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# Peer Observation is a Key Ingredient to Effectiveness in Staff Development

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Peer Observation is a Key Ingredient  
to Effectiveness  
in Staff Development

A Field Project

Presented to the  
Department of Educational Administration  
and the  
Faculty of the Graduate College  
University of Nebraska

In Partial Fulfillment  
of the Requirements for the Degree  
Specialist in Education  
University of Nebraska at Omaha

by

Linda Gentleman Boyer

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FIELD PROJECT ACCEPTANCE

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requirements for the degree Specialist in Education,  
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## Abstract

The relationship between peer observation and instructional improvement was investigated. Fifteen middle level teachers from a variety of disciplines participated in the study. Teachers were taped and assessed prior to the study as well as afterward. Teachers also responded to a questionnaire to determine their perceptions of the practicality and usefulness of peer observation. Participants were divided into two groups: an experimental group of eight teachers (four teams of two) and a control group of seven teachers. All fifteen teachers participated in a training review of instructional techniques. In addition those teachers in the experimental group attended three training sessions where they (1) learned the rationale behind peer coaching and a brief historical perspective; (2) were shown how to preconference, take notes, collect and label data, and plan the final conference; and (3) practiced taking notes and labelling. Each member of the experimental group participated in two rotations of peer observation. Analysis of data collected indicated that teachers who participated in peer observation seemed more successful in improving their instructional techniques.

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## CHAPTER 1

### Introduction

Colleges and universities cannot provide teachers and would-be teachers with all the information and skills needed to work with students. Education students are required to register in methods classes while in undergraduate college as part of the preparation for classroom teaching; generally, they practice one or two of the strategies learned in methods classes during student teaching. Inevitably, an individual, earns a degree in education, becomes state certificated, and is hired to perform a teaching job only to discover that a great deal of practical information about effective instructional techniques has yet to be learned.

After graduation, a variety of additional training and growth opportunities are available to teachers. Among these postgraduate experiences are graduate classes, workshops, seminars, district inservices, professional affiliations and contacts, collaborative planning with colleagues, building sponsored support activities, peer interaction, and independent research.

Most teachers are interested in professional growth. Those who are not self-motivated are encouraged by districts who use a variety of motivation techniques including salary schedule configurations and monetary



incentives such as pay-for-performance and merit pay to encourage continued training or retraining in an instructional skill.

Literature suggests that teachers seldom seek advice regarding post graduate training. They tend to sign up for inservices based on personal interests, proximity, and availability. If districts attempt to direct or mandate changes, teachers retreat to the safety and isolation of their classrooms (Tye and Tye, 1984). According to Bruce Joyce (Brandt, 1987), a critical element needs to be attached to any form of training or retraining program if districts are going to succeed at reducing the isolation within education and assisting educators in using new strategies. Joyce believes that no matter how much money districts earmark for staff development and professional growth, the key to a successful program is frequent and personalized feedback.

Peer observation can effectively supplement any staff development program and assure more success in confronting and correcting instructional concerns. Peer observation is a natural vehicle for feedback regarding planning, preparation, teaching methods, and problem solving. When teams of teachers assist each other in discovering ways to improve, they can receive direct, non-judgmental feedback from colleagues they admire and

respect instead of from an administrator whom they may fear will find cause not to retain or rehire them (Grossnickle & Cutter, 1984). Participants see in practice a variety of teaching styles and techniques and become adept at analyzing teacher effectiveness in others and in themselves (Joyce & Showers, 1988). Peer observation deals directly with instructional strategies and leaves tenure and evaluation to the administration.

Successful peer observation requires a systematic approach. Carol Cummings' (1985) recommended model has four steps. Total time commitment to complete all four steps is approximately two hours. The steps are outlined below.

1. A pre observation conference in which the teacher being observed (a) describes to the observer the lesson to be observed including the classroom activities and the instructional strategies which will be used; (b) establishes the logistics of the observation such as time, place, and where to sit; (c) identifies the focus of the observation; and (d) clarifies the observer's expectations.

2. An actual observation of teaching by the peer partner in which the observer will (a) observe and take notes (script), and (b) label the notes.

3. An analysis of the lesson by the observer to

(a) mentally reconstruct the observation from the script, (b) identify positive aspects to reinforce, and (c) suggest alternatives for growth.

4. A post observation conference between the peer partners to (a) review the lesson, (b) provide specific examples of skills that promoted learning, and (c) listen to the teacher who taught the lesson as he/she recaps the analysis.

#### Statement of the Problem

At Millard Central Middle School in Omaha, Nebraska, the Effective Schools Team became concerned with the degree of isolation and frustration staff members were feeling. The isolation and frustration manifested itself in several ways. Most academic teachers had little or no idea of what was happening in practical arts classes and vice versa. Although some staff members had undergone extensive training in cooperative learning, not all of those trained were actually using the method. Some staff members had been schooled in classroom management techniques, but other staff members were reluctant to try something new when they had no way of knowing if these techniques would work for them. Still other staff members expressed a fear that their methods were becoming stale and they wanted to find new ways to do old things. After reviewing the literature, the Effective Schools

Team felt that peer observation would be a useful tool to employ in addressing all of these concerns.

The purposes of this study were (a) to examine the effects of peer observation on improving classroom strategies and (b) to determine if a teacher participating in peer observation would practice a new instructional or management technique more often than a non-participating teacher.

#### Research Question

Do teachers who engage in peer observation (a) improve old skills and (b) use new skills more often than those teachers who do not engage in peer observation?

#### Limitations

Conclusions from this study were applicable only to Millard Central Middle School staff members who participated in the study from November, 1990, through May, 1991. The study involved eight volunteer teachers from a variety of disciplines as the experimental group and another seven teachers, also from a variety of disciplines, as the control group. All fifteen teachers participated in a training review of instructional techniques, but only those teachers in the experimental group used peer observation to enhance that training.

#### Methodology

Pretest-posttest design (Crow, Davis & Maxfield,

1960) was utilized for this study . The experimental group consisted of eight teachers who had recently received training in an instructional technique. These teachers received additional training in the use of peer observation. A second group of seven teachers who had also recently received training in an instructional technique but who would not use peer observation formed the control group. All teachers in both groups were obligated to arrange a taping of their classroom instruction prior to participation by the experimental group in peer observation.

All teachers in both groups were also obligated to arrange a taping of their classroom instruction after the experimental group completed the peer observation cycle. These tapes were used to measure skill acquisition and frequency of use. The pretest-posttest control group design provided an opportunity to determine whether participants with special treatment (the experimental group using peer observation) performed differently than those who did not engage in peer observation (the control group). From the tapings and their analysis were generated the data which the researcher used as the pretest and posttest of data.

The progression of the study was as follows:

1. The researcher met with the Effective Schools

Team and interested staff members in September, 1990, to explain the proposed study and the concept of peer observation. Fifteen volunteers were selected at the end of the meeting to participate in the study.

2. After the preliminary explanations, each of the fifteen volunteers arranged with the researcher to tape his/her classroom in the pretest portion of the study. All tapings were completed by October 31, 1990.

3. During November, organizational meetings with the eight volunteers who were members of the experimental group were held to discuss the peer observation process to be followed. Supplementary handouts from Carol Cummings' Peering In On Peers (1985) were distributed to provide a detailed explanation of the peer observation component. All members of both groups attended three one-hour meetings to review instructional skills to be observed and analyzed such as questioning, active participation, modeling, and classroom management.

4. In December and January, the eight members of the experimental group attended three one-hour meetings to practice scripting, analyzing data, and pre and post conferencing. Teachers within the experimental group were asked to form four teams of two. Each of the eight teachers was expected to participate in a minimum of two observations during the third quarter of the school year

(January-March). Because the focus of these observations was instructional behaviors and interactions, not content, matching team members by academic discipline was not critical. Teams were self-selected on the basis of compatibility and teaching schedules. The researcher met with each team in January to share instructional concerns and clarify the process and each team member's role.

5. The post taping of the fifteen participants was scheduled for April and was used for the posttest portion of the study.

6. Both sets of tapes were analyzed to determine changes in the use of instructional skills and the frequency of their use. The tapes were available for participant review.

7. The pre-post data of the respective groups was displayed and compared for meaning.

Penny Kowal, Ph.D., and Director of Instructional Improvement for the Millard Public Schools was a consultant to this project and assisted in categorizing selected tapes. Dr. Kowal assisted in the selection of a grid-like instrument designed by Carol Cummings (1983) to be used for measurement (Appendix J, p. 74). This instrument was easily adaptable to measure the variety of instructional or management skills chosen by the individual teams.

### Definition of Terms

Peer Coaching/Peer Observation. The process of giving teachers structured feedback about the instructional skills used in a particular lesson as seen by the observer.

Active Participation. Active responses by students in activities congruent with learning.

Adjustment. Altering the teaching after monitoring the class's level of understanding.

Classroom Management. Activities not directly related to learning such as passing out papers, taking attendance, and disciplining disruptive students.

Cooperative Learning. Students working in groups on an academic task.

Modeling. Demonstrating a procedure to students. Explaining how to perform an activity or complete an assignment.

Transition. Changing from one activity to another.

### Organization of the Study

Chapter 1 is the introduction. Chapter 2 is the review of literature. Chapter 3 is the methodology. Chapter 4 is a display and analysis of the findings. Chapter 5 is the summary, conclusions, and recommendations.



## CHAPTER 2

## Review of Literature

Few will dispute that preparing today's students for tomorrow's world is the primary goal of education today. The question of how this can be done effectively and efficiently gives rise to heated discussion among educators. Recently, education has attracted the attention of the White House and national goals have been outlined. Complicating the development of an answer is the fact that technology continues to change faster than teachers can implement last year's models, global affairs continue to affect curricular and cultural perspectives, and schools in the United States have assumed additional responsibilities related to societal problems. Drug education, health education, and consumer education are now a part of the required curriculum for boys and girls. Teachers today need to be ready to lead, guide, and instruct so that student achievement will match the demands of our society.

Hidden under all the fancy rhetoric about tomorrow's educational goals lies the fact that teachers must be trained and retrained in skills that will assist them in attaining their goals of instructing youngsters. Scores of teaching strategies are available and promoted as the vehicles which will assist educators. Which ones work?

Who decides? An emphasis on providing integrated experiences that enable students to think, problem solve, and make decisions has additionally confused teachers. Which is more important, content or process? Cooperative Learning, Whole Language, Thinking Skills, Learning Styles, Interdisciplinary Units--each is an interesting skill in itself. Can a teacher be trained to use any or all of these strategies effectively?

Colleges and universities alone cannot disseminate all the information about skills that educators and prospective educators need to promote student growth and achievement. School districts do their share in the continued education of staff members. Aggressive staff development programs are in place at most district and state levels including monetary incentive programs and the prod of state certification requirements, but unless a system is found that can maximize the effects of training, Joyce and Showers (1988) predict that educators will become firmly attached to teaching habits that may not be effective. Can teachers learn new skills and strategies? According to Joyce and Showers (1980), yes, they can, provided effective inservices are arranged. Colleges and universities will continue to provide the necessary preservice information; districts and buildings must provide the necessary staff development.

Currently, most educators learn about new skills through some form of inservice. Yet, long-lasting changes and improvements are not linked to this type of training. Results of research in this matter are consistent: teachers will not use new techniques, or will not use them correctly, unless a program is in place to assist with implementation (Sparks, 1983). Merely presenting information about a new skill does not promote transfer to usage; but, if demonstration, practice, feedback, and coaching are provided, a teacher's classroom behaviors can change (Fitzpatrick, 1985).

Plenty of demonstration and practice opportunities are made available to teachers by most school districts. Workshops, college courses, lectures, seminars, and presentations abound. School year openings are frequently marked with workshops. In Nebraska, most teachers participate in a two-day experience. Many districts have two to three days of inservices sprinkled throughout the school year. Teacher growth is not just a state issue. Teacher development has attracted national attention. In 1983, Ernest Boyer called for a two-week Teacher Professional Development Term to be added to the school year--two full weeks to focus on instructional improvement strategies and to figure out ways to implement them in the classroom (Fitzpatrick, 1985). No

district has gone this far. For the school year 1990-1991, however, the Omaha, Nebraska Public Schools added three days at the end of the school year to its teacher contract year solely for staff development purposes.

In addition to staff development time and opportunities, many districts have specific personnel with expertise in identified areas available as resources. In fact, in a survey conducted by Tye and Tye (1984), eighty percent of teachers indicated that district-level resource people were indeed available. Unfortunately, only fifty percent of the teachers responding to the survey had actually used these personnel, and, sadly, the perception of those fifty percent was that these district-level resource personnel were of little or no help. In the same survey, Tye and Tye attempted to discern if within individual schools, methods of sharing knowledge existed. Instead they found that most teachers worked alone in self-contained classrooms and had little or no opportunity to observe other teachers at work. They knew little about their fellow teachers' relationships with students, their job competencies, or their educational beliefs. This was especially true in large schools, ethnically/racially balanced schools, and secondary schools.

Classrooms are busy places. Most teachers do not

have the time to stop and analyze their teaching methods. They do things instinctively or habitually. Many teachers are not aware of certain behavior even when it is inappropriate. Feedback based on classroom observations can make teachers aware of problems and can help bring about change. In fact, sometimes feedback alone is all it takes to effect change. Other times, feedback is coupled with coaching to clarify the problem and to work on correction (Brophy, 1979). Brophy cites the work of Tuckman, McCall, and Hyman in 1969 and that of Moore, Schaut, and Fritzges in 1978 who have all suggested that feedback leads to change in the classroom.

Other evidence exists that feedback and coaching are effective transfer agents. Joyce and Showers' studies (1980) indicate that feedback provides teachers with a realistic assessment of their teaching style and practical information about options. Feedback, say Joyce and Showers, can lead to new skills. Teachers will alter the way they do things. For example, if feedback is given regarding questioning skills, teachers can become more aware of their use of questions and will begin to alter their questioning style. Changes will continue as long as feedback is given. Some teachers will need more in the way of direction. For these, direct coaching on how to apply the new skill coupled with modeling appears

to be necessary (Joyce & Showers, 1980).

Rorschach and Whitney (1986) got more than they bargained for in an experience coaching one another. All they were searching for was a way to obtain information about their own teaching styles and how to improve. They visited one another's classes, provided an interpretation of what happened as a test of each's own interpretation, made comparisons, and shared insights. What they got was not only the sought after information but also a satisfaction that came with the collegiality that accompanied the experiment.

#### Change Agent Study

Change in education involves people, not technology or so say Milbrey McLaughlin and David D. Marsh (1978). The biggest problem with today's attempts at staff development is that districts have failed to treat teachers like people. Districts continue to issue orders from the central office and wonder why change is not occurring. McLaughlin and Marsh rely heavily upon their 1976 Change Agent study to support their theories about staff development. The Change Agent study, funded by the Rand Corporation, identified the following four factors as critical for change: institutional motivation, project implementation strategies, institutional leadership, and teacher characteristics.

### Institutional Motivation

Some teachers are eager to change; some are not. Many administrators still believe in a "top-down" approach to change; these folks can expect to be disappointed. The Change Agent study supports collaborative planning suggesting that it can generate the commitment required to insure success. Scott and Smith (1987) agree. Teachers and administrators involved in a collaborative effort work together to promote effective teaching and learning. Teachers frequently talk about teaching practices. They frequently observe one another in the classroom and provide each other with helpful critiques of their teaching. Teachers frequently plan, design, research, evaluate and prepare teaching materials together. Most importantly, teachers frequently share teaching tips with one another.

### Project Implementation

Project implementation strategies are the second critical aspect of the Change Agent study. The study concluded that two elements are essential: staff training activities and training support activities. Effective staff training followed by support activities increases the chances for successful implementation. In addition, staff support activities reinforce the importance of staff training and contribute to promoting

teacher change and student gain (McLaughlin & Marsh, 1978).

Staff training is not new; it usually focuses on particular teaching skills. What may be noteworthy is the fact that these types of activities have positive results only for short periods of time. Support activities are what is needed for any of these skills to survive the long term. Staff support activities complement training by providing the frequent, personalized, and consistent feedback that staff members need to make the skill changes desired.

Staff-support activities are especially critical in the transfer of more complex strategies that are adopted by districts or schools. In fact, ongoing, in-house, staff-support activities are crucial to success in that they assist teachers in assimilating the change into the classroom. Teams of two to three work best so that personalized needs can be addressed on an as-needed basis. Another benefit of the staff-support activities is that with reinforcement comes clarity--a clear understanding of exactly what to do and why the change is being made.

#### Institutional Leadership

The third factor in the Change Agent study is institutional leadership. District planners and project



directors are, of course, important to change. But similar to staff training, the district planner and/or the project directors are effective only for a short term. For long range results, the attitude of the building principal is far more critical than the training or the trainer. Surveys indicate that when the principal is perceived as being unfavorably inclined toward the change project, success is minimal. (McLaughlin & Marsh, 1978). In addition to the principal's support, however, a good working relationship among teachers must exist if complete success is to be attained.

#### Teacher Characteristics

Teacher characteristics are the fourth critical element. The Change Agent study gathered data on several attributes said to influence both student performance and the outcome of change projects: age, educational background, verbal ability, years of experience, and sense of efficacy. Of these attributes, only one, age, produced a negative outcome. Time in the classroom seems to diminish the desire for change. The more experienced teachers were the least likely to change their practices. The most powerful positive attribute was the teacher's sense of efficacy--a belief that one can help even the most difficult or unmotivated individual.

In other research, Ann Lieberman and Lynne Miller

(1978) propose that staff development must revolve around the social realities of teaching. Among these social realities are the following: (a) Feedback has been limited for teachers. Traditionally, most, but not all feedback comes from the student; (b) Teaching and learning links are uncertain. Teachers never know if what they've spent hours planning will work; (c) A teacher's knowledge base is weak. So much of a teacher's course work revolves around theory that teachers are forced to continually take more courses, attend workshops, etc. looking for new ideas, new materials, new ways of reaching the students; (d) Professional support is lacking. While other professions eagerly applaud the use of veterans as role models and coaches for the novices, education has shied away from this most useful tool. The loneliness and isolation experienced by the classroom teacher is experienced in no other profession (Lortie, 1975).

Scott and Smith (1987) agree with Lieberman, Miller, and Lortie and encourage school districts to focus their efforts on improving the work environment. Instead of continuing practices that promote isolation, schools should encourage teachers and principals to work collaboratively toward change. Among the suggested practices are frequent teacher interaction with respect

to teaching methods and problems, frequent observation and constructive criticism of teachers by respected peers, joint planning and preparation, and peer training and support.

Teacher isolation is a major obstacle to instructional improvement (Lieberman & Miller, 1978; Rosenholtz, 1989; Rothberg, 1985; Tye & Tye, 1984). Isolation tends to keep teachers at a status quo level of competence and leads to a number of negative consequences such as (a) not seeking advice from other teachers because it may be an admission of incompetence; (b) never visiting other classrooms to take advantage of available positive role models; and (c) learning new techniques only by trial and error (Rosenholtz, 1989).

According to Joyce (1988), "effective staff development requires cooperative relationships that break down the isolation and increase the collective strength of the community of educators who staff the school" (p. 77). Current staff development tends to perpetuate the isolation by removing teachers from their building for specialized training. Once back in their own buildings, teachers return to their classrooms and, based on their own comfort level, choose whether or not to perform the new skill.

Research such as that conducted by Washburn and

Rumbaugh (1991) suggests that most teachers do not use their autonomy/isolation to engage in change. Instead, most teachers return to using the same comfortable procedures and practices as before the training. Goodlad (1983) says that instead of coming together in schools to facilitate implementation of change, teachers often hide their insecurities in the isolation of their classrooms. "The persistent autonomy of the self-contained classroom . . . serve[s] to sustain teachers' independence from peers and to limit their sense of community" (McLaughlin, Talbert, & Bascia, 1990, p. 195).

#### The RPTIM Model

An effective approach to staff development and improved collegiality is one that presents research based strategies and then assists teachers in implementing these strategies within the classroom (Fitzpatrick, 1985). Responding to complaints from teachers that inservices are poorly planned and organized, lack relevance, fail to have teacher input or long term goals, Wood, Thompson, and Russell developed a model with five stages: readiness, planning, training, implementation, and maintenance [RPTIM] (McQuarrie, Wood, & Thompson, 1984). Peer coaching is a major component of the training, implementation, and maintenance stages of that program.

### Peer Observation

Several positive factors support the use of peer observation/peer coaching. First, teachers, especially at the secondary level, rarely get to see one another teach. Watching others perform is in itself a valuable learning experience. Surgeons and lawyers have known this for decades (Sizer, 1984). Second, peer observers who analyze and code teacher and student behavior in order to discuss the techniques they've seen find that they come to analyze some of their own classroom behaviors as well. A third plus of the peer observation process is an increased level of trust, sensitivity, and esteem among participants. Respect and admiration for one another and for divergent styles also increases regardless of the discipline involved. Fourth, morale is generally high among peer observation teams (Rothberg, 1984; Sparks, 1983).

In addition, peer observation can be an effective alternative to administrator supervision. Most schools utilize an evaluation system that in the words of teachers cannot improve classroom instruction. "We neither fear nor look forward to the supervisor's observations; it is just something else that interrupts the day . . ." (Ellis, Smith, & Abbott, 1979, p. 425). Teachers do not try something new on the day the

administration visits. A clear sense of superior-subordinate is in the air. They know they are being evaluated and perform a strategy which has been successful in the past. The collegial support system of peer observation reduces significantly this superior-subordinate relationship that has plagued education for years.

Other advantages of peer observation include nurturing a more cooperative and collaborative climate between the administration and the teaching staff (Hopfengardner & Walker, 1984). Peer observation gives teachers an opportunity to assess their teaching practices while exposing themselves to other teaching methods. (Grossnickle & Cutter, 1984). Peer observation enhances collegial discussion and professional growth. A teacher survey given by Ellis et al. (1979) revealed that before participating in a peer observation/supervision cycle, teachers claimed that they changed from their usual style of teaching to a more commonly accepted style while being observed. After participating in the project, teachers no longer felt compelled to put on a show for the observer. They felt comfortable inviting fellow teachers into their classrooms and asking for their input. Observation, it seems, not only breaks down isolation, it also provides a vehicle for professional

growth and discussion.

Hopefully, all educators can improve. There need be only the desire to change and improve, an awareness of what needs to be changed or refined, and support for the change. Peer observation can be an invaluable means to a much desired end. Since peer observation focuses on analysis rather than evaluation, it is viewed as non-threatening. Objective information about their teaching allows teachers to analyze their own performances after determining what observers should watch for. Team members assist each other in discovering ways to improve and become enthusiastic instead of skeptical about growth and change. Participants see a variety of styles and techniques and become well versed in a variety of strategies. A strong sense of comradery and professional responsibility is an added benefit (Barnett, 1983). Peer observation, if utilized correctly, enables teachers to "expand their repertoire to the point where they can utilize the wide variety of approaches to teaching and curriculum" (Joyce & Showers, 1980, p. 384).

#### Requirements of Effective Peer Observation

It seems clear that peer observation can make a significant contribution to education. Of this Weimer, Kerns, and Parrett (1988) have no doubt. They are

concerned, however, about the improper use of observation. Among their many "caveats" and "concerns" are the following:

1. Observations need to produce specific data that focus on descriptive behavioral feedback--use of general descriptors such as clarity and rapport will only cloud the issue.

2. Teachers who observe must be agreeable to the fact that a number of techniques are appropriate to accomplish similar goals--becoming stubborn and thinking only their own approaches are best will destroy the objectivity of observation.

3. Teachers who observe must beware of making conclusions that cannot be validated. They must stick to what they saw and heard; inferences can be dangerous.

4. Participants need to constantly remember that one observation by one observer does not equal reliability.

5. Sometimes teachers who observe others are skeptical that what they are seeing is what normally goes on in the classroom. If the trust factor diminishes, so goes the program.

6. When more than one teacher observes another teacher, inter-rater reliability is in jeopardy unless all have been trained to use the same observational



technique/instrument.

7. Feedback after the observation must be constructive and timely. If the teacher who has been observed must wait more than 24 hours for feedback, anxiety will provoke distrust.

8. Observations by peers should remain separate from evaluation procedures.

9. Peer observers must be trained, including watching other trained observers. Training should be ongoing to insure continued quality of the program.

The majority of the research reviewed agrees with Cummings (1985) and Joyce and Showers (1988) who propose that coaching provides the companionship and collegial support that assists teachers in mastering instructional skills. No one seems more convinced than they that the key to improved academic performance of students is teachers who continually study and improve their craft so that they have at their fingertips a variety of methods to call upon for different purposes and different learners. These teachers are the ones who will convert their classrooms into learning centers that will prepare today's students for tomorrow.

## CHAPTER 3

### Design of the Study

The study was conducted at Central Middle School during the 1990-1991 school year. A memo inviting volunteers to participate was sent to all teachers on August 29, 1990. Interested individuals attended an informational meeting on September 5, 1990 (Appendix A, p. 56). Twenty-three teachers attended this meeting and expressed an interest in finding out more about the project and peer coaching and the time commitment involved. A time line for the study was distributed along with inservice meeting dates and sample time commitments (Appendix B, p. 57). Of the original twenty-three people who expressed an interest, fifteen agreed to work on the project. Although only twelve were needed for the study, it was decided that having fifteen would enable the project to fend off any scheduling conflicts that might occur later in the study. Fortunately, no conflicts arose and all fifteen teachers participated. The volunteers formed two distinct groups: one group of eight who received training in the use of peer coaching and one group of seven who did not. This study was designed as a qualitative analysis of two modes of teaching.

### The Experimental Group

A description of the eight teachers who participated in the experimental pairings is listed below:

Teacher E-1: A female seventh grade reading teacher who had taught for twelve years. She had a desire to continue to improve her teaching skills in the areas of questioning and modeling. Her education level was MA.

Teacher E-2: A female eighth grade math teacher who had taught for thirteen years. She had worked with cooperative learning in her classroom and wanted to exchange ideas with another math teacher who was also using cooperative learning to improve continuity between academic skills and social skills within the lesson. Education level was MA +9 hours.

Teacher E-3: A female eighth grade math teacher who had taught for eight years. She, too, targeted cooperative learning as the strategy which most needed extension in her teaching methodology. She hoped that observation of, plus feedback and ideas from a fellow math teacher would help. Her education level was MA +3 hours.

Teacher E-4: A female eighth grade English teacher who had taught for fifteen years. Because she works with many ability levels, she was looking for ways to improve modeling and questioning to involve those students who

frequently are unmotivated and reluctant to get involved in learning. Her education level was BA +36 hours. She was paired with Teacher E-1.

Teacher E-5: A female seventh grade reading teacher who had taught for three years. She wanted to explore the use of cooperative learning to enhance the involvement of students who frequently have difficulty working with other students. Her education level was BA+6. She was paired with Teacher E-2.

Teacher E-6: A male eighth grade math teacher who had taught for only one year. He had never worked with cooperative learning but was interested in learning how to implement it in his classroom without sacrificing classroom management/control in the process. He had a BA degree and was paired with Teacher E-3.

Teacher E-7: A male seventh grade English teacher who had taught for ten years. He wanted to perfect his classroom modeling so that the amount of teacher talk could be reduced significantly. His education level was BA +24.

Teacher E-8: A female seventh grade science teacher with two years of experience. She wanted to increase active participation while decreasing immature and inappropriate behaviors from her students. Her education level was BA. She was paired with Teacher E-7.

In summary, eight teachers composed the Experimental Group: 6 females, 2 males; 5 held Bachelors Degrees, 3 Masters Degrees; 4 taught seventh grade, 4 eighth grade. The average years of experience was eight, and the average age was 33.

### The Control Group

The seven teachers who made up the control group are described below:

Teachers C-1, C-2, and C-3: Three seventh grade teachers in different disciplines, with eleven years of experience, one year of experience, and three years of experience respectively. All wanted to improve classroom management and active participation through the use of assertive discipline. Education levels were BA +24, BA, and BA +12.

Teachers C-4 and C-5: Two female science teachers, one with five years of experience and one with only one year of experience. Both had recently had inservice training in cooperative learning but felt insecure in its application in the classroom. Education levels were BA+21 and BA.

Teacher C-6: An eighth grade female history teacher with fourteen years of experience. She wanted to examine her ability to adapt a lesson to varying learning styles. Her education level was MA.

Teacher C-7: An eighth grade male foreign language teacher with six years of experience. Since almost all students eventually experienced his survey class, he was searching for additional ways to involve all students in the learning. His education level was BA +27.

In summary, seven teachers composed the Control Group: 5 female, 2 male; 6 held Bachelors Degrees, 1 a Masters Degree; 4 taught seventh grade, 3 eighth grade. The average years of experience was 6, and the average age was 32.

#### The Method

Taping. All pretapings were completed during the month of October, 1990. The participants filled out a preconference form (Appendix C, p. 58) on which they stated their objective(s) for the lesson, the planned students' activities, and the methods proposed to assist the students in accomplishing the objective(s). The entire 42 minute lesson was taped by either the media specialist or the researcher. Afterwards, the tapes were available, and most of the participants viewed their own tapes before turning them over to the researcher for examination.

Experimental Inservices. Three inservices were planned for the experimental group. The first inservice was held on November 6, 1990. Subsequent meetings were

held on November 13 and November 20, 1990. At the first meeting, teachers were given the rationale behind peer coaching and a brief historical perspective gleaned from Carol Cummings' Peering in on Peers (1985). This first meeting pointed out: (a) the benefits of continued, school-based training activities to help teachers refine their skills; (b) the advantages of structured feedback and reinforcement; (c) the disadvantages of having only one instructional leader in a building (the principal); and (d) the practical and political advantages of utilizing teachers to assist one another.

The first meeting also defined peer coaching and its components and distinguished peer observation and its feedback from administrative observation and evaluation. Teachers were informed that

1. Peer observation is teachers helping each other to improve their teaching techniques.

2. Peer observation is designed to help teachers improve student achievement by increasing a teacher's awareness of the classroom techniques being used and by teaching how to set goals for constructive changes and to assess the results of the changes made. Teachers guide teachers in doing experiments that test the effectiveness of various teaching techniques in their own classrooms.

3. Peer observation is (a) a confidential process;

(b) voluntary; (c) observation based; (d) supportive, not evaluative; and (e) an opportunity for teachers to expand or refine old skills or add new skills with the support and guidance of a peer.

At the second meeting, information was disseminated about preconferencing, taking notes and collecting data, labelling, planning the final conference, and final conferencing.

Pre Conference. The primary purpose of a preconference is to learn the objective(s) for the lesson and to review the activities that will be used to achieve the objective(s). The preconference is also the time for the peer who will be doing the observing to sense any concerns of the teacher who will be observed. These concerns can be discussed. Finally, the observer's role is clarified (Appendix C, p. 58). Participants were given a sheet of sample questions that could be used during a preconference (Appendix D, p. 59).

Notes and Data. Data collection in peer observation relies heavily upon scripting to record the exact words a teacher uses. Scripting virtually eliminates the chance of memory lapse when the partners sit down to conference after the lesson is observed because the actual transcript of the lesson is written down. Tips for scripting included the following: (a) record verbatim the words of



the teacher being observed; (b) focus on the aspects of the lesson that specifically relate to the skill being monitored; (c) use the exact words the teacher used to give directions instead of shortcuts such as "teacher gave directions"; (d) develop your own shorthand (Appendix E, p. 60); and (e) do the best you can.

Labeling. Analyzing and labelling requires that the observer look back through the scripted notes to determine if the teacher's lesson contained activities that could be labelled attributes of effective instruction (Appendix F, p. 61).

Conference Planning. The observer then plans the postconference to give feedback to the teacher. According to Carol Cummings' (1985), Madeline Hunter differentiates conferences by their purpose. Participants in this study expressed a desire to go beyond merely reinforcing their partner. They agreed to use what Hunter calls a Type B conference in which the observer (a) labels the behavior observed, (b) notes the critical attributes of the lesson, (c) gives clear and specific examples of what the partner said and did, and then (d) discusses with the partner alternative approaches and behaviors. The Type B conference is designed to promote flexibility in the teacher. Its goal is to remind the teacher that not all situations are the same: different approaches can lead to

the same outcome. Participants were given information and a checklist to assist them in planning and conducting conferences (Appendix G, p. 65).

Practice. The third meeting was devoted to practicing taking notes and labelling. Participants watched two file tapes of Central teachers to facilitate this portion of the training: an 8th grade science lesson and a 7th grade reading lesson. As portions of the tape were viewed, the participants and the researcher scripted the tapes. At approximately 10 minutes into each lesson, the tape was stopped and the participants and the researcher compared notes to check reliability of wording, label behaviors, and determine whether behaviors matched the objective. Also discussed were how many students were involved in the lesson and whether elements of effective instruction were in evidence. A mock postconference was conducted to practice giving feedback.

At the request of the participants, a series of inservices was available in December and January to all teachers in the building covering the following topics: active participation, classroom management, cooperative learning, questioning, and modeling. Each inservice was offered twice, once on Tuesday after school and again on Thursday before school. No meetings were held during the weeks of December 17, 24, and 31. All inservices were

completed by January 24, 1991.

Some members of the experimental group expressed anxiety at this time. To ease their concerns as well as review the process, two additional informal meetings were held for members of the experimental group to recall and practice the components of peer coaching. By February 1, all participants seemed confident and eager to begin.

The teams were now free to schedule their observations according to their own schedules. Most chose to complete one observation/feedback apiece before moving to a second rotation. All observations were completed by April. Each participant made arrangements for taping of another lesson. All tapings were completed by May 15, 1991. Again, the participants filled out a preconference form (Appendix C, p. 58). Finally, each participant completed a survey prepared by the researcher (Appendix H, p. 66; and Appendix I, p. 70).

## CHAPTER 4

## Presentation and Analysis of Data

Research in education is conducted for one of two reasons: to test a theory and generalize the results or to make a decision about a specific classroom. The latter is called action research and benefits teachers in situations such as this researcher encountered because it encourages teachers to think constructively about their teaching. The design of action research used for this project was the Sign one-group pretest-posttest (Crow et al. 1960).

The researcher and Dr. Penny Kowal used a grid-like tool designed by Carol Cummings, author of Managing to Teach (1983), to assist with documenting the teachers' behaviors observed (Appendix J, p. 74). The Teaching Map, a visual display of quantitative teacher actions such as praise, criticism, questions, correction, etc., was used to rate the teachers on a scale on 1 to 5 with 5 being high. By combining these results with the raters' qualitative judgments (also a 1 to 5 scale) about the appropriate or inappropriate use of specific skills, it was possible to determine whether the teaching strategy being practiced was having an affect on student involvement/achievement. The raters' scores for the teachers in the experimental group are seen in Table 1.

Table 1

Pretest and Posttest Scores of Teachers in Experimental Group and Their Resulting Sign

<u>Teacher</u>	<u>Pretest</u>	<u>Posttest</u>	<u>Sign</u>
E-1	4	8	+
E-2	6	7	+
E-3	4	6	+
E-4	6	7	+
E-5	6	5	-
E-6	4	7	+
E-7	7	8	+
E-8	5	7	+
<u>M</u>	5.25	6.875	
<u>SD</u>	1.09	.93	
Number of Positive Differences		7	
Number of Negative Differences		1	
Number of Zero Differences		0	

The raters' scores for the remaining teachers are seen in Table 2. The disparity between the two groups is seen by comparing Table 1 with Table 2.

To determine the significance of these ratings, the

Table 2

Pretest and Posttest Scores of Non Experimental Teachers  
and Their Resulting Sign

<u>Teacher</u>	<u>Pretest</u>	<u>Posttest</u>	<u>Sign</u>
C-1	6	6	0
C-2	5	7	+
C-3	4	5	+
C-4	4	6	+
C-5	3	5	+
C-6	5	5	0
C-7	7	7	0
<u>M</u>	4.86	5.85	
<u>SD</u>	1.23	.88	
Number of Positive Differences		4	
Number of Negative Differences		0	
Number of Zero Differences		3	

researcher used the Table of Probabilities for the Sign Test (Table 3). This test is often used in behavioral sciences to determine if the difference between pretest and posttest is statistically significant or not (Walker, 1953). To calculate the Sign Test, the number of

Table 3

Table of Probabilities for the Sign Test


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X	0	1	2	3	4
<hr/>					
N					
5	.031	.188	.500	.812	.969
6	.016	.109	.344	.656	.891
7	.008	.062	.227	.500	.773
8	.004	.035	.145	.363	.637
9	.002	.020	.090	.254	.500

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Accepted level of significance for this table is .10.

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teachers whose posttest score was different than their corresponding pretest score was counted. This number is noted on the table as N. The number of minuses is labelled X on the table. The number at the intersection of N and X represents the probability that this many of the posttest scores would be higher than the pretest scores by chance alone. According to the critical values for the Sign Test, a significance factor of .344 indicated a slight probability exists for teachers who do not participate in peer observation to improve their classroom performance.

The results of this study suggested that approximately fifty percent of teachers will improve their

performance in the classroom without input from peers. Of course, these results also suggested that fifty percent of them will not.

Using the same procedure to examine the impact of peer observation and coaching, a significance factor of .035 indicated that there is only a slight possibility that teachers who do not participate in peer observation will improve their classroom performance to the same degree that these seven teachers did. Teachers who participate in peer observation stand a much higher probability of improving their instruction than those who do not.

When this researcher examined the results of the study to see if age or years of experience influenced improvement, the results were inconclusive (Table 4). The one teacher who made the most improvement overall was among the oldest chronologically and ranked fourth in experience with twelve years in the classroom. The four teachers in the control group who improved their scores had five years of experience or less, but two of those teachers were among the oldest of all fifteen participants. The one teacher in the experimental group who did not improve was chronologically among the oldest teachers in the sample; yet, she was among the youngest in experience.



Table 4

All Participants in Descending Order According to  
Resulting Sign Improvement

---

<u>Tchr</u>	<u>Sex</u>	<u>Age</u>	<u>Experience</u>	<u>Educ</u>	<u>Discipline</u>	<u>Sign</u>
E-1	F	38	12 years	MA	7th Reading	+4
E-6	M	24	1 year	BA	8th Math	+3
E-3	F	31	8 years	MA+	8th Math	+2
E-8	F	36	2 years	BA	7th Science	+2
C-2	F	23	1 year	BA	7th English	+2
C-4	F	38	5 years	BA+	8th Science	+2
C-5	F	26	1 year	BA	7th Science	+2
E-4	F	37	15 years	BA+	8th English	+1
E-2	F	35	13 years	MA+	8th Math	+1
E-7	M	32	10 years	BA+	7th English	+1
C-3	F	38	3 years	BA+	7th Reading	+1
C-1	M	33	11 years	BA+	7th SocStud	0
C-6	F	35	14 years	MA	8th History	0
C-7	M	32	6 years	BA+	8th Language	0
E-5	F	38	3 years	BA+	7th Reading	-1

---

Grade level, sex, discipline, and education were also examined. No significant data suggested any influence (Table 4).

If future studies are conducted, the impact of age,

sex, experience, etc., on instructional improvement needs to be more closely examined. The sample would need to be larger and the configurations different than those used in this study.

The statistics resulting from this study led the researcher to conclude that the hypothesis stated earlier is valid. The peer observation process helped teachers improve the quality of their instructional strategy and increased the frequency of new instructional strategy use.

## CHAPTER 5

## Summary and Conclusions

If knowledge of results, guided practice, and feedback are essential for students to learn, these same methods should be taken more seriously when assisting teachers in improving instructional techniques. Schools searching for an effective way to do just that will find an efficient method in peer observation. Used as a supplement to a staff development program, peer observation can comfortably confront, correct, and improve instructional concerns. Traditionally, feedback has come from building administrators who are often overwhelmed with a schedule that does not allow much time for working with teachers on instructional improvement. Peers are the solution.

The goal of this study was to determine whether or not organized peer support would (a) assist teachers in improving their current classroom strategies and (b) increase the use of a new instructional or management skill. Only teachers who volunteered to help each other improve their teaching techniques were considered for participation in this study. It was hoped that along with frequent feedback, positive collegial relationships would develop that would benefit teachers and students alike. This study used a total of fifteen participants to

investigate the advantages of peer support on teacher performance in the classroom. The results indicated that peer observation does make a difference.

Two separate groups of teachers participated in this study. Of the eight teachers working in teams of two, seven (87.5%) demonstrated improved instructional techniques as determined in their scores from pretest to posttest. In the second group, seven teachers were left to improve on their own; only four (57%) improved their scores.

As the study progressed, an emerging concern was whether information would determine whether peer observation and support played a key role in improvement of classroom strategies or whether teachers were merely working harder at improvement because they were a part of the study. A survey that participants took at the end of the project convinced this researcher that peer support was the major factor in improving teaching strategies. One teacher said, "It's so nice to know you're not alone." Many teachers listed the sharing in the postconference as the most valuable element of the project. One teacher added that she "kept on trying to get it right because she knew that her partner was there to help work out the problems."

An unexpected outcome of the study was the intensity

of the collegiality that developed between team members. Teams were seen on several occasions discussing instruction in the teachers' lounge, at athletic contests, and during lunch. Clearly, some newly formed friendships and relationships were a bonus to the study.

According to the post-study survey, most teachers had never invited any of their peers into their classrooms to observe their instruction. The reason that was given most frequently was that teachers are "too self-conscious" and "too afraid of making a mistake in front of someone [they admired]." They suggested that it was a time consuming process to prepare for visitors to their classrooms because they usually spent "more time than usual" planning the lesson to ensure that the visitor "would be impressed." One teacher asked, "Why would I ask for all that extra work?" Ironically, some of those same teachers admitted that they couldn't "remember willingly spending so much time on lesson planning" as they did during this study.

Discussion of instruction outside formal situations and inservices was rarely undertaken according to respondents. The reason most frequently given was that most wanted "to leave the classroom behind and relax." The same respondents claimed that they did, however, discuss students on a frequent basis. Some of the

participants told the researcher informally that they felt a little guilty when they realized that they had spent considerably more time talking about students themselves than about how to help them succeed. This awareness helped teachers realize the importance of reflecting on their own classroom strategies and teaching methods.

Five of the fifteen participants in the study had been videotaped in the classroom prior to this study. Only three of the five had done so for self-analysis as mandated by their university cooperating teacher. The remaining two had allowed themselves to be videotaped for someone else's purposes. Hard to believe, yet true, ten of the fifteen participants had never watched themselves teach, "afraid of what [they] might see."

Rarely had these teachers reached out to the traditional sources of assistance in the classroom. Teachers indicated that they had asked questions of their department heads or a peer in their discipline only when changes in curriculum or materials occurred. Questions were expected at a time of change and did not suggest that something was wrong with the teachers themselves. Eight teachers mentioned having asked someone outside the district for input. The risk in doing this was minimal as each was in a university class or involved in a

workshop where, once again, teachers were expected to ask questions. Mastery of an instructional technique was not expected in these situations; questions were.

Responding to an inquiry, none of the teachers indicated that they had asked Penny Kowal, Instructional Specialist for the Millard Public Schools, for assistance unless she had happened to be the teacher in one of their staff development classes.

Members of the experimental group were asked eight additional questions that dealt with peer observation. Six, or seventy-five percent of the participants fully agreed that peer observation can assist teachers in instructional improvement. All eight participants fully agreed that visiting other classrooms was of assistance, that having a professional partner was valuable, and that participation in peer observation was beneficial in identifying alternative strategies for classroom instruction.

Discomfort with videotaping oneself for analysis was reflected again when five (62.5%) agreed only somewhat that videotaping was a useful tool of self-evaluation, and three (37.5%) disagreed. When asked informally why participants responded as they had, they said that many people are never satisfied with "pictures" of themselves whether they are candid photographs or video tapes. They

did agree that letting someone else examine teacher performance, either in person or on video tape, was of value.

All participants were asked to share what they felt was the most difficult aspect of the project. Answer responses included concerns about: (a) the amount of time spent initially in learning the steps involved such as preconferecing, postconferecing, and, most of all, collecting and analyzing data; (b) the time involved in scheduling and conducting the observation; (c) the increase in time spent preparing and participating in feedback to one's partner's; and (d) the increased amount of time spent in preparing one's own lesson designs.

Since all participants knew that some had been trained in peer observation and some had not, all fifteen were asked to suggest some advantages to peer observation. Their responses identified the following: (a) increasing positive and supportive relationships among peers; (b) sharing problems, solutions, and ideas in a non-threatening environment; (c) working with teachers in other disciplines about common concerns; (d) watching others teach and becoming aware of how hard teachers in other disciplines work; (e) getting to work with respected teachers; and (f) realizing the importance of lesson design and student success.



When asked what advice they would give to future participants in peer observation and to the administration in a school supporting peer observation, all fifteen participants agreed that everyone, teachers and administration alike, must be aware of the time commitment involved. Teachers need to know up front that the process is time-consuming, yet rewarding. Administration can help by arranging for substitutes to cover classes and by promoting a supportive climate. Another frequent piece of advice involved both teachers and administration. "For peer observation to succeed," one participant wrote, "both administration and teachers need to be convinced early on that peer observation is not related in any way to administrative evaluation." Other types of advice ranged from being aware of teachers' "innate aversion" to being videotaped to their initial reluctance to learning "another new process."

All fifteen participants recommended participation in a voluntary peer support program. In fact, seven of the eight participants in the experimental group said they would definitely participate in peer observation again if given that opportunity. Informally, they said that this first year of peer observation was the hardest because there is so much to learn.

Other suggestions included the following: (a) the

administration should provide an incentive to participate; (b) the instructional goals should always be determined by the teachers themselves; (c) periodic sharing sessions should be held so participants can celebrate accomplishments and share concerns; (d) changing partners should be allowed; and (e) a facilitator should be available for individuals or teams in need of assistance.

Student behavior in the classroom was an issue of inquiry from the eight teachers in the experimental group. Seven of the eight teachers or eighty-seven percent of that group observed that their students seemed to be more attentive and more actively involved in their lessons. Six of the eight teachers felt confident that their students were learning more. Some even referred to higher scores which they attributed to more effective lesson design and more time on task.

A peer observation program takes time, training, and a commitment to improving instruction, but it can yield collegiality, experimentation, and, ultimately, improved student learning.

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## Appendix A

To: All Teaching Staff  
From: Linda Boyer  
Date: August 29, 1990  
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Many times you have returned from inservices enthusiastic and eager to try something new only to become frustrated after actually attempting to implement a new strategy or revise an old one. I have often overheard many of you say that you wished you could get more timely feedback or more reliable feedback (let's face it, the students do not always know what our objective is). I've heard you say that you aren't sure that the results were what you had in mind.

As many of you know, peer coaching is a process designed to help teachers improve their instructional practices by teaming with one or more teachers who have agreed to observe one another and offer feedback on predetermined objectives.

In partial fulfillment of requirements for a specialist degree, I am conducting a study of the use of peer coaching to assist teachers in the implementation of new or revised teaching strategies.

Now all I need is a few volunteers to assist in the study.

If you would be interested in participating, please come to an informational meeting on Tuesday, September 5, 1990, in Room 110. The meeting will begin at 3:15 p.m. and should last about 30 minutes.

## Appendix B

<u>Time</u>	<u>Line</u>	<u>Allow</u>
<b>OCTOBER</b>	--	
	Make arrangements to be videotaped using the skill or technique you hope to improve.	42 min.
	View the tape alone or with your partner	42 min.
<b>NOVEMBER--</b>	<u>Experimental Group Inservices</u>	
6th	Rationale, Definition, Distinction from administrative evaluation, Benefits	60 min. Rm 110
13th	Components: Preconference, Collecting data, Analyzing data, and Postconference	60 min. Rm 110
20th	Practice Components	60 min. Rm 110
<b>DECEMBER--</b>	<u>Inservice Modules - Open to All Staff in Room 110</u>	
4 & 6	Active Participation	35 min.
11 & 13	Classroom Management	45 min.
<b>JANUARY</b>		
8 & 10	Questioning	45 min.
15 & 17	Modelling	35 min.
22 & 24	Cooperative Learning	60 min.
<b>FEB/MARCH-</b>	Schedule two observa/conf per person	4 hrs.
<b>APRIL/MAY-</b>	Make arrangements to be videotaped. View tape alone or with partner. Compare.	42 min. 60 min.



Appendix C

**PEER OBSERVATION PLANNING SHEET**

Teacher \_\_\_\_\_ Observer \_\_\_\_\_

Date of Observation \_\_\_\_\_ Time of Observation \_\_\_\_\_

Date of Feedback Session \_\_\_\_\_ Time of Feedback Session \_\_\_\_\_

**Objective** - State what students are expected to know, comprehend, apply or do upon completion of the lesson.

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**Instructional Strategies** - State how the teacher will deliver the content, ie: modeling, simulation, lecture, discussion, questioning, small group, large group, etc.

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**Student Activities** - State what the students will do to achieve the lesson's objective.

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**Evaluation** - State how you will determine if the student have met the objective.

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**Special Instructions** - State specific items the observer should look for.

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## Appendix D

## SAMPLE PRE-CONFERENCE QUESTIONS

KNOW THE TEACHER'S OBJECTIVE FOR THE LESSON

1. What is your main objective for this lesson?
2. Tell me what the students will learn in the lesson today.
3. How do you plan to end the lesson today?
4. How will you know during the lesson that learning is occurring?
5. What clues will you be looking for to see if students are understanding?
6. How do you plan to check for understanding?
7. What activities will the students be doing to show you they have learned?
8. What are the activities you have selected to accomplish your objective?
9. Give me an example of what the students will be doing.
10. What level of cognition do you expect students to reach?
11. How have you assessed what learners already know about this lesson?
12. How have you assessed what learners need to know about this topic?
13. Let me see if I can restate the objective . . . How did I do?

HAVE OBJECTIVE FOR OBSERVATION

1. What do you want me to look for in the lesson?
2. What are your expectations of me during the observation?
3. Last time we worked on . . . Will I see anything specific in this lesson on that area?
4. Do you have any questions for me?
5. From the sounds of your objective, you are expecting . . . Would it be helpful if I watched to see if this is occurring?

SET THE STAGE

1. Is this an introductory lesson?
2. Is this an independent lesson or does it fit into a unit?
3. Did you have a preceding assignment I should know about?
4. Is there anything special I should know about the students in this class?
5. Is this a lesson you have taught before?

SELECT MEANS OF COLLECTING DATA

1. Where would you like me to sit?
2. I may have to leave during the quiet study portion of the lesson. Do you think that will bias the observation?
3. Do you mind if I wander or talk to students?
4. Do you mind if I participate actively during the lesson (being part of small group, etc.)?
5. Do you think my presence will have an effect on student behavior?
6. What have you told the students about the observation?

## Appendix E

**DEVELOP YOUR OWN SHORTHAND**

- leave out vowels  
tchr = teacher, wkr = work
- write first syllable only  
obj = objective, assign = assignment
- leave out short words  
take out your books and turn to page 19  
tk bks & trn p 19
- do record names of students called upon  
if frequent, abbreviate name  
Jennifer = Jen
- if unable to hear response, note it by  
using ellipsis ( . . . )
- put single quotation marks around  
student questions or talk
- use no quotation marks for teacher talk

## Appendix F

The following definitions from Carol Cummings' Peering in on Peers (1985) are meant to assist you in labelling and analyzing the lessons that you observe.

### **Active Participation**

Active responding by the student in activities congruent with the learning. Increases both rate and degree of learning. Teacher directions eliciting active participation generally include an attempt to increase level of concern (accountability), covert behavior (think time) and overt behavior.

### **Adjustment**

Occurs after a teacher monitors the class and the decision is made to alter the teaching. Adjustments include: lowering the level of difficulty by providing additional information (cues), increasing the difficulty level, etc.

### **Birdwalk**

Teacher behaviors (i.e. examples, explanation) that are not related to the objective.

### **Check for Understanding**

Teacher questions to see if students comprehend what was just taught. Occurs throughout the lesson.

### **Cooperative Learning**

Students working in groups of two or more on an academic task.

### **Corrective**

When the student experiences learning errors, the teacher provides corrective procedures to correct these errors. Additional time and help by providing alternative explanation and examples are types of correctives.

### **Covert Behavior**

Thinking or non-observable behavior such as answering a question or solving a problem "in your head." To be distinguished from reading or listening (unstructured) or overt behavior (publicly observable).

### **Dead Time**

Generally wasted time in the classroom when no assignment or responsibility is given to the students. For example: the teacher is busy and students are waiting for instruction.

### **Directions**

Explanation as to how to perform an activity or complete an assignment.

**Encouragement**

Verbal or nonverbal support that creates a positive feeling; increases motivation.

**Example**

The sample or illustration of an idea or concept provided to clarify that idea or concept. When teaching a concept, the student needs examples of that concept in addition to a definition of the concept.

**Feedback**

Providing objective information as to the accuracy of a response. May include as brief a response as “yes” meaning the answer was correct, to a more elaborate response, including corrective action. This knowledge of results can influence motivation as well as amount of learning.

**Guided Practice**

Teacher has class perform a skill or solve a problem before going on to independent practice. Purpose is to insure students have learned and will not be practicing incorrectly during independent practice.

**Input**

Information necessary to accomplish an objective. Includes explanation and example from teacher or student and information derived from media or text.

**Interest**

A variable of motivation where something is made vivid, different, or meaningful to the learner. Increases focus on the task.

**Knowledge of Results**

A variable of motivation whereby the student receives immediate and specific feedback on a response. Increases focus on the task.

**MBWA**

Management by walking around. A management technique; physical presence of the “authority figure” raises level of concern, increases focus.

**Management**

Responding to minor student off-task behavior in a way that minimizes the interruption of the class and learning time. Helps to maintain a positive feeling tone in the class by eliminating nagging reminders.

**Meaning**

A variable of motivation and retention. Is accomplished by associating new learning with what student is familiar with, giving a purpose or knowledge of use, and organizing information.

**Mental Set**

An instructional strategy that includes mention of the objective for the lesson, a purpose or reason for mastering the objective (hook into the future), and an association with previous experiences or learnings. Typically used to introduce a lesson.

**Modeling**

Teaching using visual-spatial activities (i.e. demonstration of a procedure). Increases rate and degree of learning as well as retention.

**Monitor and Adjust**

Teacher elicits observable behavior from students, examines that behavior, decides upon and makes appropriate adjustments. Described as one of the four essential elements of instruction. Monitoring should occur with the check for understanding.

**Motivation**

Principle of learning referring to the focus or persistence of student behavior. Six variables include success, level of concern, feeling tone, interest, extrinsic/intrinsic rewards and knowledge of results.

**Objective**

A description of the learner after teaching has taken place. Describes specific learning, level of thinking (Bloom's), and measurable (observable) student behavior. May also include conditions for testing and performance level (i.e. "with 90% accuracy").

**Overt Behavior**

Observable behavior elicited from student to allow teacher to monitor learning as well as insure students are actively involved.

**Praise**

Expressed approval of a student behavior; exaggerated teacher response that describes the behavior and encourages it.

**Proactive Management**

Organizing the classroom to maximize time on task. Based upon the ability of the teacher to foresee any activities taking time away from instruction. Involves establishing routines to minimize their impact on instructional time as well as preventing problems before they occur.

**Reactive Management**

Time used to discipline student for off-task behavior. Instruction is stopped to handle disciplinary matters.

**Retention**

Conditions promoting remembering or retaining information include meaningfulness of material, modeling of information, use of multiple modalities, meaningful processing of information by learner, and appropriate practice.

**Review**

To go over a lesson one more time. For example, the teacher summarizes information learned in a previous lesson.

**Sponge**

Warm-up or filler activities that eliminate potentially wasted time. This activity can be practice on an old learning or a mental set for a new lesson.

**Task Analysis**

Process of breaking an objective into small, incremental steps necessary to accomplish the objective.

**Teaching to the Objective**

Described as an essential element of instruction. Teacher questions, explanation, activities, directions, and responses to learner efforts are all congruent with the objective. Increases time on task; facilitates learning.

**Transition**

A change from one activity to another, usually preceded by teacher directions.

## Appendix G

### Introduction

- Did I greet the teacher?
- Did I set a pleasant feeling tone?
- Did I review the conference sequence?

### Discussing the Lesson

- Did I ask a question that gave the teacher an opportunity to reflect on his/her impression of the effectiveness of the lesson?
- Did I ask a question that narrowed the focus of the instructional skill to be reinforced?
- Did I listen actively to the teacher's comments?
- Did I use these comments to bridge into different parts of the conference?

### Reinforcing

- Did I share the objective with the teacher?
- Did I share specific examples?
- Did I recommend continued use of the skill?
- Did I explain the effect on the learner?
- Did we generate alternative approaches to the same objective?
- Did the teacher summarize what was heard?



## Appendix H

**Given to the Participants in the Experimental Group**

Answer items 1-12 using one of the listed responses:

- |                  |            |
|------------------|------------|
| (a) frequently   | (c) rarely |
| (b) occasionally | (d) never  |

Whenever your answer is rarely or never, please list at least one reason for your answer.

\_\_\_ 1. How often did you invite other teachers into your classroom to observe your instruction during the school year 1989-90?

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\_\_\_ 2. How often did you observe the instructional techniques of other teachers during the school year 1989-90?

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\_\_\_ 3. How often did you discuss instructional techniques with your peers during your non-scheduled time during the school year 1989-90?

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\_\_\_ 4. How often did you discuss specific students with other teachers during your non-scheduled time during the school year 1989-90?

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\_\_\_ 5. How often have you videotaped yourself for self-analysis in the past three years?

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\_\_\_ 6. How often did you try a new instructional technique in your classroom during the school year 1989-90?

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7-12. How often during the school year 1989-90 did you ask for instructional assistance/input from the following:

\_\_\_ 7. a peer in your discipline

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\_\_\_ 8. a peer outside your discipline

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\_\_\_ 9. your department head

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\_\_\_ 10. a teacher from another school or district

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\_\_\_ 11. an administrator

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\_\_\_ 12. the district's instructional specialist (Penny Kowal)

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Answer items 13-20 using one of the listed responses:

- (a) agree fully
- (b) agree somewhat
- (c) agree not at all

- \_\_\_ 13. Peer observation can help a teacher meet his/her needs for instructional growth.
- \_\_\_ 14. Peer observation can help motivate teachers to examine their current teaching practices.
- \_\_\_ 15. Peer observation can help motivate teachers to try new teaching practices.
- \_\_\_ 16. Visiting other classrooms can help teachers learn something about their own teaching practices.
- \_\_\_ 17. Videotaping oneself is an effective tool of self-evaluation.
- \_\_\_ 18. Having a colleague as a partner can be an incentive for personal growth.
- \_\_\_ 19. Having a partner can help motivate teachers to develop better lesson designs.
- \_\_\_ 20. Participation in peer observation can help identify alternative strategies for classroom instruction.

**21. What was the most difficult aspect of this project?**

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**22. What was the most valuable feature of this project?**

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**23. Were you successful in making the desired changes or improvements in your instructional techniques? Why?**

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**24. What suggestions would you give teachers and administrators who are considering implementing peer observation as a vehicle for instructional improvement?**

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Appendix I

**Given to the Participants In the Control Group**

Answer items 1-12 using one of the listed responses:

- (a) frequently
- (b) occasionally
- (c) rarely
- (d) never

Whenever your answer is rarely or never, please list at least one reason for your answer.

\_\_\_ 1. How often did you attempt a new technique in your instruction during the school year 1989-90?

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\_\_\_ 2. How often were you satisfied with the results?

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\_\_\_ 3. How often do you request the assistance of other peers in the accomplishment of any instructional technique?

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\_\_\_ 4. How often do you discuss instructional strategies with your peers?

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\_\_\_ 5. How often do you discuss specific students with other teachers during your non-scheduled time?

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\_\_\_ 6. How often have you videotaped yourself for self-analysis during the time period 1987-89?

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7-12. How often during the school year 1987-89 did you ask for instructional assistance/input from the following:

\_\_\_ 7. a peer in your discipline

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\_\_\_ 8. a peer outside your discipline

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\_\_\_ 9. your department head

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---

\_\_\_ 10. a teacher from another school or district

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\_\_\_ 11. an administrator

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\_\_\_ 12. the district's instructional specialist (Penny Kowal)

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13. What was the most difficult obstacle to improving instruction this year?

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14. What was the easiest aspect of improving instruction in your classroom this year?

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15. Were you successful in making the desired changes or improvements in your instructional techniques? Why?

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**16. What suggestions would you give teachers who are considering instructional improvement?**

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**17. What advantages/disadvantages did you encounter in making instructional improvement?**

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**18. Would you participate in peer observation? \_\_\_\_\_ Why? or Why Not?**

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Appendix J

School \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_ # of Students \_\_\_\_\_  
Teacher \_\_\_\_\_ Observer \_\_\_\_\_

**INTERACTIVE TEACHING MAP**

Lesson Objective \_\_\_\_\_

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