentor teacher to maintain responsibility for major curricular decisions in their classrooms. Transcripts of the planning sessions clearly indicated that from the beginning of student teaching to the end, both Mr. Oakes and Ms. Gardiner were the decision makers, although they allowed some flexibility. In Ms. Gardiner’s classroom, for example, Joni was given some control over how the topics and concepts could be presented, but within established guidelines. “[Ms. Gardiner] has a lot of influence, but then she also asks me [for my input].... Say ‘I’m hoping to go through subtraction and addition with regrouping’ or ‘I’m hoping to teach penguins’

and then she’ll say, ‘so you’ll want to look at the [state] core and kind of think about that.... So she’s kind of given me guidelines and then I choose what I want to teach and when I want to teach it.’” While Jerriann’s experience in third grade left her more alone in her planning and preparation than Joni, Mr. Oakes was nonetheless in charge of what was to be taught.

Intentional absence from the classroom on the part of both mentors signaled a strongly held belief that solo teaching is the best preparation for teaching. When contemplating the instructional possibilities created by the presence of two teachers in a classroom, Ms. Gardiner welcomed another “trained adult” to help in reading groups. Yet she, like Mr. Oakes, acknowledged that such an arrangement was unrealistic in public school classrooms. She struggled with finding a balance between working in the classroom with her student teacher and giving her a “realistic” experience in the form of solo teaching. She seemed settled with her decision to transfer the responsibilities of teaching as quickly as possible to Joni. For Jerriann, Mr. Oakes’s withdrawal was abrupt, and came early in the term. Jerriann’s time logs reveal no difference in the amount of time spent observing Mr. Oakes teaching at the beginning to the end of the semester. She was given considerable responsibility for instruction within the classroom early in the semester, and that continued. Early on she was responsible for setting up and managing learning centers, teaching mathematics, opening the classroom day with calendar, weather, and pledge of allegiance routines, dealing with discipline issues, and closing each day. She was also responsible for correcting assignments, giving and monitoring homework, and moving children during the day to lunch, recess, and other out-of-class activities. When Mr. Oakes was in the room he tried not to interfere with Jerriann’s teaching. During those times he reported that he found it difficult not to “jump in,” to say something, or to take control when he felt uncomfortable about what he observed. The version of a “team” that emerged was one where Mr. Oakes attempted to guide Jerriann from behind the scenes during occasional planning sessions, but stayed out of her way in the presence of the children.

In Ms. Gardiner's classroom, withdrawal was more gradual, but was nonetheless intended to prepare Joni for the solitary world of classroom teaching. Initially, Ms. Gardiner taught most of the day while Joni observed, took notes, or occasionally assisted with student questions, or with off-task behavior. Eventually the roles changed. After the third week Ms. Gardiner spent less and less time in the classroom, finally leaving Joni to manage and teach the students independently. After she had eased into full responsibility for instruction, Joni maintained Ms. Gardiner's class routines, including daily oral language, sustained silent reading, mathematics, two reading groups, attendance, pledge of allegiance, all subjects, transitions to recess, lunch, and music. She also planned lessons and schedules with her mentor teacher, and developed and implemented a management plan.

### 3.4. *Perceptions, expectations, and assessment*

The overall concerns expressed by both student teachers and mentors were those commonly acknowledged in the literature (see McNally et al., 1997). Mr. Oakes had difficulty turning the teaching of his students over to another: "I just hate to give my kids away [during] prime teaching time in January and February. And I always worry. I'm too possessive of my kids." This reluctance was amplified by his concern about Jerriann's daily preparation. "Because of her outside influences with the two classes and getting married, she was flying by the seat of her pants a lot of the time. She'd get the kids working and then run over to the computer to get a worksheet ready for that afternoon, which should have been already run off." Ms. Gardiner also worried about her children, but sought opportunities to give them additional help: "I have so many kids that are on the low end of the academics and [having a student teacher] will give me a chance to give them a little bit more individualized attention." Perhaps Ms. Gardiner's release of her children to the care of a student teacher was made easier by her confidence in Joni.

For Jerriann there was a need for more interaction with Mr. Oakes, but little opportunity for extended conversations, feedback, and plan-

ning. Because much of Jerriann's teaching was solo teaching in Mr. Oakes's absence, she received little scrutiny. "I felt like I was being critiqued with not as much support in helping me grow." She was, however, appreciative of her mentor's help when offered. "There were a few times when the planning went really well, and we were actually able to talk and plan together. I remember when we were working on the fairy tale unit.... [For] an hour and a half we were able to bounce ideas off each other and that was incredibly valuable because I got his feedback and suggestions." For both, there seemed to be some level of professional respect for the other, but neither was elated about their experience. As noted, limited time was a serious issue for Jerriann, as it was for most of the student teachers.

Joni's expectations for student teaching were more closely matched to those of her mentor than was the case with Jerriann and Mr. Oakes. Ms. Gardiner perceived herself to be a nurturer, a facilitator, and the director of her classroom curriculum, and Joni felt those roles were appropriate for a mentor teacher. In her opinion, her mentor teacher was "responsible to know what's required of me and to be able to help me work through that." Additionally she indicated that the mentor should "answer any questions that I have and kind of guide me through the process of student teaching,... Take note of what's going on so she can give me pointers and feedback, and then... To always kind of be there in case I need help." Ms. Gardiner's view of her role aligned with Joni's perception: "It's important for me to give her praise for the things that I see she is doing well or that I think are being successful with the students, and then to give her ideas on the things that aren't working so well." With this match of perception and expectation, Joni and Ms. Gardiner worked harmoniously together. Both were pleased with the contribution and performance of the other.

## 4. Partner placement case

As noted, we use the case study of the sixth grade partner team to present our findings. Not



only does this case well represent the others, it has the additional advantage of involving two very dissimilar student teachers. Indeed, it would be difficult to imagine two more unlike personalities than Rebbie's and Emma's, the two paired student teachers. In contrast, the student teachers in the fourth grade team were characterized by the mentor teacher as a "perfect match" because they had "similar personalities." While, for a time, Rebbie and Emma struggled with their relationship, eventually they became very close friends.

#### *4.1. Partnership participants*

We begin with background on Mrs. Kenny because, as [Graham \(1997\)](#) argues, personal histories have a "profound influence on the mentor teacher–student teacher relationship" (p. 516). Rebbie and Emma were assigned to student teach with Mrs. Kenny, a sixth grade teacher with 16 years of elementary school teaching experience. A self-confessed "control freak," Mrs. Kenny had mentored over 15 student teachers in two school districts. She characterized her previous experience as mentor as "a mixed bag." Before volunteering to participate in the study, she had "mixed emotions" about working with two rather than one student teacher. Her concern not only was whether or not having two student teachers would increase her work load, but more generally tied to the potential negative impact of any student teachers on the children: "[Some] of these kids are so low [academically] that it's really difficult [to give up my class]... The kids have to go to seventh grade next year; I always feel a [need] to get them where they need to be to move on." She thought being taught by student teachers might impede their progress. Understandably this is a common view among mentor teachers. The mentor of the second grade team felt much the same way, that student teachers would harm the children. Mrs. Kenny approached participation in the study cautiously, expecting to carefully monitor the children's performance and be fully ready to continue to play an active role in the classroom to make certain no harm was done to them.

According to Ms. Kenny, Rebbie "had a little chip on her shoulder" at the beginning of student

teaching. Apparently she wanted a student to teach at Western Horizon, but hoped she would not be placed with a partner. She wanted her own classroom, but did not get one. Of the six student teachers placed with partners, only Rebbie and Lou, a member of the fourth grade team, initially expressed doubts about partner teaching.

Characterized by herself and by Mrs. Kenny as relatively "easy going" but a very serious student, Rebbie brought to student teaching an unusually rich academic background particularly in mathematics and the arts. Emma, Mrs. Kenny said, was not as "strong" academically as Rebbie. Their personalities, she said, were opposites. Emma was playful and seemed much younger than Rebbie, was "cool," very concerned with the latest fashions, hair fads and music groups, and very confident and outgoing, not reserved at all. In contrast to Rebbie's solid, calm, more grown up bearing, Emma was flighty, less steady and, according to Mrs. Kenny, "superficial," and much less reflective. As Mrs. Kenny remarked, "Those personalities are so different." Yet, they were assigned to be partners.

Like the other partner-placed student teachers Emma and Rebbie did not know one another well prior to their assignment as partners. As Rebbie said about Emma: "I really didn't know anything about her... [We've had some classes together but] I've never done any group projects with her at all. So, it was really different being paired with her. I wasn't sure how it would turn out."

#### *4.2. Relationships*

At the beginning of the term, and throughout, planning together was ongoing. At the end of each day Mrs. Kenny, Emma and Rebbie met to discuss the day's events, consider problems, and make certain everything was ready for the next day. The upcoming week was planned on Fridays. At the start of the term, like each of the other mentor teachers, Mrs. Kenny shared the established curriculum with her student teachers. The school had adopted reading and mathematics programs and the expectation was that these would continue

in place. In science, the sixth grade studied light. In social studies, the topic was the middle ages. Vocabulary and spelling were part of each week, as were physical education and music, both taught by school specialists. Art activities took place every week, and in this one area there was no assigned curriculum.

During the first 2 weeks, Mrs. Kenny was heavily involved in every aspect of teaching but this soon changed. She noted, “At the beginning of the student teaching experience [as a mentor], I do a lot of spoon feeding. A lot of talking. With the two [student teachers] in the classroom, I feel like it’s been more discovery [than in the past]. I’ll tell them, this is your topic...and you go figure it out. Bounce ideas off each other and come back to me and then I’ll help you tweak it before or after you teach it. It has been different [from my previous mentor experience].”

Before Mrs. Kenny withdrew from the classroom, Emma and Rebbie thought of Mrs. Kenny as fully part of the team, albeit a senior member. Rebbie remarked: “There’s no separation. It’s all three of us. Always. Every time the kids are gone, we’re talking.... She’s part of the team. She’s a strong part of the team.” But as the term progressed and Mrs. Kenny withdrew from the classroom, though not from the on-going conversation about teaching, Emma and Rebbie became increasingly interdependent and simultaneously independent of Mrs. Kenny. Quickly they realized that they were invested in one another’s development, and that success was dependent upon fully and openly sharing ideas and resources and helping one another in any way possible. In response to the question, “When something goes wrong in the classroom, to whom do you go for help first,” both said their partner. “I go to Emma first. We talk about it, especially if she’s noticed a problem, then we’ll go to Mrs. Kenny. I like to talk to Emma about [a problem] first to see if maybe we can work it out.” They used one another as sounding boards, sources of ideas and feedback, and for support. In turn, Mrs. Kenny became a much valued resource and guide. As Emma said, “She’s awesome to work with. She’s very helpful. If we need resources, she’ll help. She’ll explain ideas. She talk[s] with us...and gives us advi-

ce...and suggestions. But then, she hands [everything] over to us.” This inter-dependence was present in other partner-placed teams of student teachers as well.

#### *4.3. Roles and responsibilities*

Mrs. Kenny transferred full responsibility for the classroom over to Emma and Rebbie more rapidly than she initially thought she would or could. As she did so, her role quickly changed. She continued to give feedback, struggling, as she said, to be “critical,” but she saw herself, particularly with the language arts curriculum, as one member of a team. Given Emma and Rebbie’s knowledge of writing instruction, for the first time in her career Mrs. Kenny decided to organize learning centers. All three of the team members took responsibility for a center through which the children moved each day during the time scheduled for the language arts. There were four centers, including one designed for independent work on spelling and vocabulary. This represented a dramatic change in Mrs. Kenny’s program, one noted and valued by some of the children, as one child remarked in a group interview: “At first we didn’t have centers... But now...we have these centers where we have literacy; it’s a rotation.” Another commented: “I just like to get into the writing [centers].”

Emma and Rebbie assumed complete responsibility for the curriculum by the end of the third week. This change is indicated in the time logs where they reported from week two to week six that the amount of time spent on planning and preparing to teach nearly doubled. While planning patterns varied, planning and preparing to teach remained a time consuming activity across the term for each of the three partner teams. Throughout the term Rebbie and Emma met each day with Mrs. Kenny, who observed regularly but spent progressively less time in the classroom. Observation notes reveal that Rebbie and Emma shared the day, and even when one had major responsibility for an activity or lesson the other remained significantly involved. For instance, Rebbie assumed major responsibility for the Friday arts lessons, but Emma actively participated in



them by helping the children. Similarly, as the term progressed they became increasingly willing and able to slip into and out of one another's lessons, offering suggestions, support, assistance and from time to time correction. For example, about mid-term, Emma and Rebbie had planned to introduce a new book when the children returned from morning recess. The decision was made because they felt that the children had lost interest in the book they had been reading to the class, Lloyd Alexander's *The Book of Three*. The plan was for Emma to make the transition to the new book and to begin reading. The students protested; they wanted to finish the story. Standing together in front of class, Emma and Rebbie quickly conferred, and roles were switched—Rebbie led the class. Roles were likewise traded with ease during the weekly class meeting. During a vocabulary activity and without embarrassment Emma turned to Rebbie for help pronouncing an unfamiliar word that caught her by surprise. This pattern was also typical in other partner placements. Our observation notes of the second grade team include the following comment similarly illustrating how closely the three teachers worked together: "Erica engages in supportive interaction while Susan (the mentor) switches between correcting papers and monitoring. Erica shifts from supportive interaction to full teaming with Liz directing [a] game." Within each of the teams, roles became fluid.

Mrs. Kenny offered a way of thinking about how Emma and Rebbie taught together which applies to each team. Early in the term, as she transferred responsibility to them, she said: "You can team teach or you can tag teach, which are two different things. You need to decide which you want to do." By teaming, she meant that each was fully involved and equally responsible for a lesson or activity. By tagging she meant turn taking. As our observation notes indicate, Emma and Rebbie did both, mostly "tagging" in the morning and "teaming" in the afternoon, but always, Mrs. Kenny said, "collaborating."

The transfer of responsibility for the classroom to the student teachers was handled somewhat differently in each of the three teams. In the sixth and second grade teams the mentors withdrew

from most active classroom participation relatively early. The mentor of the second grade team felt able to give over more responsibility for the classroom faster than she had when working with previous student teachers. This was her plan:

We began working as a team right from the first day. At first [their teaching] was a little bit limited because I wanted to give them some time to learn the routines... I'm gradually moving them from a team situation [with me] into a situation where they're taking over more of the responsibility...

As the term progressed this mentor, like Mrs. Kenny, was often out of the classroom. In contrast, the mentor of the fourth grade team was seldom out of the room unless she was working with students in the adjacent pod area. She remained much more actively engaged instructionally: "During the day she mostly stays out of things when we're in charge, maybe taking kids aside who need individual attention. We divide the kids up in small groups and she takes a group." This difference may help account for Marsha's conclusion that, in contrast to Lou, her partner student teacher and the other four partner-placed student teachers, she would not teach in a partnership if she were to have the opportunity of reconsidering her initial decision.

#### *4.4. Perceptions, expectations, and assessment*

Early in the term Mrs. Kenny would only say that having responsibility for two student teachers was "very different" from having one. She refused to answer the question, "If you had a choice between having one competent student teacher, and two promising student teachers [assigned to you], which would you choose?" Then she was uncertain: "That's kind of a loaded question. I don't want to make that decision [yet]." However, like her two colleagues, she clearly valued working with student teachers: "I think a limited amount of it [having a student teacher] is good. It helps me stay fresh as a teacher. They bring things to the table that are interesting, that help me..." The other two mentors did not share her initial doubts

about partnership teaching. From the start the fourth grade mentor was thrilled at the prospect of having additional adults in the classroom: “We don’t need lower class size, we need more adults in the classroom!”

At the end of the term, Mrs. Kenny’s doubts about partnership placements were gone: “I had mixed emotions about it at first, but I think this has been a much more positive situation for the students than what I’ve seen in the past.” She thought the benefits to the student teachers were significant, but she dwelt on the benefits for the children, her primary concern:

It’s been much more supportive for the kids. To have an extra body in the classroom [is a plus]... Because of [the student teachers’] planning and collaboration, the kids have really gotten good material.... They are getting richer experiences. I think that if you just throw a single teacher in there all day, the children are going to get some good experiences, [perhaps] a super math lesson, and that would be it for the day. The [teacher] then just kind of gets through reading or spelling... [In contrast] this team [makes it so] they’re getting rich experiences every time... They do so many exciting, high-energy kinds of things, that when I go back into the classroom the kids are going to die... They’ve really kept the kids moving.

The fourth grade mentor teacher supported this view, and added an additional insight: “Man, it’s wonderful... They have covered in eight weeks much more material than I would ever cover.”

Early in the term, a downside emerged for Mrs. Kenny: her workload increased beyond what, based upon her extensive experience, she thought was normal for mentoring a single student teacher. “At the beginning, I felt a little bit overwhelmed.” But this situation changed as the term progressed: “In some ways it is more and in some ways it is less [work]. I don’t think [it’s a bad trade-off]. I don’t think it’s been more work; it’s [just] been different... It’s more at the beginning, and less now.” The fourth grade mentor teacher disagreed: “I have a [reduced] workload. They do a lot. They are very competent. It has been less work for me

because it has been a team effort.... The kids got more instruction.”

Despite having doubts of her own about being placed in a partnership, Rebbie concluded the term very enthusiastic about teaming and about her student teaching experience.

Emma and I, we’re great together! If we have a suggestion, we feel free to make it. If she is doing something that isn’t going well, I feel free to step in and she does the same with me. You know, if we notice something, or if we talk about a lesson plan before and say, ‘You know, I don’t know if this is going to work,’ we aren’t afraid to step in. Because we’re here to help each other.

Emma echoed Robbie’s assessment and added: “[In our partnership] the lessons are really thought out and well planned because there are at least two people working on them, and figuring things out... It adds variety.” She said that she felt that her creativity had “been increased” by working with Rebbie. Then Emma spoke specifically of Rebbie and the support she offered: “It’s nice to have somebody else that understands exactly what you’re going through. We can talk about different kids and the problems they’re going through. How are we going to get this student to learn better; I have somebody that knows my situation, that is there every day, that I can discuss issues with.” Because of Rebbie, Emma felt “more security” when student teaching.

At the beginning of the term, Emma expressed concern that her participation in a partnership during student teaching would be viewed negatively by future employers: “Just what is a future employer going to think? If they know [I] team taught, does that mean that I can’t [teach] on my own? In a way that kind of worries me, but not [a lot because] I’ve had two semesters that it’s been just me and [a mentor] teacher [in the classroom].” At term’s end, this concern was entirely gone, having been overwhelmed by her positive experience with Rebbie and her growing appreciation of the value of teacher collaboration: “I think it’s important to collaborate with other teachers... [From collaborating] you get more ideas, more depth in lesson planning, it’s just better.” When

asked if she would partner teach again, Emma responded: “I loved having a partner;” she would recommend it to others. Then, pausing to think, she offered a qualification: “There are some personalities that I think would have been difficult to work with. But then, maybe not. Maybe not. I thought so at the beginning [of student teaching].”

Rebbie shared Emma’s assessment of partnership teaching. Despite being pressured in interview to identify negative effects, she did not. She was asked: “If you could go backward and do it all over again, would you prefer to work with another student teacher, or would you rather be on your own?” “I would work with another student teacher again.” She said this despite her initial concern. “Convince me, why? Imagine that I’m a student teacher and I have to make a decision about student teaching.” Rebbie responded:

Because having Emma in here has [provided] extra support to where I felt more daring, more courageous to do things I may not have done with a class before. Neater activities, something that might need a little more monitoring going on from a new teacher perspective. I’ve been able to do things that I might not do with my regular classroom... I’d say, do it!

Neither student teacher was concerned about having to share a class and a mentor. They felt equally powerful, and fully responsible for the class. As Rebbie said, “I feel responsible for the class even when Emma is in charge.” Nor did they feel they did not receive a sufficient amount of time soloing, being wholly and individually responsible for the class. While this was not a concern for Emma or Rebbie, it was for Lou and for one of the second grade partner teachers:

It’s not realistic. We had three people to help [the children] and that won’t happen in a real class... I like working in the partners for the students’ sake because it gives a lot of them a bit more variety in teaching... But probably for the student teacher’s sake, [teaching] singly would be a little bit [better preparation] in aspects of management. But working with others and trying to figure out ways to creatively approach

the curriculum and the things you need to teach—pairing is probably better.

## 5. Discussion

The discussion is organized around the set of questions that guided our inquiry.

Question 1: What kind and quality of relationships will develop in the two models of student teaching between mentors and student teachers and, in the partnership model, between student teachers?

As noted, only one of the six paired student teachers said she would not want to work with a partner if again given the opportunity. However, she also said that the experience of partner teaching was valuable, just not “realistic.” This comment underscores a persistent tension within teacher education: “The need to free prospective teachers to develop powerful educational visions and to imagine new possibilities, although important, may come into conflict with the need to prepare them for schools as they currently exist” (Kahne & Westheimer, 2000, p. 380). The belief that to teach is to work in isolation, to plan lessons alone, solve problems alone, and to stand alone in front of a classroom and to talk at children, is a recognized and major impediment to educational renewal.

The concept of “collaboration” frequently appears in the school reform and teacher development literature as an unqualified good: “Research has shown collaboration to certainly affect the level of commitment to the school organization, the level of motivation and job satisfaction among teachers, and the professional development of teachers” (van Veen, Slegers, Bergen, & Klaassen, 2001, p. 190). Despite these results, the nature of professional relationships that facilitate development and enhance performance is much more complex than is typically suggested. Clement and Vandenberghe (2000) convincingly argue that collegiality and autonomy both have a place in teacher development, that they most productively exist in a “circular tension” where “learning opportunities...and learning space are attuned to one another” (p. 92). They warn: “even modest

learning experiences originate more easily in a school characterized by a circular tension between autonomy and collegiality. Such circular tension cannot be created by enforcing collegiality through, for instance, the establishment of structural forms of collaboration” (p. 98). Partnership placement is a structural form of collaboration. Did it encourage collegial relationships?

Our data indicate that student teachers placed in a partnership teaching arrangement came to appreciate the value, when learning to teach, of working closely with other teachers. A member of the second grade partnership nicely captured the common view: “I’ve learned that others can be very helpful to me and I will...get other teachers’ input and avail myself [of their knowledge].” Each of the paired student teachers became heavily invested in their partner’s development and success.

In varying degrees the partner-placed student teachers felt the tug between autonomy and collegiality. When Mrs. Kenny urged her student teachers, Emma and Rebbie, to decide how they wanted to work together, tagging or full teaming, she offered a model for thinking about and negotiating their relationship. She presented both approaches as legitimate and valuable. Her concern was to help her student teachers think through their relationship prior to encountering difficulty. Each of the partner-placed student teachers wanted opportunities to test their own ability and ideas and for this a measure of autonomy was needed; and each wanted critical feedback and opportunities to talk about their teaching and for this collegiality was required. Within the partner placements the circular tension described by Clement and Vandenberghe was much in evidence but it was surrounded by a shared understanding that they could not succeed alone. They needed one another.

Creating a desirable tension between autonomy and collegiality in the single-placements was more difficult. The absence of Mr. Oakes from the classroom left Jeriann alone to make the best she could of her autonomy. Teachers often confound isolation with autonomy; Jeriann faced loneliness, a common and debilitating part of the lives of many teachers (Koepen, Huey, & Connor, 2000).

She did not feel connected to him; she just happened to be assigned to student teach within his classroom. In fairness to Mr. Oakes, his approach to mentoring is more typical than not: “under the individualistic culture of teaching, mentors are hesitant to offer suggestions to their novices and they worry about intruding into the autonomy of their novices” (Wang, 2001, p. 52). In contrast, Joni came to value Mrs. Gardiner’s consistent support, and her suggestions and feedback. Through this experience she came to understand the important place another teacher could have in her own development as a teacher. However, her view was colored by her formal relationship with Mrs. Gardiner: mentee (student) to mentor (teacher and evaluator). Having a partner who was also a peer opened up opportunities for development unavailable to single-placed student teachers and had the additional value of enabling risk taking both singly—where the boundaries of one’s autonomy are pushed outward—and unitedly.

Question 2: What differences in roles and responsibilities will emerge for mentors and student teachers in the two models of student teaching?

For the most part, singly placed student teachers began as assistants to their mentors, charged with carrying out an established program, and then assumed virtually all the responsibilities of teaching but within the established activity structure. Functioning as supervisors, mentors gave feedback and advice as they could. The student teachers taught and listened when given feedback. The relationship was clearly one of expert to novice. In contrast, although in varying degrees, partnership-placed mentors and student teachers became interdependent members of instructional teams. Among partners and mentors conversation about teaching was frequent, consistent, and open. Since partners had the opportunity to plan and then to observe one another teach, they had abundant opportunities to jointly analyze their teaching which, as Roth and Tobin (2001) argue, provides rich opportunities to learn about and better understand teaching not available to a teacher working alone in a classroom. Thus, in partnership placements, not only mentors but

peers become critics of teaching. But, since they were joined in a common commitment to provide an enriched education to a specific and shared class of children, feedback was less one-directional, more conversational, and decidedly focused on mutual interests.

Working with two student teachers prompted mentors to rethink their conceptions of the mentor role, understandings based upon their prior experience with solo student teaching. They found it relatively easy to allow a greater measure of risk taking in the classroom and greater involvement in curriculum decision making because they trusted their student teachers and their joint ability not only to manage the classroom but to provide an enriched curriculum. Trusting the student teachers made it easy for mentors to slip into a supporting instructional role if they wished, perhaps to assist an individual student or a small group of children. Remarkably, we found no evidence of serious competition between partners nor any indication that the active involvement of the mentor with children was threatening.

Question 3: What value will the student teachers and mentors find in their experience? What impact will the student teachers have on the classroom, the mentors (including their workload), and pupil learning?

According to the mentor teachers, all the student teachers performed well, no exceptions. However, mentors to partner-placed student teachers thought their paired student teachers (based upon prior experience mentoring individually placed student teachers) were better able to take risks; developed richer, more interesting and varied lessons; and were able to be more helpful to children. And, they learned how to collaborate: “When one slips up the other one catches it and they don’t seem to have any problem taking up the slack for the other. They work equally hard at what they’re doing. They try and make sure that each succeeds. Whatever the lesson is, the other one is over there getting materials, making sure it works.” In sum, the mentors concluded that the experience was more beneficial than traditional student teaching, but not only for the student teachers. The children, they said, were also better off.

Based upon previous experience the mentors had some concern about working with student teachers generally arising from fear of potential negative impact on the children. There was also some concern about working with pairs of student teachers, as Mrs. Kenny observed. At the end of the term, however, all of the mentors excepting Mr. Oakes echoed words about the value of mentoring commonly reported in the research: Mentoring a student teacher has a “significant impact on [the mentor’s] own teaching”; reduces “isolation because they share students and lessons with another adult”; brings “new ideas, strategies, and up-to-date research directly into [the classroom]”; and provides “enthusiasm, excitement, and encouragement to try new things” (Hudson-Ross, 2001, p. 438). None of these statements are unique to mentoring pairs of student teachers.

However, partner teaching did impact the classroom in three somewhat unique ways: First, given increased human resources mentors with partnered student teachers engaged in unusual and extensive curricular and instructional innovation. Recall, Mrs. Kenny organized learning centers for the first time. With her student teachers, the second grade mentor organized small groups and consistently tutored individual pupils which, she said, had been lost or neglected before as she sought to keep her class on task and moving through the curriculum. Moreover, the mentors asserted that the curriculum became much richer, beyond what was possible with only one student teacher, and this impacted how Mrs. Kenny thought about the future and what she would teach. As noted, Rebbie brought expertise in art and mathematics from which Mrs. Kenny learned. Emma created an after school dance program, which Rebbie and Mrs. Kenny enthusiastically supported. Second, classroom management was dramatically altered, which reflected a change in the power structure of the classroom and, we believe, in the quality of human interaction. To be sure, established management routines were kept in place and with two or three adults in the classroom these likely had greater effect than was usual. However, we observed interactions and patterns of interaction that are rare in a typical classroom even when there is a teacher’s aide

present. While one of the partners was guiding a lesson another lingered with a single student for an extended period of time or actively scanned the classroom for signs of confusion and then responded immediately. This was possible, in part, because the teachers thought of themselves (unlike an aide) as equally responsible for the classroom. Although debate continues over the value of reduced class size, some researchers noting that the key to improvement is the quality of teaching (see [Stone & Mata, 2000](#)), we witnessed some of the possibilities.

Third, the mentors asserted that the children learned more, and more quickly. This result is similar to that reported for team teaching generally: “According to the literature, team teaching encourages multiple perspectives, promotes dialogue/increased participation, and improves evaluation/feedback” ([Anderson & Speck, 1998, p. 673](#)). In group interviews the children gave compelling reasons why they liked partner teaching. Like each of the three mentors, the elementary school children found significant benefits in partnership teaching. Rebbie and Emma’s students especially appreciated having a teacher always available to offer assistance and liked the variability of the curriculum: “I think it’s good because all the lessons are different.” Another commented favorably on instructional differences: They have “got their own techniques.” The children spoke of specific lessons they enjoyed, including art lessons Rebbie taught on Monet and another on Georgia O’Keefe. Another liked the faster pace: “We can get through a subject a lot faster.” Every child, without exception, said they liked having multiple teachers in the room. These comments were typical. Second graders supported their older peer’s views and added their own insights: “We can do more centers.” “When I get mixed up on something, someone comes to help me.” “One teacher gives one assignment and another teacher gives another assignment and I like to have different assignments.” Only two drawbacks were noted by the children in Emma and Rebbie’s classroom to partnership teaching: Sometimes there was a little confusion about which teacher to go to for help (“Sometimes it’s confusing because if you have a question about a lesson that

one of them’s teaching, you might go to the other two [and] they can’t really help you”) and too much homework (“We have a lot of homework now.”).

Considering the impact of partnership teaching on the children, the mentors expressed one concern, best captured by the second grade mentor:

It’s taken me a half a year for [the children] to feel really safe and comfortable with me, and now we’ve brought in some other people who are taking primary responsibility for [teaching] now... All at once [they’ll go back to having one teacher]. I think it will be hard for the kids. They’ll have to wait [for help]. I wish that didn’t [have to] happen. They could get questions answered immediately [when the student teachers have been here].

She went on to say: “It’s going to be hard for me to go back to teaching a room by myself because that’s not how I like to teach. I like to teach with other people. I don’t think I have everything that a child needs and the more people I can bring into a room to offer things for the children, the better off they are going to be.”

Mentors had mixed views about whether or not having a pair of student teachers was more work than having responsibility for a single student teacher. One thought it was less work; another, Mrs. Kenny, thought it was more work at the beginning of the term, although on balance the trade-off was judged worthwhile. This difference in mentor perceptions might be connected to the increased complexity that is involved when trying to forge a team with two very dissimilar student teachers like Emma and Rebbie.

## 6. Conclusion

Mentors who worked with pairs of student teachers were enthusiastic about the practice and hopeful it would continue. With one exception, the paired student teachers agreed. Yet, there is some reason for caution before embracing the practice. Most of our students came to teaching sharing a moral orientation to the world grounded in a



shared religious commitment. They were dedicated to teaching, saw teaching as a moral act and a form of valued service, and tended not to be confrontational when faced with a differing point of view, a point noted by Mr. Oakes about Jerriann. Thus, while we felt relatively secure randomly assigning students to either a pair or single placement, under other circumstances success might be dependent, as Emma suggested, on who one is paired with. Some student teachers might make poor candidates for a partnership. What might happen when one student teacher is open and responsive to suggestions and criticism and the other timid and defensive? Similar attention probably should be given to mentor placement and school selection. We were fortunate at Western Horizon to have a sufficient number of teachers volunteer as mentors, albeit only barely, that we could conduct the study at one site. Even then, as noted, challenges emerged with two mentors assigned to work with single-placed student teachers. The teachers were experienced as mentors and generally confident as teachers. They were not easily threatened by the presence of university faculty nor multiple student teachers. Additionally, Western Horizon is an urban school with a faculty and principal comfortable with the language and values of collaboration. While these teachers were predisposed to support the idea of partner student teaching, some still had serious doubts. Other faculties might well be openly hostile. After all, beliefs about how one best learns to teach differ, and are often intense and very personal.

For purposes of this study we intentionally did not conduct inservice classes on mentoring. In the future, we will. Had we done so perhaps Mr. Oakes would have had less difficulty giving feedback and Mrs. Kenny might not have struggled to be helpfully critical of student teacher practice. The teachers expressed interest in the topic and said they would have appreciated being able to think through with other teachers how best to support and build a teaching partnership. Further, we did not consider the potential impact of partnership teaching on the university supervisor's role. In their co-teaching model, which also involves peer teaching, Roth and Tobin (2001)

include the supervisor as a participating member of the instructional team, another teacher, who needs to be involved in the classroom in order for his or her participation in the conversation about teaching to be grounded and valuable.

Of the four single-placements with which we began the study, as noted, only two stayed with the same mentor teacher throughout the term. We have wondered what would have happened if the two student teachers who encountered difficulty had been placed with a partner. Perhaps with a partner to offer support and feedback a change would not have been necessary. Then again, perhaps a change in placement would have been necessary for other of the student teachers, those placed with a partner, had they been assigned alone.

The charge that student teaching with a partner is not "realistic" is a serious one. An adequate response requires clarity and agreement about the aim and purpose of student teaching: If to learn to teach is to learn to manage by oneself large numbers of children, then partnership teaching has an obvious disadvantage. However, if student teaching's primary purpose is to learn how to develop innovative curricula and expand one's knowledge of methods and of children while learning to engage in collaboration, then partnership teaching has an advantage. We give Mrs. Kenny the last word: "It's been a really, really positive situation for the girls, and I hope in the future [the university] continues [to support partner teaching]".

## Appendix

### 1. Sample protocol.

Two interviews for Student Teachers.

Interview 1: (before starting, get permission to record the interview and once the tape begins, state the date)

What is your name? Are you placed with another student teacher in your mentor teacher's classroom or are you alone with a mentor?

For those in a partnership, ask:

1. Characterize your team (peer and mentor teacher). How do you get along with the members of your team? Be specific.

2. Describe your mentor teacher's role and responsibilities.

3. What do you do when your partner is teaching? What does your mentor do when you are teaching?

4. When something goes wrong within the classroom, with whom do you speak? From whom do you seek help?

5. Who has most influence over the curriculum, over what is taught? How are curriculum decisions made?

6. What is the downside of having a teaching partner?

7. What is the upside of having a teaching partner?

8. Thus far, what has been your greatest challenge in student teaching? Your most serious problem? (Probe)

For those not teaming, ask:

1. How do you get along with your mentor teacher?

2. Describe your mentor teacher's role and responsibilities. How do you work together?

3. When something goes wrong within the classroom, with whom do you speak? From whom do you seek help?

4. Thus far, what has been your greatest challenge in student teaching? Your most serious problem? (Probe)

Interview 2: (before starting, get permission to record the interview and once the tape begins, state the date)

What is your name? Are you placed with another student teacher in your mentor teacher's classroom or are you alone with a mentor?

For those in a partnership, ask:

1. Characterize your team (peer and mentor teacher). How do you get along with the members of your team? Be specific.

2. Describe your mentor teacher's role and responsibilities. Are you satisfied with how she performed her role?

3. What do you do when your partner is teaching? What does your mentor do when you are teaching?

4. When something goes wrong within the classroom, with whom do you speak? From whom do you seek help? Why?

5. Who is most powerful in the team? Probes: In decision making, with students? Who has most influence over the curriculum, over what is taught, and over classroom management? How are decisions made?

6. What is the downside of having a teaching partner? Have you felt constrained in any way by having a partner? If so, how? (Probe: How has having a partner effected your ability to take risks—this might be a plus or a minus—and be creative?)

7. What is the upside of having a teaching partner? (Same probe as above, #6: How has having a partner effected your ability to take risks and be creative?)

8. What was your greatest challenge during student teaching? Your greatest problem? Probe.

9 (an addition to the first protocol). If you could go backward and do it all over again, would you prefer to work with another student teacher or with only a mentor and no teaching partner?

Please elaborate.

10 (an addition to the first protocol). If you could go backward and do student teaching all over again, what would you change?

For those not teaming, ask:

1. How do you get along with your mentor teacher?

2. Describe your mentor teacher's role and responsibilities. How do you work together?

3. When something goes wrong within the classroom, with whom do you speak? From whom do you seek help?

4. When something goes wrong within the classroom, with whom do you speak? For whom do you seek help? Why?

5. What was your greatest challenge in student teaching? Your most serious problem? (Probe)

6. (An addition to the first protocol). If you could go backward and do it all over again, what would you change about student teaching?

## References

- Anderson, R. S., & Speck, B. W. (1998). "Oh what a difference a team makes": Why team teaching makes a difference. *Teaching and Teacher Education*, 14(7), 671–686.

- Buchberger, F., Campos, B. P., Kallos, D., & Stephenson (Eds.). (2000). *Green paper on teacher education in Europe: High quality teacher education for high quality education and training*. Umea, Sweden: Thematic Network on Teacher Education in Europe.
- Bullough, R. V., Jr., Young, Janet, Erickson, L., Birrell, J. R., Clark, D. C., Egan, M. W., Berrie, C. F., Hales, V., & Smith, G. (2002). Rethinking field experiences: Partnership teaching vs. single-placement teaching. *The Journal of Teacher Education*, 53(1), 68–80.
- Clement, M., & Vandenberghe, R. (2000). Teachers' professional development: A solitary or collegial (ad)venture. *Teaching and Teacher Education*, 16(1), 81–101.
- Graham, P. (1997). Tensions in the mentor teacher-student teacher relationship: Creating productive sites for learning within a high school English teacher education program. *Teaching and Teacher Education*, 13(5), 513–527.
- Howey, K. R., & Zimpher, N. L. (1999). Pervasive problems and issues in teacher education. In G. A. Griffin (Ed.), *The education of teachers: Ninety-eighth yearbook of National Society for the Study of Education* (pp. 279–305). Chicago: University of Chicago Press.
- Hudson-Ross, S. (2001). Intertwining opportunities: Participants' perceptions of professional growth within a multiple-site teacher education network at the secondary level. *Teaching and Teacher Education*, 17(4), 433–454.
- Johnston, S. (1994). Experience is the best teacher: Or is it? An analysis of the role of experience in learning to teach. *The Journal of Teacher Education*, 45(3), 199–208.
- Kahne, J., & Westheimer, J. (2000). A pedagogy of collective action and reflection: Preparing teachers for collective school leadership. *Journal of Teacher Education*, 51(5), 372–383.
- Koepen, K. E., Huey, G. L., & Connor, K. R. (2000). An effective model in a restructured teacher education program. In D. J. McIntyre, & D. M. Byrd (Eds.), *Research on effective models for teacher education* (pp. 136–152). Thousand Oaks, CA: Corwin Press, Inc.
- Martin, D. (1997). Mentoring in one's own classroom: An exploratory study of contexts. *Teaching and Teacher Education*, 13(2), 183–197.
- McNally, J., Cope, P., Inglis, B., & Stronach, I. (1997). The student teacher in school: Conditions for development. *Teaching and Teacher Education*, 13(5), 485–498.
- Roth, W.-M., & Tobin, K. (2001). Learning to teach science as practice. *Teaching and Teacher Education*, 17(6), 741–762.
- Stone, B., & Mata, S. (2000). Fast-track teacher education: Are we adequately preparing teachers for California's class-size reduction? In D. J. McIntyre, & D. M. Byrd (Eds.), *Research on effective models for teacher education* (pp. 203–234). Thousand Oaks, CA: Corwin Press, Inc.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park: Sage Publications.
- van Veen, K., Slegers, P., Bergen, T., & Klaassen, C. (2001). Professional orientations of secondary school teachers towards their work. *Teaching and Teacher Education*, 17(2), 175–194.
- Wang, J. (2001). Contexts of mentoring and opportunities for learning to teach: A comparative study of mentoring practice. *Teaching and Teacher Education*, 17(1), 51–73.
- Wideen, M., Mayer-Smith, J., & Moon, B. (1998). A critical analysis of the research on learning to teacher: making the case for an ecological perspective on inquiry. *Review of Educational Research*, 68(2), 130–178.
- Wilson, S. M., Floden, R. E., & Ferrini-Mundy, J. (2001). *Teacher preparation research: Current knowledge, gaps, and recommendations*. The University of Washington, Seattle: Center for the Study of Teaching and Policy.
- Yin, R. K. (1984). *Case study research: Design and methods*. Newbury Park: Sage Publications.