THE RELATIONSHIP AMONG PLANNING ACTIVITIES, PEER COACHING SKILLS AND IMPROVED INSTRUCTIONAL EFFECTIVENESS IN PRESERVICE SPECIAL EDUCATION TEACHERS

A Dissertation

by

CHARLES ANDREW MORTON

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

May 2004

Major Subject: Educational Psychology

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ABSTRACT

The Relationship Among Planning Activities, Peer Coaching Skills and Improved Instructional Effectiveness in Preservice Special Education Teachers.

(May 2004)

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This study is intended to examine the relationship between peer coaching skills and the improvement in instruction among preservice special educators. The study will examine: a) preservice teacher instructional skill before and after coaching, b) the effects of lesson planning activities by the preservice teacher on classroom instruction, and c) coaching methodologies and the use of systematic structured observation instruments during coaching.

Qualitative and quantitative analysis of case studies were utilized to ascertain the effect of peer coaching and coaching on a preservice teacher's ability to plan and implement improved instruction to their students. This study is intended to assist the improvement of preservice special education teacher training by enhancing their ability to provide feedback regarding effective instructional skills to their teaching colleagues, and subsequently to improve classroom instruction.

DEDICATION

This dissertation is dedicated to my parents, Ralph and Marjorie Morton. I regret that they are no longer with us and that they are not able to share in this accomplishment. Regardless, I carry their memory with me and hear their words of encouragement - I think they would be proud! Thanks Mom and Dad for teaching me the importance of believing in myself and having the ability to "follow through" and accomplish the goals that I set.

ACKNOWLEDGEMENTS

There are so many people who have helped keep me motivated over the last 10 ½ years and I would like to acknowledge them for continuing to push me toward this goal. My fellow doctoral students at A&M who preceded me by many years - Vicki, Karen, Tom, Anne, Allison, Jan (Dr. SCIE) to name a few. Also, my long time close friends - Donnie, Kathy, Wes and Andrea. Then there are the people I have met along the way since leaving A&M – Janell, Yvette, Gail and Tim. I am sure there are others I am forgetting (not surprising since it took so long).

I also owe my friend Lisa a great deal for always believing I could do this and gently encouraging me along the way. I want to thank her for coming all the way to College Station to share the experience or my defense, but more importantly to celebrate this great milestone in my life.

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CHAPTER I

INTRODUCTION

Traditionally the task of teacher observation, evaluation, and instructional improvement has been the responsibility of school administrators. Philosophically, the administrator's goal has been to foster instructional improvement and staff development. Realistically, however, too often the observation of teachers is limited to assessing minimal competence and determining eligibility for merit pay increase.

The public is increasingly demanding accountability for student outcomes in our schools. For improved student outcomes to be achieved, tangible improvement in teacher instructional skills must occur, and such improvement must be observable and able to be evaluated.

Many instructional observation and feedback tools are designed for use in the traditional classroom; however, the configuration of the traditional classroom is changing. Federal, state and local regulations have been enacted and improved practices have been designed to include students with special needs into the "traditional" classroom. As the student composition of many general education classrooms is continually changing, and as new ideas and theories come into practice, ongoing teacher training is needed to meet the demands for better classrooms and student achievement (Fuchs & Fuchs, 1994; Little, 1989).

This dissertation follows the style of *The Journal of Special Education.*

As the inclusion of special education students into the general classroom becomes a practical and viable model in today's classrooms, the role of the special education teacher has expanded to include that of consultant (Idol, 1993). These special education teachers work with their general education teacher colleagues to assist in the design and development of plans to assure classroom success for the at-risk student. This increasing interest in consultative and collaborative teaching, as all educators are taking responsibility for at-risk youth, demonstrates a need for the development of a greater number of teaching skills for special educators. Full inclusion education programs have also highlighted effective inclusive teaching practices such as cooperative learning, and lesson planning which need to be included in training today's educators (Idol, 1993). Coaching has proven to be an effective means of accomplishing this training goal (Hasbrouck, 1994; Hendrickson & others, 1988), and for teachers in training, planning is important if teachers can expect to effectively employ proven teaching behaviors in the classroom setting (Byra & Coulon, 1992).

Coaching

One proposed solution to address this need for improved and expanded teacher training is the technique of coaching. Coaching provides the exchange of ideas with another professional while working through a difficult process and assists in the acquisition of new elements of repertoire (Joyce & Showers, 1982).

Numerous studies have found that coached teachers can transfer newly acquired skills to the classroom, use these skills more appropriately, and have better long-term retention of knowledge and greater applied skill (Buck et al., 1992; Joyce & Showers,

1988; Neubert, 1988). In addition Showers (1985) states that when teachers are provided with peer coaching they practice new strategies, develop greater skill, and understand their acquired skills more clearly.

The act of providing feedback in a coaching situation is also beneficial to the person doing it (Joyce & Showers, 1982). In addition a proven way to improve instruction is to train peers to coach (Morgan, Gustafson, Hudson, & Salzberg, 1992). Peer coaching involves a teacher observing another colleague teaching a lesson, then using the results of that observation to collaboratively set informal goals for developing or improving instructional skills (Strother, 1989).

This type of peer-based instructional observation needs to be distinguished from traditional supervision. The differences between supervision and peer coaching are subtle yet complex and may be discussed in terms of sources of perceived power (Showers, 1985). When coaching is not separated from the supervisory process, where power is not shared, is not likely to encourage the collegiality of growth of the intended professional (Hasbrouck, 1994).

Coaching, whether provided by peers, “near peers”, university supervisors, or cooperating teachers, strengthens the training of preservice special educators (Englert & Sugai, 1983). Peer coaching has been found to enhance the skills of preservice special educators. Peer coaching skills addressed in preservice training could serve to a) strengthen preservice teaching skills, and b) provide preservice teachers with a useful professional skill for the future (Hasbrouck, 1994). These skills will benefit the

preservice teacher by enhancing their ability to evaluate and provide feedback to their teaching colleagues in professional situations.

Researchers and teacher trainers have discussed the usefulness and benefits of peer coaching (Englert & Sugai, 1983; Lignugaris/Kraft & Marchand-Martella, 1993; Ludlow, Faieta, & Wienke, 1989; Morgan et al., 1992; Peterson & Hudson, 1989), but little has been written on the information exchange between teacher and coach, referred to as the debriefing process. Few researchers have discussed: a) how the coaching process affects the preservice teacher's instruction in subsequent lessons; b) how the coaching process affects the preservice teacher's planning activities; and c) whether goal development improves the preservice teacher's ability to teach better lessons.

Of studies focusing on peer coaching and debriefing (Buck, Morsink, Griffin, Hines & Lenk, 1992; Glickman & Bey, 1990; Metcalf, 1991), all have examined the overall effectiveness of peer coaching, but fail to examine any specific procedural or behavioral aspects. At least two previous studies of coaching with preservice teachers used summer practica of similar length (Hasbrouck, 1994; Peterson & Hudson, 1989). Peterson and Hudson's study, however, examined coaching provided to the preservice teachers by supervising teachers only, not peers.

Planning

Planning plays a fundamental role in linking curriculum to instruction and in turn, influencing what goes on in the interactive teaching environment (Byra & Coulon, 1992). Other studies on teacher planning (Peterson, Marx & Clark, 1978; Carnahan, 1980; Twardy & Yerg, 1987) have led to conclusions that what preservice teachers do

prior to teaching affects what they do while teaching. There is a positive correlation between concrete, written planning activities and the quality of interactive teaching behavior. Adequacy of coverage of lesson content in planning is positively correlated to teacher demonstration of the desired teaching skills.

Peer coaching has been shown to stimulate collaborative planning and implementation of additional effective classroom management strategies not necessarily discussed in the peer coaching session (Hasbrouck & Christen, 1997). Conferences between peer coaches and trainees focused on planning for appropriate use of new models of teaching, teachers' educational objectives for teaching specific subject matter, and discussion of strategies best suited for achieving objectives that have been shown to improve instructional effectiveness (Showers, 1984).

Purpose

This study is intended to examine the relationship between peer coaching skills and the improvement in instruction among preservice special educators. The study will examine: a) preservice teacher instructional skill before and after coaching, b) the effects of lesson planning activities by the preservice teacher on classroom instruction, and c) coaching methodologies and the use of systematic structured observation instruments during coaching.

Case studies will be analyzed qualitatively and quantitatively to determine if peer coaching and developing the skills to coach can affect the preservice teacher's ability to plan and implement improved instruction to their students. The results of this study will assist in improving preservice special education teacher training by enhancing their

ability to provide feedback regarding effective instructional skills to their teaching colleagues, and subsequently to improve classroom instruction.

Research Questions

Question One

Is there a relationship between a preservice special education teacher's (PT's) planning activities, measured by the Planning Activity Log (PAL) immediately preceding their teaching, and improvement in instructional skills between two evaluated lessons (measured by the change between SCIE1* and SCIE2* scores).

Question Two

Is there a relationship between the quality of the peer coaching a preservice special education teacher (PT) receives, measured by the Coaching Efficacy Scale (CES), and their future planning activities measured by the PAL.

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*Scale for Coaching Instructional Effectiveness.

CHAPTER II

REVIEW OF LITERATURE

The review of the literature will outline the growth of the coaching process as an integral part in the development of preservice teachers. Theories, methodologies and rationales for coaching, peer coaching, debriefing, planning, and its ultimate impact on classroom instruction will be described. This section also documents the need for structured observation tools to accurately record, communicate and transfer information between the coach, and the preservice teacher being observed. The concept of peer coaching has been studied, demonstrated its utility, and continues to be an area of importance, which deserves further development as a significant component of the tools provided to today's educators.

Preservice Training

Research regarding preservice educator training suggests that teacher preparation should provide both sufficient opportunities for practice and a structure for reflecting on the meaning of these experiences (Pugach & Allen-Meares, 1985). Undergraduate teacher training programs continue to focus on specialized academic content rather than on more generic instructional methodology (Hindman & Polsgrove, 1988). Preservice teachers need to not only be exposed to and informed of more specific effective teaching techniques, but must be allowed to develop their ability to apply them in a classroom setting (Hindman & Polsgrove, 1988).

Of all of the activities included in preservice teacher training programs one of the most critical and important components are early field based experiences (Buck et al.,

1992; Lignugaris/Kraft & Marchand-Martell, 1993). Early field based experiences in preservice teacher training have shown to result in improved pre student teaching performance, increase in the number and quality of teaching behaviors, and student teachers who perceive themselves as better prepared to teach when they enter the classroom (Buck et al. 1992). Early field experiences are beneficial to student teachers because they allow the preservice teacher to be gradually inducted into teaching and opportunities to receive feedback and correction regarding teaching performance (Buck et al., 1992; Ludlow et al., 1989). The most meaningful field based experiences are predicated, in part, on the assumption that effective, frequent supervision occurs including detailed evaluative feedback and support (Buck et al., 1992; Lignugaris/Kraft & Marchand-Martella, 1993; Morgan, Gustafson, et al., 1992). The provision of technical feedback helps keep the mind of the teacher on the business of perfecting skills, polishing them, and working through problem areas (Joyce & Showers, 1982).

This supervision, however, is time consuming and faculty members providing this supervision receive little financial support or reinforcement from other faculty (Buck et al. 1992). These experiences are often compromised by supervisors having a large number of supervisees, competing responsibilities, scheduling problems, and widely dispersed physical settings (Englert & Sugai, 1983; Morgan, Menlove et al., 1994). This reflects the sentiment that most regular and special education teachers felt that their early field based experiences were not consistently or closely supervised.

One method of supervision that may help relieve some of the supervision burden from university faculty members and provide both intensive and effective supervision is

to match preservice teachers with more advanced students or teachers (Lignugaris/Kraft & Marchand-Martella, 1993; Morgan et al., 1994). Many graduate students, however, have been found to lack training in critical supervision skills, delivery of effective feedback, and instructional problem solving skills (Morgan, Menlove et al., 1994). Additionally, many classroom teachers and graduate students find the supervision process, coupled with their other responsibilities, to be burdensome (Morgan et al., 1994).

For supervision to become a standard component of student teaching, efficient, low-cost supervision training must be developed. (Buck et al., 1992). One way to improve supervision may be to train peers to coach. (Joyce & Showers, 1980; Morgan, Gustafson, et al., 1992; Peterson & Hudson, 1989).

Coaching

Coaching is essentially a method of transferring skill and expertise from more experienced and knowledgeable practitioners of such a skill to less experienced ones (Hargreaves & Dawe, 1990). Coaching's first function is to provide interchange with another human being over a difficult process (Joyce & Showers, 1982). Coaching consists of an intensive relationship between teacher and student in which the coach works alongside the student and engages in dialogue with him or her as the student attempts to practice and develop a newly acquired skill (Hargreaves & Dawe, 1990).

Teacher coaching originated as a staff development technique designed to develop teacher skill (Miller, Harris & Watanabe, 1991). The coaching strategy seems to be a viable intervention for improving the teaching behaviors of student teachers

(Peterson & Hudson, 1989). Coaching facilitates the challenging training process by providing opportunities for teachers to interact with and support each other during the transfer period (Hargreaves & Dawe, 1990).

Joyce and Showers (1981) review of the literature regarding teacher training and how it affects everyday teaching practice found that there are four commonly agreed upon components: (a) presentation, (b) demonstration, (c) practice, and (d) feedback. These components are sufficient for the transfer of skills to the classroom, but coaching is an important fifth component for most teachers. Showers (1985) contends that the three fundamental purposes of coaching are to: (a) build communities of teachers engaged in the ongoing study of teaching, (b) facilitate collegial study of new knowledge and skills through the development of a shared language and common understandings, and (c) to provide a support structure within which teachers can develop new teaching skills and strategies.

Three types of coaching have been identified: (a) technical coaching, (b) collegial coaching, and (c) challenge coaching (Garmston, 1987; Hargreaves & Dawe, 1990). Technical coaching focuses on the learning and transfer of new skills and strategies into the existing repertoires of teachers. Collegial coaching is directed more to the context of teaching and to the processes of self-reflection. Professional dialogue among teachers is needed to improve practice and to alter the organizational context in such a way as to assist in teacher improvement. Challenge coaching evolves from the other two models and addresses itself more to specific and persistent problems in

instructional design and delivery which need attention (Garmston, 1987; Hargreaves & Dawe, 1990).

An additional category of coaching is peer coaching, a practice in which colleagues on an equal or near equal level provides feedback and assistance. PC has been found to produce positive results. Two practices appear promising for field based experiences in special education: (a) the use of coaching (especially peer coaching), and (b) opportunities to develop decision making skills through reflection of personal performance, student achievement and research (Buck et al., 1992). This is supported by Joyce and Showers (1980) who found that one specific method of coaching which can be used to augment classroom supervision is peer coaching, in which one teacher trainee is taught to monitor another trainee's teaching behaviors. Skoog (1980) has suggested that structured feedback from peer observation is an effective means of improving teaching performance. Sparks (1986) compared three types of training including: (a) workshop only, (b) workshop plus peer observation, and (c) workshop plus feedback from the trainer. From this research it was found that peer observation was more effective than workshops alone or trainer feedback. Sparks (1986) also found that peer observation appeared to be more effective than trainer-provided coaching in boosting the (effective time management teacher training) workshop effectiveness.

Little (1982) found that staff development was most successful when there was a norm of collegiality and experimentation for successful staff development, of which peer coaching is a methodology. It has been suggested that peer coaching might be used as

one component of a comprehensive supervision model in large teacher preparation programs (Lignugaris/Kraft & Marchand-Martella, 1993).

Peer Coaching

Peer coaching may be defined as the assistance that one teacher provides to another in the development of teaching skills, strategies, or techniques (Miller et al., 1991; Strother, 1989). Peer coaching involves a teacher observing another colleague teaching a lesson, then using the results of that observation to collaboratively set informal goals for developing or improving instructional skills (Strother, 1989). Teachers involved in peer coaching situations instruct, train, and tutor one another (Garmston, 1987) by: (a) directly observing another trainee's teaching behaviors, (b) delivering feedback based on these observations, (c) recommending alternative teaching behaviors to refine instruction, and (d) remaining available for ongoing support (Englert & Sugai, 1983; Hendrickson et al., 1988; Morgan, Gustafson et al., 1992; Peterson & Hudson, 1989). The goals of peer coaching are to increase collegiality and professional dialogue, establish a common vocabulary, refine teaching practices, promote the transfer of learning and stimulate self-initiating autonomous teacher thought. (Hendrickson et al., 1988).

LeBlanc and Zide (1987) contends that peer coaching results in: (a) the application of new knowledge and skill, (b) feedback on teaching application is provided allowing for the skill to be fine tuned, (c) confidence is enhanced through the facilitation of the self-analysis process, and (d) commitment is enhanced via the emotional support and encouragement provided by peer coaching. Peer coaching has also been shown to

increase teacher's effectiveness by reinforcing and extending positive practice, increasing skills and understanding, remediating or developing alternatives for less effective practices, and providing highly skilled teachers with newer effective teaching practices (Hasbrouck & Christen, 1997; Hunter & Russell, 1989; Miller et al., 1991; Showers & Joyce, 1996)

In addition to extending skills, peer coaching also produces positive results in the development of self-confidence due to its non-threatening environment. The supportive climate created by the process of peer coaching produces an environment in which the individual can experiment and solve problems (LeBlanc & Zide, 1987). Moreover, peer supervision is directed at enhancing teacher growth and morale not evaluating performance and judging worth. Cooperative teachers need to be encouraged to provide students with support, guidance, and encourage self-evaluation (Ludlow, et al., 1989). Peer coaching provides the process for continuing support and direction, allowing for an open flow of communication (LeBlanc & Zide, 1987).

Unlike other assistants, peer coaches have firsthand knowledge of practicum expectations and stresses, so they may be especially supportive and empathetic (Morgan et al., 1994). Fimian (1986) stated that peer support among teachers reduces occupational stress and burnout. It is found that providing support and companionship to teachers seemed to be the most natural behavior for the peer coaches and the most thoroughly developed in their natural repertoires (Showers, 1985).

Lignugaris/Kraft and Marchand-Martella (1993) found the use of student teachers as supervisors in preservice teacher education programs represents one

approach to providing both intensive and effective supervision in field-based teacher preparation programs. Although their have only been two studies cited that specifically addressed coaching by undergraduate preservice teachers (Hasbrouck, 1994; Peterson & Hudson, 1989) other studies have shown peer coaching to be effective in the classroom setting (Byra & Coulon, 1992; Englert & Sugai, 1983; Hendrickson et al., 1988; Lignugaris/Kraft & Marchand-Martella, 1993; Morgan, Gustafson et al., 1992; Morgan, Menlove et al., 1994; Rolider, McNeil-Peirce, Van Houten, Molcho, & Ylevitch, 1986).

Although Peterson and Hudson (1984) examined coaching in preservice teachers, Hasbrouck (1994) is the only study found that specifically addresses peer coaching in preservice special education teachers. Hasbrouck (1994) found that peer coaching was effective in improving the instructional skills for the preservice special education teachers. This study also found that the training time necessary to teach preservice teachers how to coach could be substantially reduced by using experienced teachers to help mediate the overall process and act as peer coaching "coaches". Hasbrouck (1994) also utilized case study research which added insight into the relationships that formed between the peer teams and provided helpful information about the individual participants personalities, attitudes and general approach to the practicum requirements which influenced the effect of study treatment on their behaviors.

Showers (1985) also supports peer coaching, and states that teachers who are coached by peers transfer training at a greater rate than uncoached peers. Peer coaching appears to be an effective method for improving teacher awareness of their own

instructional behaviors, student behavior and the interaction of both (Hendrickson et al., 1988).

Peer coaching has been found to be an effective method for improving the training of preservice teaching personnel and enhancing the professional competence of classroom teachers (Hendrickson et al., 1988). Preservice coaching increases desirable teaching behaviors while decreasing undesirable teaching behaviors (Buck et al., 1992; Peterson & Hudson, 1989). Preservice coaching improves collegiality by increasing self-confidence, reducing isolation, and providing support (Buck et al., 1992). Buck et al., (1992) have reported that peer observation positively affects in-service teacher's attitudes toward observation and their receptivity to supervision.

Once teachers learned that their coaches were not there to judge them, a team spirit developed (Peterson & Hudson, 1989). Anecdotal comments and evaluation data suggest that individuals in this practicum were quite comfortable having peers responsible for grading the field-based part of their practicum (Englert & Sugai, 1983; Hendrickson et al., 1988; Lignugaris/Kraft & Marchand-Martella, 1993; Rolider et al., 1986;). Hindman and Posgrove (1988) reported that student teachers are able to interpret objective performance feedback, and use the information to shape their teaching behavior in a positive direction.

The coaching experience is a two-way street. Peer coaching seems to have a positive effect on both the trainee and the coach. Students rated receiving peer coaching as “very helpful” in preparing them for their student teaching experience (Fimian, 1986). They also felt that providing coaching to their peers was also “very helpful” in their

preparation. Coaches state that they learn as much from observing and giving feedback as they do by being observed. (Hendrickson et al., 1988). Watching a colleague teach may have been a powerful learning experience. Teachers mentioned picking up new ideas from teachers they watched. Observers were involved in the analysis and coding of teacher and student behavior. This experience may have helped analyze their own behavior more accurately and enabled them to make more significant changes in their own teaching (Peterson & Hudson, 1989).

When a group of four or six teachers observed each other regularly while they are trying out a model, they not only give technical feedback to each other, but also receive it vicariously while they observe it being given. It is suggested that the greatest benefit to peer coaches appeared to be increased use of and facility with the strategies they had been coaching in others. Peer coaches uniformly believed they had learned more and grown more than their trainees as a result of the coaching experience. Some peer coaches also believed they had achieved greater collegiality with their peers because the coaching conferences had established new norms for what they discussed with their peers (Joyce & Showers, 1982).

The supervision skills acquired by these people will be invaluable as they take responsibility for supervising paraprofessionals and serving as peer coaches for colleagues. They can also be used to build effective teams of teachers who know how to provide one another with the data and the questions needed to reach for new goals and stimulate growth (Cromwell & Browne, 1993). It is likely that student teachers who participate in peer supervision improve communication skills that might be useful in

training and managing instructional aides, or providing feedback to colleagues on their teaching (Lignugaris/Kraft & Marchand-Martella, 1993). The ultimate goal for this growth, training, and improved skills is its impact on teacher effectiveness in the classroom.

The use of peers to provide observation and feedback for preservice teachers in classroom settings is proving to be an efficient and cost effective method of assisting in the training of teachers to attain specified levels of teaching performance (Rolider et al., 1985). Peer coaches may be valuable resources who can relieve some of the burden from university supervisors, and can overcome time restrictions involved in field based preservice supervision (Joyce & Showers, 1980; Morgan, Menlove et al., 1994; Lignugaris/Kraft & Marchand-Martella, 1993). One method for overcoming the negative effects of fewer and shorter observation opportunities involves the use of peer observers equipped with efficient and precise observation systems (Englert & Sugai, 1983).

Problems with Peer Coaching

Although peer coaching has many advantages in pre and post service training and development, the methods by which it is implemented requires some thought. We need to be in search of well-defined observation systems, necessary for the success of coaching and further research is needed to discover coaching benefits to specific preservice populations, as well as to determine the skills that are required of successful coaches (Buck et al., 1992). For supervision to become a standard component of student teaching, efficient, low-cost supervision training must be developed (Lignugaris/Kraft & Marchand-Martella, 1993).

Three skill areas seem to be critical to the peer coaching practice. They are: (a) training to coach, (b) learning and utilizing effective debriefing techniques, and (c) appropriate use of standard observation tools. Coaching is not an inherent capability. For coaching to provide positive results some instruction, observation and practice of this skill is necessary (Joyce & Showers, 1982). Having the skills to communicate and knowing where we are going are important; but teachers also need to be able to observe, collect data, conference with adults, and ask reflective questions (Cromwell & Browne, 1993). Graduate students often lack training in critical supervision skills, such as how to collect and interpret data on trainee performance, deliver feedback effectively, and solve instructional problems (Morgan et al., 1994).

Training Coaches

In preparation for the role as a peer coach, it has been suggested that coaches receive training in observation and recording, evaluation, and feedback procedures (Morgan et al., 1994). Effective peer coaches need specific training. When untrained peers observe each other, the activity becomes essentially "watching someone teach" and most of the potential benefit of the peer coach is lost (Hasbrouck, 1994; Hunter & Russell, 1989).

Training professionals to effectively coach their peers must start with a clear understanding of effective instruction so an observer will be able to (a) identify strengths and weaknesses in a lesson, and then (b) provide specific feedback and suggestions for improvement (Englert & Sugai, 1983; Hasbrouck, 1994). Teachers participating in this type of training can be used to build effective teams when they are teaching. They are

effective because they are skilled at knowing how to provide colleagues with the data and the questions needed to reach for new goals and stimulate growth. Peer observation training activities appear to be more powerful than the coaching or workshop activities (Cromwell & Browne, 1993).

Despite the merit and value of training, some thought must be given to the time and expense of the training process. Hasbrouck (1994) stated that the biggest concern with peer coaching is the amount of training required for preservice teachers to be trained as coaches. Most studies found that a significant amount of time was needed to train teachers to be effective coaches. The studies involving preservice teachers found that they required extensive training to coach their peers effectively (Hasbrouck, 1994; Morgan, Gustafson et al., 1992).

One study, Morgan, Menlove et al., (1994) included 19 hours of training from the university supervisor in observing and debriefing skills, and the use of the observation instrument developed by Marchand-Martella plus videotaping of the lesson. As is documented by Morgan, Menlove et al. (1994) the cost-effectiveness of coaching must be questioned because nearly 20 hours of training per coach and five to seven hours of meetings with each trainee were required. Lignugaris/Kraft and Marchand-Martella, (1993) found that student teacher supervisors who participated in their program required fairly extensive training in using the observation system and in providing feedback to trainees. Peck et al., (1989) state that there is a great need for intervention techniques that increase implementation of individualized education plan-related instruction without demanding investment of large amounts of resources in specialized training.

Debriefing

A critical component of the PC process is the post-conference (Robbins, 1991; Willerman, McNeely & Cooper-Kaufman, 1991). Peer coaching has two distinct phases. The first involves the observation of a teaching episode followed by a debriefing where suggestions for improvement are provided through collegial dialog (Hargreaves & Dawe, 1990; Hasbrouck, 1994). The coach debriefs the observation with the teacher, goals for improvement are developed, and ideas for making changes and improvements are discussed (Hasbrouck, 1994). Structured feedback involves learning a system for observing teaching behavior and providing an opportunity to reflect on teaching using a system this can be self administered, provided by observers or by peers and coaches (Joyce & Showers, 1980). Efficient attainment of teaching skills depends upon the specification of target behaviors; reliable, valid performance feedback during or immediately after acquisition trials, and access to data from previous training trials. (Hindman & Polsgrove, 1988). It has been suggested that preservice teachers can better acquire effective teaching skills when: (a) target behaviors are clearly specified, (b) reliable and valid performance feedback is provided, and (c) access to data from previous performance is available to them (Hasbrouck, 1994; Semmel, 1978).

Structured Observation Tools

A critical issue in implementing an integrated supervision model is verifying the consistency of grading criteria across various observers (Lignugaris/Kraft & Marchand-Martella, 1993). An instrument which clearly identifies key elements in an effective lesson would greatly facilitate both the training of PCs and the provision of peer

coaching (Englert & Sugai, 1983). Observation instruments help provide more objective feedback (which teachers tend to trust more than observer's comments), and to use for evaluation of their own performance to set goals for improving their skills (Englert & Sugai, 1983; Hasbrouck, 1994).

Peer coaches who used well-defined observation systems and provided structured feedback based on that system were more effective than peer coaches who did not use well-defined supervision instruments (Englert & Sugai, 1983; Lignugaris/Kraft & Marchand-Martella, 1993). Skoog (1980) suggests that structured feedback from peer observation is an effective means of improving teacher performance. The peer coaching process which used objective and descriptive recording of teacher's behavior are more effective than those using subjective evaluation for providing a teacher with useful feedback.

An effective instructional observation system should be able to bridge the gap between the classroom setting, student levels and subject matter. "The instrument must focus on the most important, and most generic aspects of instruction, taking care to construct the individual items, providing both sufficient and accurate descriptors and a rating scale that can be consistently used by observers (Hasbrouck, 1994).

A need exists for a reliable and valid instrument to guide the observation of teachers in classroom settings by their colleagues/peers to facilitate coaching (Hasbrouck, 1994). There does not appear to be an instrument specifically designed or optimally suited to serve as a tool for conducting the required first step of peer coaching, the observation of teaching (Hasbrouck, 1994).

Planning

Biegel (1993) conducted a study on peer teaching and special educators and supports the findings that training and a structured, systematic observation instrument to aid in instructional analysis are two fundamental components found to be important for the prospective special educator. This study also confirmed that an important part of the training and preparation for teaching is knowledge of planning. Prior to beginning any peer teaching episodes the prospective special educators receive training in lesson planning. This includes the creation of objectives, how to plan for a teaching/learning procedure, and how to plan to evaluate the lesson.

There is considerable research questioning whether teacher trainers are providing potential teachers with enough training and practice before they enter the classroom. The integration of theory with practice continues to be an important concept in preservice teacher education. Fennell (1993) conducted a study of student teachers and their perceptions of preparedness for teaching was based on five areas including lesson planning, unit planning, and strategies for instruction. The results supported that the integrated framework (peer coaching and interaction, skilled observation, debriefing, self-evaluation, and experiences) helped students integrate and make sense of pedagogical theories through "hands on" experience and practical knowledge about teaching. The students reported that experiences related to planning, structuring, presenting lessons, and instructional strategies were quite helpful and could be adapted to a variety of classroom contexts benefitting teachers, preservice teachers and students in the classroom.

A survey of colleges and universities with undergraduate secondary education programs collected data on 37 topics relating to specific skills or competencies on student preparedness for teaching. Issues of teacher planning, teaching techniques, dealing with at-risk (special education) students and student assessment were included in the survey. Results found that the chances were one in three that students were not fully prepared in both learning styles and models of teaching. Planning is such an important aspect of good teaching that it boarders on shocking that so many students have less than complete preparation in this area (Reick,1992).

The impact and importance of planning as part of teacher preparation is one of concern to educators internationally. For example, Spanish educators have studied the process of planning and its outcome, as well as establishing into practice more training on the topic. Knowledge based solely on (years of) experience which we may call a system of trial and error wastes time and the quality of teaching suffers (Sanchez & Valcarcel, 1998).

Japanese education is renovating teaching styles including preservice teacher education utilizing technological innovation to develop lesson plans. Traditionally novice teachers use their own schooling experiences and occasionally some collegial interchange to develop plans and strategies. This results in a somewhat rigid framework which, in today's teaching environment, does not always meet individual classroom situations. In conjunction with the need for a "form" with which to assess teacher behavior, establishing a planning "format" which can be utilized in any classroom scenario, and is flexible to structural change is proposed. This images, concepts, models,

and propositions (ICMP) method for instructional design and analysis will provide preservice teachers with a model for lesson planning for today's classroom (Nishinosono, 2000).

Other systematic observation instrument and planning procedures such as The Whitehall Social Emotional Climate Index, Blooms Taxonomy, Models of Teaching, Natural Supports Matrix and Cooperative Learning Planning System, to name only a few are only a part of the overall planning process. Research has shown that teachers plan for instruction using very different strategies than those advocated during the last 30 years of educational practice; and planning by experienced teachers and novice teachers can vary tremendously (Housner & Griffey, 1985). Peterson & Hudson (1989) determined that planning has two general categories: (a) task/activity decisions, and (b) instructional strategy decisions. Today there are so many considerations to include in planning that preservice teachers can become overwhelmed by the prospects of the entire process.

Summary and Rationale for Study

The research review in preparation for this study confirmed the lack of an adequate structured observation system for assessing teaching behaviors that could be useful for structured feedback and coaching of teaching professionals at all levels. Supervisors, experienced teachers, or preservice teachers are in need of standard instruments and procedures to assess peer instruction and provide useful feedback.

Although few empirical studies have been conducted specifically regarding peer coaching there has been a great deal of research regarding other types of coaching. Hasbrouck (1994) summarized the research to date on coaching: (a) objective and

descriptive recording of teacher behavior is more effective than subjective evaluation when providing feedback, (b) much time is needed to train teachers to be effective coaches, and (c) goal directed behavior is more likely to effect change than focusing on outcomes.

This study is intended to examine the relationship between peer coaching skills and the improvement in instruction among preservice special educators. The study will examine: a) preservice teacher instructional skill before and after coaching, b) the effects of lesson planning activities by the preservice teacher on classroom instruction, and c) coaching methodologies and the use of systematic structured observation instruments during coaching.

Case studies will be evaluated both qualitatively and quantitatively to determine if peer coaching and developing the skills to coach can improve the preservice teacher's ability to plan and implement instruction for their students. This study is designed to provide information to assist in improving preservice special education teacher training by enhancing their ability to provide feedback regarding effective instructional skills to their teaching colleagues, and subsequently to improve classroom instruction.

CHAPTER III

METHOD

Context

The study was conducted during a four week practicum held the summer before the preservice teachers' (PT) required student teaching experience. The successful completion of this four week practicum was required prior to the trainees' admittance into their student teaching experience. This summer program also serves as an internship site for consulting teacher trainees enrolled in a special education Masters program in the Educational Psychology Department at Texas A&M University. At least two previous studies of coaching with preservice teachers used a summer practicum of similar length (Hasbrouck, 1994; Peterson & Hudson, 1989). Peterson and Hudson's study; however, examined coaching provided to the preservice teachers by supervising teachers only, not peers. Hasbrouck (1994) examined preservice teachers actually coaching utilizing experienced teachers to provide assistance.

The summer program is a cooperative effort between the university and a local school district. The university faculty designed the practicum to link preservice and consulting teachers with professional educators and provided skills based instruction to public school children who experience difficulties in school.

The university provided two doctoral students to serve as site supervisors and three consulting teacher trainees to serve as consultants to the student teachers. The summer practicum was also used for additional students to earn supervision practicum credits, and to provide technical support to evaluate the process. The local school

district provided the special education students, facilities, staff (1 principal and six middle school teachers), instructional supplies and materials, and transportation for the students.

Subjects

Study participants included 7 female (ages 20-24), Caucasian undergraduate preservice special education teachers (PTs) who were enrolled in a required 4 week summer practicum. Some of the PTs had previous classroom experience from other undergraduate courses, volunteer and employment opportunities, but for most this was their first teaching experience. The PTs all planned on pursuing teaching careers immediately following the completion of their undergraduate degree, with some expressing interest in continuing on for their Masters degree. This practicum, the first formal experience the PTs had in teaching groups of children, was a requirement for the PTs major at the university.

The special education students, 157 male and 123 female middle school children (95 sixth, 101 seventh and 84 eighth graders) were identified by their home school as either: a) at-risk for failure because of poor academic performance, b) learning disabled or c) recent failure of at least one subtest of the Texas Academic Assessment of Students Test (TAAS). The specific reason each child was placed in the program is unknown, however, each child was administered a content pretest to determine their specific functioning level in reading, math comprehension and mathematics word problems.

Instrumentation

Scale for Coaching Instructional Effectiveness (SCIE)

The SCIE was developed as a method to assist teachers to observe their colleagues in classroom settings. The SCIE offers teachers an opportunity to provide feedback in the form of professional and collegial critiquing for instructional improvement. During the development of the SCIE, Hasbrouck (1994) considered several technical aspects of the instrument including construct validity and interrater reliability.

The SCIE consists of 51 items that describe effective teaching behaviors. Hasbrouck (1994) derived these items from 3 sources. The sources are: (a) effective schools research, (b) existing teacher and classroom evaluation scales, and (c) consultation with experts. The SCIE was designed to be used after a teacher or coach observes and documents a colleague teach a single lesson for at least 20 minutes. The teacher or coach records detailed anecdotal notes about classroom dynamics which include teacher behavior and student reactions.

After the SCIE is completed, the teacher or coach debriefs the colleague by discussing the SCIE ratings. The teacher or coach critiques the colleague's lesson based upon their observations and offers examples of the colleague's strengths and suggestions for improvement. The teacher or coach then sets specific goals for focusing on areas of needed improvement, and encourages the colleague to brainstorm instructional methods to address the identified needs. A novice teacher who observes a colleague needs to use the SCIE in the presence of an experienced teacher. Both observers, the novice and the

experienced teacher, rate the colleague. After completing their ratings, the raters meet to develop consensus (Hasbrouck, 1996).

The 51 SCIE items utilize either a 2 or 3 point rating scale. 24 items of the SCIE utilize a 2 point scale. This 2-point scale provides the options of "NI" and "Yes √". The option "NI" refers to needs improvement. This option suggests that the desired behavior was not implemented and should have been, or was implemented with low quality/skill, or was used with only a few students or for a small part of the lesson. The option "Yes√" refers to the colleague's engagement in the behavior. This option suggests that the desired behavior was implemented with at least fair/moderate quality or fair/moderate skill for most of the lesson with most of the students.

The other 27 items of the SCIE utilize a 3 point scale to rate the colleague's performance. This scale provides the options "NI", "Yes√", and "Yes+". The option "Yes+" suggests that the desired behavior was implemented with good or excellent quality or high skill for all or almost all of the lesson with all or almost all of the students.

Each of the 51 items of the SCIE can be coded as "NtOb". The option "NtOb" refers to not observed in the lesson. This option suggests that the behavior was not observed, or that the behavior was not applicable, or that the quality of the behavior could not be judged.

Scoring

The SCIE score was obtained by assigning a numeric value to each of the 51 item responses. Responses were given the following numeric rating corresponding to scoring criteria on the SCIE protocol: (a) "Yes: +" was rated a 2, (b) "Yes:√" was rated a 1, (c) "No" was rated zero. Items rated as "NtOb" were not assigned numeric values and not included in the analysis since they were considered neutral ratings and would affect average SCIE scores in the analysis.

Construct validity

Validity has historically been described in three parts consisting of construct, content and criterion related (APA/AAERA/NCME, 1985), however, many researchers consider the discussion all of types of validity to further support the concept of construct validity (Messick, 1989). When a test or assessment is designed for use within a specific context relevant construct definitions are usually derived from content analyses including judgment data from experts in related subject matter, and systematic surveys of related materials (Anastasi, 1986).

Content-related evidence for SCIE items

Anastasi (1988) states that a systematic examination of the content must be made to determine whether or not it is representative of the domain claimed to be measured. One method of determination is to have experts examine an instrument in regards to its completeness or representativeness, appropriateness, format and bias (Tindal &Martson, 1990).

Hasbrouck (1994) utilized twelve individuals enrolled in or recent graduates from graduate programs at Texas A&M University and University of Oregon to review and critique the SCIE items. All participants were familiar with other formal and informal teacher observation instruments and each had at least five years of teaching experience. The professionals provided feedback which was used to modify the items, behavioral descriptions and rating scale. Another pilot study suggested that five out of six experienced teachers indicated that the SCIE made a "very positive contribution" to the peer coaching experience (Hasbrouck, 1994). This process not only strengthened the content validity of the measure but provided feedback from professionals who might be using the measure regarding the measures' face validity.

Another way to address the validity of an instrument is to match an instrument's content with other similar instruments (Anastasi, 1986). Hasbrouck (1994) selected a number of classroom observation/evaluation instruments of similar purpose (e.g. the *Florida Performance Measurement System (FPMS)* [Florida Coalition for the Development of a Performance Measurement System, 1984], *Texas Teacher Appraisal System* (TTAS) [Texas Education Agency, undated], *The Scales for Effective Teaching (SET)* [Kukic, Fister, Link, & Freston, 1989], and *The Teacher Evaluation Scale* (TES) [McCarney, 1986]) – all based upon effective school research. All fifteen items from the SCIE were listed on a grid and then the researcher/developer rated the content of each of the four comparison instruments as having a close match (item content from the comparison instruments matches 50-100% of the content of the sub items of the SCIE item), some match (<50% match of content) or no match (no mention of attributes

similar to any of the SCIE sub items in any item from the comparison instrument (Hasbrouck, 1994). The results of this analysis produced an average match with the SCIE across the four instruments of 72%.

Interrater reliability of the SCIE

The SCIE has been field tested during informal pilot studies. One of the field tests consisted of 132 observations of 66 lessons conducted over a 4 week practicum (Hasbrouck, 1997). This pilot study compared the ratings of experienced teachers to the ratings of novice teachers. The average percent agreement of the two groups increased over the four week practicum from 61% agreement (.37 Kappa) for the initial observation, to 66% agreement (.47 Kappa) for the second observation, to 68% agreement (.46 Kappa) for the third observation. A pilot study which utilized experienced teachers to support and guide PTs achieved 81% interrater agreement (.52 Kappa) following 5 hours of training which included videotaped lessons (Hasbrouck, 1996).

Hasbrouck (1994) discussed the analysis of these pilot studies indicating that since the calculation of percent of agreement alone is subject to inflation by chance agreement (Fleiss, 1981) a Kappa coefficient which corrects for chance agreement was utilized. Kappa can accommodate both the 2 and 3 point scale utilized on the SCIE (Suen & Ary, 1989) and it is the most frequently recommended index of chance-corrected agreement (Cohen, 1965).

Coaching Efficacy Scale (CES)

The CES was developed as a tool to assist teachers and coaches in assessing feedback given during a debriefing session following instruction with a colleague. The CES also allows multiple observers to systematically assess coaching behaviors displayed during a debriefing session. During the development of the CES two of the same technical aspects addressed when developing the SCIE (Hasbrouck, 1994) were considered; construct validity, as supported by content and face validity and interrater reliability.

When developing the CES, a review of literature on peer coaching, interpersonal communication and problem solving skills was conducted in conjunction with input and feedback from a variety of professionals in the field of education and counseling. The version of the CES used in this study was the first to be used in a field based study.

Content and face validity of the CES

Since no other scale existed prior to the study the researcher was not able to match the content of the CES with other tests as recommended (Anastasi, 1986). The development of the CES scale and response schemata closely modeled that of the development of the Scale for Coaching Instructional Effectiveness (Hasbrouck, 1994). The rating scale for the CES was adopted from the SCIE (Hasbrouck, 1994) with five of the CES items providing a rater with a 2 point scale, and 11 CES items providing a 3 point scale. Each of the 16 items provide the choice of "Not Ob" if the behavior was not observed, or if the behavior was not applicable.

The following development procedures were designed to strengthen face validity and content validity of the CES. The 16 items on the CES were derived from an initial set of 65 statements that were developed by the researcher relating to peer coaching, interpersonal communication and problem solving skills and developed from a literature review. Four faculty members from counseling and school psychology programs at Texas A&M reviewed the 65 statements and selected 25 statements which they considered to be most relevant for the intended use of the CES which was to evaluate peer coaching interaction.

The resulting 25 statements were presented to 20 doctoral students enrolled in educational psychology, counseling, and school psychology programs at Texas A&M University. To the extent that the graduate student respondents had considerable experience and expertise in teaching and instruction this procedure contributed to the content validity of the CES.

The author provided the graduate students information about the use of these statements and asked them for feedback regarding the appropriateness and clarity of the statements given the intended use. The graduate students' feedback was utilized to refine the 25 statements into the existing 16 items of the CES scale by eliminating items that at least half of the group felt were unclear or did not adequately address the intended use of the instrument.

Interrater reliability of CES during pilot testing

Four graduate students in masters and doctoral programs in special education and educational psychology used the first 16 item CES to rate a series of 3 videotaped

debriefing sessions. The videotaped sessions were loosely scripted so that a variety of possible debriefing behaviors could be rated using the CES. After each tape was viewed and rated the author had a group discussion with the graduate students concerning their use of the CES. The author then considered the graduate students' feedback when making modifications to CES items in an effort to increase the utility and reliability of the instrument.

Three additional graduate students used the resulting version of the CES to code the same 3 scripted, videotaped debriefing sessions. The ratings obtained from these students were used to establish initial interrater reliability scores for the CES. The percent agreement of the resulting trials increased from 69% agreement (34% chance agreement, .62 Kappa) for the initial observation, to 94% agreement (34% chance agreement, .90 Kappa) for the third and final observation. A Kappa coefficient of .90 among three raters was considered sufficient for the purposes of this study.

Gelfand and Hartmann (1975) advise a Kappa of .60 is the minimal acceptable level of interrater agreement, Fliess (1981) believes that a Kappa between .40 and .75 represent a fair to good agreement. Also, Hasbrouck (1984) considered a Kappa coefficient of .56 with six different independent raters to be sufficient interrater agreement during pilot studies for the SCIE.

Scoring of the CES

CES ratings were assigned point values as follows: "+" received 3 points, a "√" received 2 points, a "√-" received 1 point. Items rated as "Not Ob" were not assigned numerical values and not included in the analysis because they were considered neutral

ratings. These values were added together to produce a total CES score for each coaching session.

Planning Activity Log (PAL)

The PAL was developed as a structured way for PTs to provide a daily self report regarding the amount of time, types of activities, and outside resources consulted for lesson planning. The PAL divided planning activities into 8 major categories. They are: (a) arranging the classroom for the lesson, (b) gathering or creating student materials, (c) preparing proactive classroom management strategies, (d) selecting objectives, (e) selecting content, (f) organizing lesson presentation, (g) rehearsing lesson, and (h) designing modifications for diverse skill levels. The PTs completed the PAL daily by coding the amount of time spent in each area as "Major", Minor", or "None". "Major" refers to more than 30 minutes or 50% of the total planning time. "Minor" refers to less than 30 minutes or 50% of the total planning time. "None" refers to 0 time spent planning. The PTs also indicated on the PAL what type of external resources, in any, were consulted during the planning of the lesson.

Scoring of the PAL

PAL ratings were derived by assigning the following point values: "Major" received 2 points, "Minor" received 1 point and "None" received 0 points (indicating that no time was spent planning in this area). These values were summed to produce a total PAL score for each planning session.

Procedure

This study made use of material and data already required as part of the preservice teachers 4 week summer practicum. The preservice special education teachers were paired and assigned an experienced teacher (ExpT) to work with through out the practicum. Since the preservice special education teachers were divided into pairs and assigned the same ExpT, they were also observed using the SCIE and coached based upon the results twice during the practicum.

Each preservice special education teacher observed a lesson at least 20 minutes in length, completed the SCIE consensus form, and debriefed twice during the four week practicum. The first SCIE observation was not conducted until the second week of the practicum. With the exception of one participant who had both SCIE observations during the same week, all other participants had a least one week between each SCIE observation.

Following each SCIE observation, the teacher or coach and experienced teacher met to discuss their independent ratings of the lesson and develop consensus regarding each of the 51 items on the SCIE prior to debriefing the PT. This meeting was to take place as soon as possible following the observed lesson, generally the same day. The teacher or coach, experienced teacher, and PT would then meet for the debriefing within a day following the consensus meeting. The consensus meeting and the coaching session were held privately at the practicum site.

The coaching sessions ranged in length from twenty five minutes to over one hour and were audio taped by the participants. No objections were noted to the audio

taping and all participants were informed of the audio taping procedure prior to the beginning of the study and signed an agreement stating that fact.

At the end of each debriefing session self improvement goals were to be set focusing on the discussion and areas identified by the SCIE as needing improvement, however few of the PT's actually set formal goals. According to the SCIE directions following the debriefing session, each teacher or coach was also to complete a debriefing checklist including a self report of their coaching performance including the goals selected by the PT for improvement, few PT's completed this step in the process.

PALs were requested daily throughout the course of the practicum. Because the PAL's were an academic requirement of the practicum the PT's completed them with great regularity.

Study Design

A one group pretest-posttest design and interrupted time series design was used to address the three questions proposed in this investigation (Cook & Campbell, 1979). Figure 1 outlines the design schematic and data collection time line.

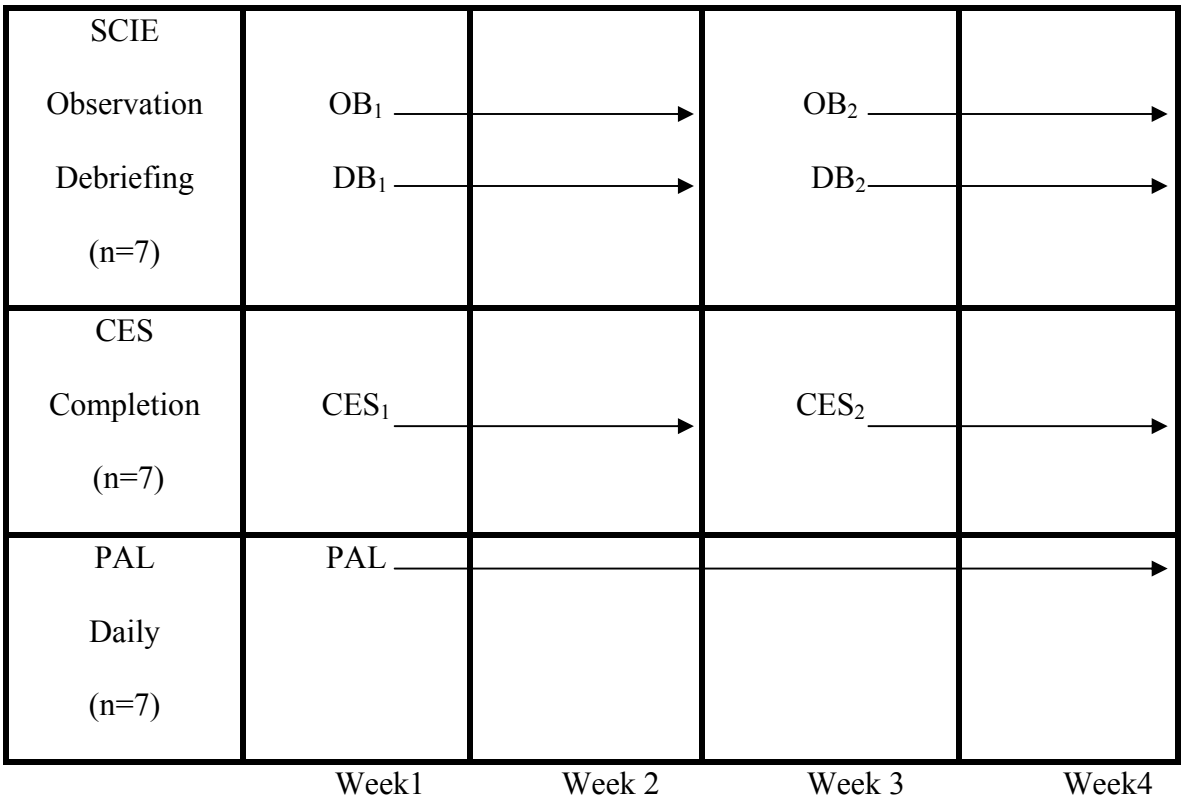

Figure 1. Design Schematic

Validity

When conducting applied research, such as the study at hand, much effort must be made to control threats to the internal validity of the study. Cook and Campbell (1979) state that many applied researchers rank internal validity as the most important concern to consider when designing a study, closely followed by external validity.

Cook and Campbell (1979) describe internal validity as a measure to control drawing false positive or false negative conclusions when describing casual hypotheses.

Campbell and Stanley (1963) stated that internal validity is the basic minimum without which you cannot interpret the results of any experiment.

External validity is also of importance to this study because of the desire to make generalizations from the results (Cook & Campbell, 1979; Campbell & Stanley, 1963). Cook and Campbell (1979) also state that when conducting applied research it is crucial that any demonstration of change be made in a context that permits wide generalization or generalization to the specific target settings or persons in whom the researcher is interested. This is extremely important when conducting research on teaching because of the desire to generalize results across similar classroom settings (Campbell & Stanley, 1963).

Threats to Internal Validity

Campbell and Stanley (1963) identified a number of threats to the internal validity of a study. The threats include 1) the events that occur between measurements, 2) maturation of the subjects due to the passing of time, 3) effects of the first test on the second, 4) changes in observers or scorers, 5) statistical regression bias in the selection of respondents and 6) loss of subjects throughout the experiment. Cook and Campbell (1979) identify two additional threats to internal validity including bias and error. Bias describes factors that systematically affect the value of means while error refers to factors that increase variability and decrease the chance of obtaining statistically significant effects.

In order to minimize or control possible threats to the internal validity it is important to identify these threats and pose solutions prior to and through out

implementation of the study. The following threats and solutions were identified for this study.

Differential teaching opportunities

The seven PT's participating in this study were placed in five different classrooms with five different teachers during this study. This produced differential teaching opportunities and experiences for each PT affecting the chain of events occurring between each study measurement and affecting the way in which each subject changes or matures throughout the study. These differences can directly affect study results by producing potentially different settings for the study participants.

In an effort to counteract this problem the district cooperating teacher was encouraged to provide equal instructional opportunities for each PT. Additionally the PT's kept track of their instructional responsibilities and provided descriptions of their classroom activities in daily journals. These journals were reviewed daily by each PT's Exp T and also by the researcher.

Differential PT teaching supervision

Although program requirements require the PT to be supervised during all classroom activities the occurrence and depth of this supervision naturally varied from classroom to classroom. This again can produce different events between measurements and affect the process in which the PT's change and mature during the course of the study.

In an effort to address this problem the sight director developed a supervision schedule in order to evaluate and grade the PT providing consistent supervisory

interaction for each participant. Additionally, each PT was supervised by a consulting teacher who was trained in a university program utilizing similar supervisory techniques. The consulting teacher collaborated daily during the duration of the summer program to ensure supervisory consistency.

Preservice teacher instructional history

The amount and quality of instructional experience varied greatly among the PT's. Some PT's have no experience teaching while others participated in a number of instructional activities, practica and volunteer activities related to teaching children. This affected the ability that each PT had to participate in the instructional responsibilities required in each classroom as well as the level of skill they possessed and their potential for growth, maturation and change throughout the course of the study.

Threats to External Validity

There are a number of threats to the external validity or the way in which experimental results can be generalized to other populations. These threats include a) the reaction or interaction the testing will have on test subjects, b) effects of selection bias on the experimental variable, c) reactive effects of the experiment itself on the participants and d) effects of prior treatment on subjects in a multi-treatment experiment (Campbell & Stanley, 1963; Cook & Campbell, 1979).

One should be careful when generalizing the results of an exploratory, quasi-experimental study like this one. The sample size is small and the participants are very specific, i.e. preservice special education teacher's participating in their first formalized teaching experience. Efforts have been made during the data collection and reporting of

the results of this study to provide the reader with adequate demographic and descriptive information so they can make an informed decision regarding the use of these results.

Analysis

Question One

Is there a relationship between a preservice special education teacher's (PT's) planning activities, measured by the Planning Activity Log (PAL) immediately preceding their teaching, and improvement in instructional skills between two evaluated lessons (measured by the change between SCIE1* and SCIE2* scores)?

The data to answer Question One regarding the relationship between PTs planning activities and improvement in instructional skill came from two sources: a) A PAL score which represents the amount of time each PT spent planning the lesson represented in the SCIE2 score, and b) Change and/or growth from between each PT's SCIE1 and SCIE2 scores. These variables are outlined in Figure 2.

The results were obtained by subjecting the data to a cross tabulation analysis producing a Chi-square and Cramer's V. The Chi-square p value, which measures significance of a relationship between two variables, is sensitive to sample size; in contrast, Cramer's V, which measures the size or magnitude of relationship, is not affected by the size of the sample used. These two indices indicate whether and to what extent the observed pattern of the cross tabulated data deviates from the expected pattern assuming no association between the variables (Tai, 1978).

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* Scale for Coaching Instructional Effectiveness

Question Two

Is there a relationship between the quality of the peer coaching a preservice special education teacher (PT) receives, measured by the Coaching Efficacy Scale (CES) and their future planning activities measured by the PAL?

The data to answer Question Two regarding the relationship between the quality of coaching a PT receives and their planning activities came from came from two sources: a) A PAL score which represents the amount of time each PT spent planning the lesson represented in the SCIE2 score, and b) Results of the PAL representing the amount of time and type of activities PTs engaged in when planning their lessons. These variables are outlined in Figure 2. The results were obtained in the same manner as the results in Question One by subjecting the data to a cross tabulation analysis producing a Cramer's V.

	Question 1	Question 2
IV	Coaching Skill (as measured by the Coaching Efficacy Scale)	Planning Activity (as measured by the Planning Activity Log)
DV	Planning Activity (as measured by Planning Activity Log)	Instructional Skill (as measured by Scale for Coaching Instructional Effectiveness)
Data Analysis	Correlation between PT coaching skill and their planning activities	Correlation between PT planning activity and improvement in instructional skill
Sample Size	N=7	N=7

Figure 2. Explanation of Variables by Question

CHAPTER IV

RESULTS

In order to address the two research questions posed below, both qualitative and quantitative analyses were conducted. Part one of this section summarizes data collected for this study. Part two provides a qualitative discussion and analysis of case studies involving the seven study participants. Part three provides a quantitative analysis of data collected during the study summarized by the following research questions.

Question One

Is there a relationship between a preservice special education teacher's (PT's) planning activities, measured by the Planning Activity Log (PAL) immediately preceding their teaching, and improvement in instructional skills between two evaluated lessons (measured by the change between SCIE1* and SCIE2* scores)?

Question Two

Is there a relationship between the quality of the peer coaching a preservice special education teacher (PT) receives, measured by the Coaching Efficacy Scale (CES) and their future planning activities measured by the PAL?

Pseudonyms were used for the seven preservice teachers (PTs) (Anne, Janell, Kathy, Kelly, Mary, Audrey, and Lindsey) participating in the study completed a four-week summer practicum in which they were required to observe a colleague teach a lesson, evaluate the lesson in collaboration with an experienced teacher (ExpT), and provide

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* Scale for Coaching Instructional Effectiveness

peer coaching to their colleague. The PTs instructional skill was measured by the Scale for Coaching Instructional Effectiveness (SCIE), an instrument developed to assist teachers observe their colleagues in classroom settings. The PT's coaching ability was measured by the Coaching Efficacy Scale (CES), an instrument developed to rate the coaching ability of the peer coach. The PTs also completed the Planning Activity Log (PAL), a summary of their instructional planning activities during the summer session. The information gathered from the use of the three instruments–the SCIE, CES and PAL–were used to answer the two research questions which will be addressed after a general descriptive data section.

Part One: Descriptive Summary

The SCIE was used to measure the instructional effectiveness of the PTs participating in the study. Two sets of SCIE scores were obtained for each PT by tallying the results of the debriefing protocol, correcting for any items that were coded as NtOb "not observed" and deriving a "percentage correct" score representing each PT's score for each SCIE observation. SCIE1 and SCIE2 scores represent the PT and the ExpT consensus score from observing two respective independent lessons. SCIE1 occurred within the first two weeks of the summer session and SCIE2 occurred during the last two weeks of the summer session for most participants (N= 7).

Table 1.

PT SCIE1 and SCIE2 Percentage Correct Scores

	PT	SCIE1	SCIE 2
	Lindsey	35	50
	Anne	35	49
	Kathy	45	49
	Audrey	60	91
	Mary	56	69
	Kelly	42	61
	Janelle	74	65
Group Statistics	Mdn	45	61
	Min Score	35	49
	Max Score	74	91
	Range	39	42

Of the seven scores reported for the first SCIE observation (SCIE1) the lowest score was 35%, and the highest score was 74% providing a range of 39 percentage points between the lowest and highest score. The seven scores (Mdn = 45) are reported in Table 1. Of the seven scores reported for the second SCIE observation (SCIE2) the lowest score was 49% and the highest score was 91% providing a range in scores of 42 percentage points. The seven scores (Mdn = 61) are reported in Table 1. Although the range of the SCIE1 and SCIE2 scores are very close; the median score increased by 16 points, indicating that the study participants made overall improvement in instructional skills as the study progressed.

The CES was designed to measure the coaching skills exhibited by preservice teachers engaged in a SCIE debriefing session with a colleague. The CES score used in this study was calculated by averaging CES ratings for a single debriefing session obtained from two independent evaluators. The two evaluators listened to an audiotape of each debriefing session and coded the CES protocol based upon the interactions heard in each audiotape.

Table 2.

Peer Coach CES1 Percentage Scores for SCIE1 Coaching Session Corrected for "Not Observed" Ratings

	Coach	CES1
	Debbie	56
	Janell	85
	Kelly	62
	Maggie	72
	Lea	49
	Kathy	73
	Anne	68
Group Statistics	Mdn	68
	Minimum Score	49
	Maximum Score	85
	Range	36

The CES1 score represents the average ratings by two independent evaluators rating the coaching session in which the results of SCIE1 were discussed. This session occurred within 24 hours of the PT's first coaching session, scheduled within the first two weeks of the practicum for participants (N= 7). Of the seven CES scores presented, the lowest score was 49% and the highest score was 85% providing a range in scores of 36 percentage points. The seven scores (Mdn = 68) are reported in Table 2. The range in the CES scores indicates widely disparate coaching skills for the SCIE1 debriefing. The PAL utilized in this study represents a self report of the amount of time each PT planned for lessons in eight categories related to planning activities.

Of the seven PAL scores presented, the lowest score was six out of a possible 16 and the highest score was 15, providing a range of nine points. The seven scores (Mdn = 12) are reported in Table 3. There are a total of 16 points possible on the PAL. With a median score of 12 this would indicate that the study participants spent a "Major" amount of time planning in at least three areas measured by the PAL. Four of the study participants receiving double digit scores would have recorded that they spent a "Major" amount of time planning in at least three of the indicated areas. A summary of all of the information provided in the descriptive summary section appear in Table 4.

Table 3.

PAL Score for Planning Activities Preceding the SCIE2 Lesson

	PT	PAL score
	Lindsey	12
	Anne	15
	Kathy	12
	Audrey	8
	Mary	9
	Kelly	14
	Janell	6
Group Statistics	Mdn	12
	Minimum Score	6
	Maximum Score	15
	Range	9

Table 4.

Summary of PT Scores and Overall Rankings

PT	SCIE1/ Rank	SCIE2/ Rank	SCIE DIFF/ Rank	CES1 – Their Coach/Rank	CES2 – Their Coach/Rank	ALL PLANNING/ Rank
Janell	74/ 1	65/ 3	-9/ 7	68/ 4	76/ 1t	55/ 7
Kelly	42/ 5	61/ 4	+19/ 2	73/ 2	76/ 1t	99/ 1
Audrey	60/ 2	91/ 1	+31/ 1	72/ 3	71/ 2	81/ 4
Anne	35/ 6t*	49/ 6t	+14/ 4	85/ 1	--/--	78/ 5
Kathy	45/ 4	49/ 6t	+4/ 6	62/ 5	56/ 3t	95/ 2
Mary	56/ 3	69/ 2	+13/ 5	49/ 7	56/ 3t	77/ 6
Lindsey	35/ 6t	50/ 5	+15/ 3	56/ 6	56/ 3t	87/ 3

*t = tied ranking

Part Two: Case Studies

Part Two of this chapter will present summary information regarding case studies of the seven study participants. A case study can be used to help explain casual links in complex interventions as well as more fully describe the context in which the interventions occurred. A case study can be defined as an empirical inquiry that investigates an interaction within a real-life context, especially when the boundaries between the interaction and context are not clearly evident (Yin, 1989).

The interaction examined in this study was the effect the peer coaching process had upon preservice special education teacher's planning activities and improvement in instructional effectiveness. The context in which the study occurred consisted of six classrooms within the one site, with seven participating PTs and three ExpTs.

Sample

The seven PTs (ages 20-24), were undergraduate preservice special education teachers who were enrolled in a required four-week summer practicum assigned to a middle school campus. The seven PTs were selected because they were already participating in the summer practicum as a prerequisite to their student teaching experience. Some of the students had previous classroom experience from other undergraduate courses, volunteer and employment opportunities but for most, this was their first teaching experience. The students all planned on pursuing teaching careers immediately following the completion of their undergraduate degree, with some expressing interest in continuing on for their Masters degree. This practicum, the first

formal experience the PTs had in teaching groups of children, was a requirement for the PTs major at the university.

Procedure

The seven cases will be summarized individually and the data collected will be examined in five parts: a) Case Overview–a general description of the PT and classroom (from information obtained from ExpTs, daily logs, and researcher observation), b) Instructional Skill and SCIE scores (from SCIE protocols), c) Planning Activities (from PAL protocols), d) Peer Coach Effectiveness (from CES), and e) Case Summary.

Individual Case Studies

Case overview–Janell

Janell reported some instructional experience when she entered the summer practicum. This experience, however, was with younger children. This was her first experience teaching middle school aged children. Janell taught five different groups of students in a science classroom, the groups ranging in size from 21-24 students. With the exception of one class (second period) she reported that she felt that she and the classroom teacher had adequate control over the classroom. The students followed directions and there were few disciplinary problems. Janell also reported that although the students were placed in the program because of academic difficulties that they were making adequate progress in the summer program. Janell stated that she and the teacher had little control over her second period class, and that there were numerous disciplinary problems. She noted that the second period students were not making adequate progress toward the summer program's academic goals.

Janell and her ExpT agreed that the classroom teacher did all of the lesson planning herself and did not include Janell in this process. Janell's planning activities were restricted to small group instructional activities assigned to her, and her SCIE lessons. Janell assisted all of the students in small group settings and supervised during independent practice activities. Janell's ExpT reported that Janell's students tended to be "more active" than other students she had observed during the summer practicum.

Janell was diligent in completing her daily log. She repeatedly expressed concern with the pacing and progress of the class. She appeared frustrated with this aspect of the class schedule but never reported addressing this concern to the classroom teacher. Janell and her ExpT stated that the classroom teacher did not give much verbal feedback. However, Janell noted on several occasions in her log that she was learning a great deal from the classroom teacher through observation. Janell made continuous positive comments about her experience, that she felt the students were responding to her as a teacher. She stated that the student's had a tremendous amount of potential, and she hoped she would learn enough to help them realize this potential.

Instructional skill and SCIE scores–Janell

Janell was the only study participant who had a lower SCIE2 score when compared to SCIE1. Her SCIE1 score was the highest of the entire group. Her SCIE2 score was the third highest out of the seven study participants. Her two SCIE evaluations were fifteen days apart and occurred while she was teaching two different class periods. She taught seven students during her SCIE1 evaluation and twenty-three students in her SCIE2 evaluation. As a result Janell had far more "NtOb" ratings in the first SCIE,

particularly in Section C–Classroom Management. Janell also appeared to have more difficulty in Section B–Instruction during her SCIE2 evaluation scoring lower in subsections B3, B4, B5 and B7; Active Learning, Lesson Pacing/Focus, Giving Directions, and Monitoring Learning/Responsive Lesson Adjustment respectively.

Planning activities–Janell

Janell's PAL score for the planning activities that took place prior to her SCIE2 evaluation was the lowest of all participants. In addition, Janell's cumulative PAL score including all reported planning activities for the entire summer practicum was the lowest of all study participants. With one exception, Janell reported that all consultation regarding planning activities came from her classroom teacher.

Coaching effectiveness–Janell's coach

Janell's coach tied for the highest CES scores of all study participants in the coaching session following Janell's SCIE2 observation. Janell's coach addressed each point on the CES with "adequate quality" with the exception of number one: PC asked PT to describe perceptions of observed lesson which Janell's coach did attempt but with poor quality, and number 13: PC identified outside resources to consult in order to improve instruction which Janell's peer coach did not address in the peer coaching session.

Coaching skills–Janell as a coach

Data on Janell's second coaching session was not available; however, Janell received the third highest rating of study participants on her CES1 coaching session.

Case summary–Janell

Although Janell's SCIE scores deteriorated between her SCIE1 and SCIE2, lessons she was still one of the strongest PTs participating in the study. Janell had the lowest planning score prior to the SCIE2 evaluation as well as the lowest overall planning score for the entire four week practicum.

Janell's coach tied for the highest CES score of all study participants for the coaching session following the SCIE2 observation. Even though Janell's coach had the highest score on both coaching sessions, the second CES score was seven points lower when correcting for "NotOb" scores. Janell was also able to perform quite well in her classroom and coaching duties with a relatively small time spent planning lessons and classroom activities.

Case overview–Kelly

Kelly taught five different classes consisting of 19 to 24 students. During the first three weeks of the program she taught in a language arts classroom, and during the last week of the practicum she taught in a math classroom.

The ExpT reported that the language arts classroom teacher closely followed the curriculum laid out for the course, and allowed very little input from the PTs. The ExpT also reported that the classroom teacher was in "complete control," and only let the PTs do insignificant tasks which Kelly felt were appropriate for a classroom aide not a preservice teacher.

Kelly reported that the classroom teacher maintained control of the classroom at all times, and only reported behavior problems four times with individual children. Kelly

stated that she realized that it was important to gain control of the classroom the very first day but seemed concerned about the way in which the classroom teacher approached this task. She repeatedly noted in her journal that she would approach behavior management differently–by talking individually with the students. Kelly commented that she did not have as much control over the class as she would like, but she made several comments early in the practicum about working on being firm, learning how to redirect students, and developing a "teacher voice."

Kelly seemed to be very aware of the areas in which she needed to improve, and frequently commented on this in her journal. Kelly also seemed to learn from each lesson, and reported on several occasions that she made changes in her lesson each period, modifying areas that were problematic for her and the students. Kelly reported that she did not feel she received much support or guidance from her language arts classroom teacher, and stated that she did not feel that she and the classroom teacher had established any type of "bond."

Kelly was moved into a math class for the final week of the practicum. She stated that she liked the way the classroom was organized, and repeatedly stated that she was glad to participate in a different classroom. She reported that there were no behavioral problems in the classroom. Although Kelly did relatively well overall in her practicum, she reported difficulties interacting with her first classroom teacher which seemed to hamper her progress. She did not feel supported and disagreed with many techniques utilized by her classroom teacher.

Instructional skill and SCIE scores–Kelly

Kelly showed moderate improvement between her SCIE1 and SCIE2 scores. In rank order from highest to lowest, Kelly's SCIE1 score was fifth out of seven, and her SCIE2 score was fourth out of seven.

Kelly scored well on both SCIE observations in section A–Planning and Preparation. She experienced difficulty, however, in section B–Instruction and scored no points in either SCIE observation in B5–Giving Directions, and B9–Lesson Closure. Kelly experienced difficulty with section C–Classroom Management on her SCIE1 evaluation by not addressing section C1–Rules and section C4–Off-task, Negative behaviors. Kelly improved her section C score between her SCIE1 and SCIE2 observation. Out of a section total possible of 23 points Kelly's SCIE1 section C total was 4 and 13 for SCIE2.

Planning activities–Kelly

Kelly reported feeling nervous during any solo teaching time. Kelly stated, "I learned that for me to teach a lesson I need to prepare for it the day before." Kelly also felt that she was nervous when she did not feel organized, and commented on how much more comfortable she felt during the last week of the practicum when she was moved to the math classroom.

Kelly's PAL score for the planning session immediately preceding her SCIE2 debriefing was the highest of all study participants. Kelly's PAL score calculated for the entire summer practicum was the highest for all study participants. Information gathered from the PAL also indicated that Kelly utilized her peer PTs as a resource in planning

most lessons, and frequently consulted with her classroom teacher when preparing lessons.

Coaching effectiveness–Kelly's coach

Kelly's coach showed little improvement between the first and second coaching session. However, she tied with another PT with the highest CES score for the SCIE2 observation. Kelly's coach failed to elicit any perceptions of how Kelly thought the lesson had gone. The coach did, however, consistently validate Kelly's knowledge, expertise, and the efforts she made toward teaching the observed lesson.

Coaching skills–Kelly as a coach

Kelly had the fourth highest CES1 score and shared the lowest CES2 score with three other study participants. Kelly showed a decline of 5 points between her CES1 and CES2 scores.

Case summary–Kelly

As Kelly discussed, planning was very important for her progress in this study. She reportedly spent a great deal of time planning for her lessons but only showed moderate improvement in her SCIE scores. Although Kelly's coach did fairly well (with scores in the top half of study participants), Kelly herself reported that planning had the greatest effect on her improvement.

Case overview–Audrey

Audrey taught five different class periods of language arts. Audrey did not report the number of students in each of the classes but according to the information obtained from her peer PT the classes ranged in size from 19-22 students. Audrey only reported

one student with consistent behavioral problems, and noted that her classroom teacher was very stern when discussing the classroom rules with the students. Even though Audrey reported that she thought her classroom teacher was too "tough" on the students, she reported that the students exhibited few behavioral problems. Audrey didn't think that the classroom teacher was empowering her students to exhibit good behavior. They complied with the classroom rules because they were apprehensive of the consequences.

Audrey reported that her classroom teacher was very organized and well prepared. She reported that she learned to have extra class work prepared, understanding that if students were kept busy they would have less time to act out or get into trouble. Audrey compliments her classroom teacher repeatedly throughout her journal stating that she gave frequent suggestions, and encouraged Audrey to teach in front of the class and capitalize on teachable moments. Audrey reports that she watched the classroom teacher very closely so that she can model the classroom teacher's behaviors around key parts of the lesson.

Instructional skill and SCIE scores–Audrey

Audrey had the second highest SCIE1 score of all participants and had the highest SCIE2 score of all participants. Audrey also showed the highest gain (31 pts) between her SCIE1 and SCIE 2 lessons.

Planning activities–Audrey

Audrey reports that she learned a great deal when actually coaching, and is able to utilize this knowledge when planning and teaching her own lessons. Audrey repeatedly discussed the necessity for being prepared. Audrey stated that she utilized her

classroom teacher and her peer PTs as resources when planning her lessons. Although she reports that being prepared is essential, she spent the least amount of time planning for her SCIE2 lesson when compared to all study participants.

Coaching effectiveness–Audrey's coach

Audrey's coach showed no change in her CES scores for the SCIE1 and SCIE2 debriefing sessions. Her CES for the SCIE debriefing was fourth out of seven, and her CES score for the SCIE2 debriefing was third out of seven even though her corrected score was one point lower than the score she received for her SCIE1 debriefing.

Coaching skills–Audrey as a coach

No data was available for Audrey's second coaching session. She did have the second highest CES1 score of all study participants.

Case summary–Audrey

Audrey reported that she enjoyed her experience and learned a great deal from the classroom teacher. She did well in the practicum as evidenced by her SCIE scores. She spent a great deal of time planning but not quite as much as many of her peers in the study. As evidenced in Audrey's notes, she was quite observant of her peers, classroom teacher, and other environmental cues. Audrey reported learning every day, as evidenced by the comments in her journal. She indicated that she liked teaching secondary classes because she could teach a lesson several times a day and make changes that affected her class' ability to learn the material.

Case overview–Anne

Anne reported that this was her first real teaching experience, but that she had "observed great amounts." She stated that observation did not compare to spending an extended amount of time teaching the same students. She notes that this summer practicum was "the best experience of my undergraduate experience." Anne taught five science classes totaling 125 middle school students. Anne stated initially that she was having a wonderful experience, and that she was learning a great deal from the classroom teacher. She praised the teacher on her ability to include all of the students in classroom discussion and activities.

Anne's attitude changed during the third week of the program when her classroom teacher returned from taking several days off. Anne then reported that her classroom teacher's attitude had changed, and she did not think that the teacher wanted to be in the classroom. She reported that her teacher was becoming rude when interacting with the students, and that she made several comments that Anne and her peer teachers felt where cruel and inappropriate. In spite of the changes in the classroom teacher's attitude toward the students, Anne remained positive as reflected in her journal comments.

Anne commented frequently on behavior management issues. She stated that the issues were usually easily addressed, but admitted that third and forth periods were particularly difficult. Anne seemed to realize that behavior management was key to the success of the students and reported a desire to be proactive rather than being a "policeman" and handling behaviors as they would arise in the class. Anne was

concerned about the student's involvement with gangs. She wondered how this was potentially affecting their behavior. Anne felt that the student's behavior was for attention, and that they feared doing well academically. With academic achievement, the students would no longer receive the additional attention they craved. Or possibly the students were bored, and not stimulated by classroom activities.

Anne repeatedly commented on the importance of time during her classroom experience. She stated that "time flies" and she never felt there was enough time to fully accomplish tasks in the classroom. She stated that when she did not have enough time she felt "rushed, flustered, and unorganized," and that this affected the way she handled the students.

Anne exhibited an excellent attitude toward the practicum experience, and often discussed her appreciation of the feedback she received and a desire for more. She stated that the SCIE process was "wonderful" and she looked forward to doing it again. She also commented that during the critique of one of her videotaped lessons she received "a lot of good constructive feedback."

Anne exhibited an ability to be introspective, to evaluate her feelings and actions and how they might bear upon the students with whom she was working. She showed compassion in her thoughts and comments, and tended to take things too personally. She was overly critical of her interactions during the practicum. She made repeated comments that her attitude each day was reflected in the student's behavior, and she needed to continue to work on her frustration level because this greatly affected her

teaching. She repeatedly discussed her "major" goals as having better voice control when talking with students and to "not let her frustration show."

Instructional skill and SCIE scores–Anne

Anne improved her SCIE score from a SCIE1 of 35% to a SCIE2 of 49%. Her SCIE1 score was the lowest of all study participants and her SCIE2 score was exactly in the middle of all seven participants with three scores higher and three scores lower. Anne improved in each of the three areas of the SCIE–Planning and Organization, Instruction, and Classroom Management. Anne seemed to have the greatest difficulty in the area of Classroom Management only scoring a total of five and nine respectively in this area out of a possible 25 points. Anne had very few "NtOb" ratings, and had moderate scores in each area assessed.

Anne's SCIE evaluations were 15 days apart. During her SCIE1 evaluation she reported a class size 10 students and during her SCIE2 evaluation she reported a class size of 20 students, twice as many as were present during the SCIE1 lesson. Both lessons were taught during science class.

Planning activities–Anne

Anne had the highest PAL score prior to her SCIE2 lesson. Anne had the second highest total PAL score–representing the amount of time Anne spent planning during the entire summer practicum. Anne reported that she frequently consulted with her peer teachers and the classroom teacher when planning lessons.

Coaching effectiveness–Anne's coach

Anne's coach had the highest CES1 score of all study participants. Data was not available for this coach's CES2 score, and therefore no conclusions could be drawn regarding any similarities or differences between the two coaching sessions.

Coaching skills–Anne as a coach

Anne had the highest CES1 and CES2 scores of all study participants; however, she showed a 7 percentage point decline between the CES1 and CES2 scores.

Case summary–Anne

Anne showed a great deal of growth, from the lowest SCIE1 score to the fourth highest SCIE2 score. She spent the most time of all participants planning for her SCIE2 lesson and spent the most time of all study participants planning throughout the practicum. Anne did very well as a coach and also had a coach that did very well as measured by the CES.

Anne exhibited a very positive attitude regarding the entire practicum experience and seemed to have the most introspective comments regarding the experience as a whole. She realized the value of time during the lesson and seemed to realize that planning, preparation, and utilizing resources tend to contribute to the success of the teacher.

Case overview–Kathy

Kathy taught five different groups of students in a language arts classroom, the groups ranged in size from 19-24 students. Kathy reported that the classroom teacher had "great behavior management skills," and stopped misbehavior immediately. She

stated that the students took the classroom teacher seriously. The student's behavior seemed, however, to deteriorate as the school day progressed, and that "time on task" decreased simultaneously. She reported that her first and second period classes followed directions "very well" and that her third, fourth, and fifth period classes followed directions "well." Kathy also reported that she had "a great deal" of control over class periods one, two, and three. She had "adequate" control over her fourth period class, and "not much" control over her fifth period class.

Kathy rated her first, second, and third period classes as "average" with regard to academic ability. She rated her fourth and fifth period classes as "below average" academically. Kathy reported that she was able to participate in planning and had the opportunity to take over instructional responsibility as often as she felt comfortable. She felt that the curriculum and instructional materials were set prior to the beginning of the practicum, but the classroom teacher took the time to review these materials with Kathy, and discuss appropriate instructional strategies for the classroom. Kathy felt that this planning helped her be more proactive in dealing with problems in the classroom.

Kathy completed her daily log but was very general in her activities for the day. She seemed to only recap the highlights of the day in a positive manner. She also expressed that the practicum was a great experience, and was considering teaching middle school when she completed her undergraduate program.

Instructional skill and SCIE scores–Kathy

Kathy had the fourth highest SCIE1 score and showed the smallest amount of growth between her SCIE1 and SCIE2 evaluations. Kelly had the lowest SCIE2 score of 49.

Planning activities–Kathy

Kathy had the third highest PAL score for her SCIE2 lesson but had the second highest overall PAL score, representing the total amount of time that she reportedly spent planning for the entire summer practicum.

Coaching effectiveness–Kathy's coach

Kathy's coach had the fifth highest CES1 score and shared the lowest CES2 score of 56 with two other study participants.

Coaching skills–Kathy as a coach

Kathy had the second highest CES1 score and shared the highest CES2 score with one other study participant. Kathy showed slight improvement between her CES1 and CES2 scores.

Case summary–Kathy

In comparison to the other practicum participants, Kathy did not do as well on the SCIE showing the smallest growth between her SCIE1 and SCIE2 evaluations, and had the overall lowest SCIE2 score of all study participants. Kathy reportedly spent a great deal of time planning, and spent the most time of all the participants through out the practicum. Kathy was also a very effective coach when examining her CES scores.

Case overview–Mary

Mary taught five different language arts classes consisting of 17-23 students. The ExpT reported that the curriculum was already chosen for the class, but that the supervising teacher allowed a great deal of flexibility when it came to teaching lessons.

Mary reported that the first period class was very "relaxed and laid back," and that the activity in the classroom and the number of behavior problems increased through out the day. She reported feeling that she had "a great deal" of control over student behavior in first and second period, and reported having only "adequate" control over third, fourth, and fifth periods. Mary noted that the classroom teacher had control over the classroom at all times, and that she credited this to clearly defined rules that were discussed with the students the first day of the summer program.

Mary stated that her classroom teacher was on top of everything that happened in the classroom and was also very supportive of her. Mary reported that the classroom teacher allowed her to teach on the first day of the practicum which helped Mary overcome her nervousness and build her confidence for the rest of the practicum. Mary initially reported that her greatest fear was her ability to effectively control student non-compliance. By week three of the practicum she reported that she was most uncomfortable with her ability to motivate her students to learn. By the third day of the practicum she reported that she was "attached" to the students, and made several comments regarding her ability to control behavior problems on her own.

After Mary was observed by her university supervisor, she stated that she was not upset about some negative feedback that was given. Mary felt they were curriculum

issues that she had no control over. Mary also reported concerns over the SCIE instrument because she did not see how an observation instrument could capture all of the activity that occurs in the classroom. Mary seemed to realized after her observation experiences, that the greatest factor in teaching children to learn is not the curriculum or the materials, but the quality and commitment of the teacher.

Overall, Mary reported a positive practicum experience, stating on numerous occasions that she loved teaching and that the kids were the greatest part of the experience. Mary was also extremely complementary of her classroom teacher for being supportive and allowing her to teach a great deal during the practicum.

Instructional skill and SCIE scores–Mary

Mary had a net gain of 13 percentage points between her SCIE1 and SCIE2 evaluations. She ranked fourth out of seven participants on her SCIE1 evaluation, and second out of seven on her SCIE2 evaluation. Mary did not show any specific deficit in the three areas of the SCIE–Planning/Organization, Instruction, and Classroom Management, and showed slight gain in each of these areas when comparing her SCIE1 and SCIE2 evaluations.

Planning activities–Mary

Mary had the second from the lowest PAL score prior to her SCIE2 lesson indicating little time and effort in her preparation for the lesson as compared to the other study participants. Mary also had the second from the lowest PAL score for the entire practicum compared to other practicum participants. Mary only reported spending more than 30 minutes planning any part of the lesson for her SCIE1 evaluation, and only

consulted one outside source, her classroom teacher, when deciding how to arrange the class for the lesson. Overall, Mary's planning was limited, both in terms of time and resources.

Coaching effectiveness–Mary's coach

Mary's coach had the lowest CES scores of all participants for both the SCIE1 and SCIE2 evaluations. Her coach also showed little growth or improvement between coaching the SCIE1 and SCIE2 debriefings.

In addition to her low CES scores she failed to acknowledge or discuss any of Mary's feelings or opinions when they were brought up during the debriefing, and failed to give concrete suggestions for improving instruction. Mary's coach had a difficult time keeping the debriefing session focused, and did not summarize or facilitate the development of goals.

Coaching skills–Mary as a coach

No information was available regarding Mary's effectiveness as a peer coach.

Case summary–Mary

Although Mary did not have the highest SCIE1 or SCIE2 scores, she was in the top half of the sample group. She showed improvement (13 points) that was average when compared to the group in her SCIE2 evaluation.

Mary did not spend a great deal of time planning and only counted on her classroom teacher to assist with this task. Mary felt that the curriculum and lessons were already set, and that her main goal was to find methods to assist the students in staying

motivated to learn the task at hand. Mary repeatedly stated that she enjoyed her practicum experience and thought that it supported her goal to become a teacher.

Case overview–Lindsey

Lindsey taught five language arts classes with 20-24 students in each class. She initially reported that there were few behavior problems associated with the five class periods, but by the end of the first week all of the documentation Lindsey provided discussed behavior management problems.

Lindsey reported that each class became "rowdier" throughout the day resulting in near chaos by fifth period. Lindsey stated that one of the issues that exacerbated the behavior problems was a small classroom and overcrowding. She reported that fifth period had a number of rival gang members in the class, and that there was constant hostility amongst the students. Lindsey commented that she felt like she did not have the respect of the students which made it difficult for her to gain control when teaching. She stated that she felt like "an assistant," and that she had more respect from students when she was employed as a substitute teacher outside of this practicum.

Lindsey also reports that she worked on developing a "behavior empowerment" program in concert with the classroom teacher to handle the numerous behavior problems. Lindsey and her classroom teacher felt the behavior problems were so severe that they were unable to allow the students to work in small groups which put additional stress on her as a teacher. She also reported that the practicum principal was used repeatedly to handle behavior problems which further undermined her authority in the classroom.

Lindsey did not discuss any other academic or instructional issues in her daily journal or in other information documenting her practicum experience. Behavioral issues appeared to have over shadowed all other aspects of her practicum experience.

Instructional skill and SCIE scores–Lindsey

Lindsey shared the lowest initial SCIE score of all practicum participants. Her score showed moderate improvement when comparing her SCIE1 and SCIE2 scores but she only improved her rank order by one, having the second from the lowest score on her SCIE2 evaluation.

Lindsey obtained the exact same scores in Section A of the SCIE–Planning and Organization, and posted moderate growth in each of the other two areas, Instruction, and Classroom Management. Lindsey exhibited difficulties in the areas of giving directions, and lesson closure posting zero points for each area on both SCIE evaluations.

Planning activities–Lindsey

Lindsey had the third highest PAL score for the planning session preceding her SCIE2 evaluation, and the third highest overall Pal score representing the total amount of time spent planning during the four week practicum.

Lindsey reported that much of the planning had already been done for the classroom lessons, or was dictated by the curriculum. She reported that most of her time was spent modifying the lesson plans to accommodate the behavior problems that were experienced. Lindsey also reports that she used only the classroom teacher as a resource when planning or modifying lessons.

Coaching effectiveness–Lindsey's coach

Lindsey's coach scored second from the lowest during the SCIE1 debriefing session, and obtained the same score for her SCIE2 debriefing. Her SCIE2 CES score tied with two other participants for the lowest score.

Lindsey's coach did not structure the debriefing, and had a difficult time refocusing the debriefing when it was off track. Lindsey's coach did not acknowledge her input during the debriefing session, and, although she used concrete language when debriefing about the lesson, she did not encourage Lindsey to use concrete language when discussing various parts of the lesson. Lindsey's coach modeled professional language during the debriefing, but was inconsistent as to specific details that would help Lindsey understand how to improve.

Lindsey's coach had a difficult time summarizing the various parts of the lesson. As she proceeded through the session, she did not facilitate the development of goals which Lindsey could use to improve her instruction.

Coaching skills–Lindsey as a coach

There is insufficient information regarding Lindsey's effectiveness as a peer coach.

Case summary–Lindsey

There was not enough information available to evaluate Lindsey as a coach but her SCIE scores did improve between SCIE1 and SCIE2 evaluations. Her improvement went from having the lowest SCIE 1 score to ranking fifth out of the seven study participants in her SCIE2 evaluation.

Lindsey had a difficult time during this practicum, and spent much of her time focusing her teaching skills specifically around behavior management. Although Lindsey reportedly took time outside of the classroom to work on planning lessons, she reportedly spent most of that time modifying existing curriculum in an effort to more effectively manage the problem behaviors she reported in her classroom.

Part Three: Quantitative Analysis

Question One

The data to answer Question One regarding the relationship between PTs planning activities and improvement in instructional skill came from two sources: a) A PAL score which represents the amount of time each PT spent planning the lesson represented in the SCIE2 score, and b) Change and/or growth between each PT's SCIE1 and SCIE2 scores.

The results were obtained by subjecting the data to a cross tabulation analysis producing a Chi-square and Cramer's V. The results are summarized in Table 5. The Chi-square p value, which measures significance of a relationship between two variables, is sensitive to sample size; in contrast, Cramer's V, which measures the size or magnitude of relationship, is not affected by the size of the sample used. Therefore it is felt that with such a small sample size Cramer's V would be the appropriate measure to use in this analysis. These two indices indicate whether and to what extent the observed pattern of the cross tabulated data deviates from the expected pattern assuming no association between the variables (Tai, 1978).

Table 5.

Cross Tabulation Cell Counts for Question One

	PAL		
SCIE	little	lot	Total
little	1	1	2
med	1	3	4
lot	1	0	1
Total	3	4	7

The Cross Tabulation table for Question One provides a cell count table, crossing the SCIE1 and SCIE2 scores with PAL scores (amount of time PTs spent planning the lessons for the SCIE2 lesson) (N=7 PTs). The cross tabulation produced a Cramer's V = .52, and Effect Size $\acute{\eta}^2 = .27$. These results indicate a relatively small effect size (Cohen, 1965) indicating a relatively weak relationship between the subjects planning activities and improvement in instructional effectiveness. The very small N for these analysis warn against any close interpretation of results. Thus, the Cramer's V results should be considered as only loosely indicative of strength of relationship, and the p values also of limited meaningfulness.

Question Two

The data to answer question two regarding the relationship between the quality of coaching a PT receives and their planning activities came from two sources: a) A CES score representing the skill of the PT's coach during the SCIE1 debriefing, and b) results of the PAL representing the amount of time and type of activities PTs engaged in when planning their lessons after the SCIE1 ddebriefing. The results were obtained in the same manner as the results in question one by subjecting the data to a cross tabulation analysis producing a Cramer's V. The results are summarized in Table 6.

Table 6.

Cross Tabulation Cell Counts for Question Two

	CES			
PAL	little	med	lot	Total
little	0	2	0	2
med	2	1	1	4
lot	0	1	0	1
Total	2	4	1	7

The cross tabulation results provide a cell count table comparing categorized CES scores representing the skill of the PT's coach during the SCIE1 debriefing with categorized PAL scores representing the amount of time and type of activities the PT engaged in when planning their subsequent lessons. The cross tabulation analysis yielded a Cramer's V=.53, and Effect Size $\acute{\eta}^2 = .56$. The results for Question Two indicate a similar correlation between the two variables; however, the effect size of .56 is consider to be a medium effect size (Cohen, 1965) indicating a stronger relationship between the PT's coaches effectiveness after the SCIE1 evaluation when compared to the PT's instructional improvement. Because of the very small N, these statistical analyses are considered loosely indicative only.

CHAPTER V

DISCUSSION AND SUMMARY

Study Overview and Purpose

This study was conducted during a four-week summer school program designed to assist middle school students who had experienced academic difficulties during the previous school year or who had been identified with specific learning disabilities. This summer school program also served as a required practicum site for preservice special education teachers (PTs) prior to their student teaching experience. The PTs worked with experienced consulting teachers (ExpTs) to teach language arts and mathematics to the students enrolled in the summer program.

Review of the literature clearly confirms that coaching is an important component to teacher training (Joyce & Showers, 1982; Hasbrouck, 1994; Hargraeves & Dawe, 1990). However, the quality of the coach and the coaching/debriefing session has not been the primary focus for research. This study was designed to examine the skills used in coaching, using the Coaching Efficacy Scale (CES) designed to assist teachers and coaches in assessing feedback given during a debriefing session following instruction. The CES was developed to be the first structured observation system for assessing coaching effectiveness. It rates or measures skills and abilities that make a good coach.

Educators are trained in their classrooms, learn from “hands on” experience as teacher interns, and broaden their knowledge from constructive evaluation (coaching) by their superiors as well as their peers (Miller, et al., 1991). One of the purposes of this

summer practicum was to provide initial training on peer coaching to the PTs involved in the study. The PTs exhibited varying levels of instructional skill and coaching ability at the beginning of the practicum. The practicum was designed to allow the PTs to practice their instructional and coaching skills throughout the practicum with the assistance of classroom teachers and master teachers or Experienced Teachers (ExpT).

Review of Study Results

Since research indicates that coaching can be an effective way to improve the instructional skills of teachers (Showers, 1985, Hargraeves & Dawe, 1990), the first research question was intended to examine the quality of the coaching session that each PT received and whether that related to improvements in their instructional skill during the practicum. The second research question explored whether coaching affected PT planning time and activity.

The researcher developed several hypothesis to study based upon a review of literature, observation and professional experience which were reflected in the questions posed. The hypotheses studied were: 1) Effective planning, including the use of appropriate resources and sufficient time for the process improves teacher instruction, and 2) A teacher who receives objective useful feedback should be able to incorporate the information to improve their instruction. The following is a discussion of the study results and whether the results support these assumptions.

Planning Improves Instruction

In the original construction of this study it was thought that data related to planning would be found to corroborate the intuitive sense that, "Yes, planning makes a better teacher." Though lacking causal evidence, circumstantial evidence from this study seems to indicate that this is true. All of the study participants participated in planning activities and with one exception, Janell, they all had improved instructional effectiveness scores. Janell reported some instructional experience prior to enrolling on the summer practicum. Janell reported a generally positive experience during the practicum although she did report feeling a little frustrated because of the limited scope of her assignments by the classroom teacher during the practicum experience. Janell had the lowest planning score of all study participants and was the only participant to receive a lower SCIE score during the second coaching session. Although Janell was the only participant whose SCIE2 score was lower than her SCIE1 score; she had the highest SCIE score during the first debriefing session. In fact her score was 14 points higher than the next closest PT on the first SCIE score and only had one SCIE score higher than her first SCIE during the entire practicum. Examining Janell's case, it appears that since she did very well on her first SCIE observation, she may not have taken as much time and care when planning for subsequent lessons. This would explain the low planning score and drop in her instructional effectiveness score.

As previously stated, all other study participants participating in planning activities showed an improvement in their instructional effectiveness as measured by the

SCIE. This holds true when examining the data gathered in relationship to one of our seven subjects Kelly.

Kelly was one of the only study participants assigned to teach in two different classrooms with two different supervising teachers. She reported that the first classroom teacher was not very supportive which required Kelly to do a great deal of work outside of the classroom and practicum setting to prepare for her part in the day's lessons. Feedback from Kelly indicated that the second classroom assignment for the last week of the practicum provided her with a great deal more support and feedback from the classroom teacher.

Kelly reported the highest overall Planning Activity Log (PAL) score when compared to other study participants. This score represents the amount of time that Kelly spent planning during the practicum setting studied. In order to test the researcher's assumption that planning improves instruction, Kelly's instructional effectiveness scores, as measured by the Scale for Coaching Instructional Effectiveness (SCIE), were also examined, showing moderate growth between observations. Kelly's first SCIE score ranked her fifth while her second SCIE score ranked her third when compared to all study participants. Since Kelly had a relatively low first SCIE score she could very well have taken the extra time and effort to thoroughly plan her remaining instruction, thereby increasing her planning score substantially.

Audrey had the highest SCIE score of all participants and exhibited the greatest improvement of all study participants between her first and second SCIE observations. Audrey reported a positive practicum experience, and even though she thought that her

classroom teacher was “too stern”, there were few student behavioral problems, which Audrey appreciated when she was teaching. Audrey reported a moderate amount of planning during the practicum experience, with her planning score in the top three when compared to other participants. The remaining study participants all showed varied amounts of planning time and instructional improvement yet showed an increase in instructional effectiveness.

Impact of Coaching on Instructional Effectiveness

As with the first assumption, empirical data derived from this study does not provide solid causal evidence that good coaching will make a more effective teacher; however the anecdotal, case specific information discussed below does support this assumption.

As educators we assume that students who receive good instruction will learn faster and retain more information. The practicum that was studied exemplifies this, i.e. the PTs are receiving instruction (coaching) in the form of feedback from their peers, expert teachers and classroom teachers.

Audrey’s case supports the assumption that good coaching increases a teacher’s effectiveness. Although Audrey reported that she thought that her classroom teacher was too strict on the students in the class, she realized that it made teaching in the classroom much easier, which in turn created a better learning environment. Audrey showed a great deal of progress in effective instruction between her first SCIE observation and her second, achieving the highest overall SCIE score of the study. Audrey’s coach was consistent during both coaching sessions with only one percentage

point difference between the first and second CES scores. These scores ranked Audrey's coach as third for the first CES score and second for the later CES score when compared to other coaches in the study.

In contrast to Audrey's case discussed above, Janell's case, (discussed earlier) actually showed a decrease in instructional effectiveness, while her coach did quite well, receiving the highest score on the second SCIE coaching session. This would seem to weaken the argument that effective coaching makes for a good teacher but when compared to other study participants, Janell did very well on both SCIE evaluations. As Janell reported, she had previous instructional experience but was able to continue to incorporate the experiences in the practicum including peer coaching to keep a high instructional effectiveness level.

Kathy's case exemplifies the notion that "good coaching" increases a teacher's instructional effectiveness. Her coach had the lowest coaching effectiveness score following the second SCIE debriefing session and Kathy had the lowest SCIE score after her second observed lesson. Kathy's coach also had a relatively low coaching score after the first debriefing and Kathy showed the smallest change in instructional effectiveness of all other participants who showed improved scores. Kathy's coach was one of two coaches in the study that actually showed a decline in coaching scores between the first and second SCIE debriefing sessions. Kathy did report a very high planning score which would seem to indicate that she received little assistance from the SCIE debriefings.

These cases, Audrey's, Janell's and Kathy's show a range of effects that coaching may have on instructional effectiveness. Kathy's and Audrey's cases indicate that coaching and improvement in coaching improved instructional effectiveness (supporting the assumption) while Janell's case showed that even though the coaching was not rated as high as in the other cases that the PT's instruction showed improvement and there was no decrease in the instructional effectiveness.

Limitations and Weaknesses

Following is a discussion of the limitations and weaknesses identified during the course of this study. Caution has been used to interpret the results because of the identified design weaknesses and limitations. The following weaknesses and limitations; practicum intensity, practicum length, differential PT teaching experience, supervision differences between supervising classroom teachers, and reliability of self reports were identified and discussed in greater detail below.

The first limitation, the intensity of the practicum for participants, caused a number of PTs to drop out decreasing the amount of participant data. The participating PT's were putting in four to five hours per day in the classroom assisting and teaching lessons. As students themselves, they were also taking classes, studying, and some were working in the "real world" on top of that. In other words, a "full plate."

In addition to the participants having a "full plate" the practicum required them to undergo training to use the Scale for Coaching Instructional Effectiveness (SCIE), to complete a daily Planning Activity Log (PAL), and keep a daily journal. They had to learn to observe, score, coach, debrief, meet with experienced teachers, and provide

constructive criticism to their peers with still limited knowledge themselves as to what is required to "be a good teacher."

The study started with a group of 12 PTs, the number dropped to seven who completed the additional required tasks and paperwork to contribute sufficient, useable data for the study. Although a great deal of useful anecdotal information was available and presented in this study the data colleted did not lend itself to a detailed quantitative analysis thereby limiting the usefulness of the results in other settings.

Another issue contributing to the weakness of the study was the length of the practicum. Since the practicum only lasted four weeks it limited the number of instructional observation and debriefing opportunities for the PTs. A practicum of greater length would have provided more instruction and peer coaching opportunities and more coaching practice.

Additionally, anecdotal information suggests that the PT differential teaching experience affected the outcome of the study. Each study participant reported a variety of individual teaching experiences prior to entering the teacher education program. Practically this means that some of the participants have had experience teaching groups of children while others have not. The PTs varying experience results in difference in PT skill and comfort level entering when entering the practicum classroom.

Classroom differences in the teaching and mentoring style of each PT's classroom teacher also affected the outcome of the study. The quantitative data being provided by the PTs was also somewhat skewed due in part to the classroom teacher's acceptance of and willingness to participate in the practicum. Some teachers were eager

for the "extra sets of hands" within their classroom, and were willing to make contributions as mentors to the PTs. Other classroom teachers were not so accommodating. With limited time to accomplish their requirements, the additional "hands" sometimes required more time to direct. Given these conflicting attitudes, the amount of actual classroom participation afforded the PTs varied in scope. Some PTs were encouraged to participate, plan, and execute actual classroom activities, while others were, as one PT described it, "no more than secretaries permitted only to take role and collect homework papers". Literature supports the idea that if classroom teachers are receptive to PT participation, then PC and all of its aspects has a greater chance for ultimate success (Hendrickson, et al., 1988; Showers, 1985).

Another limiting factor to this study was the unknown accuracy of self-report data. Questions naturally arise as to the structure of the PAL, the PTs understanding of the form, and the training the PT received in correctly recording their planning activities. It remains unclear whether accurate planning data was collected, as the PAL was a self-reporting document required as part of the PTs overall grade for this practicum; it's actual validity can be questioned.

Anecdotal documentation suggests that the participating PTs felt planning was an important component of the teaching process, however, quantitative data collected from the PAL did not, in all cases, reflect this attitude. Therefore, planning effects on teacher performance were not validated by this study.

Implications for Further Research

Although formal analysis of the data collected during this research study did not yield clear results it is felt that the information gathered and presented in the case studies show support of the research questions posed at the beginning of the study. The issues addressed previously regarding the limitations and weaknesses of the study greatly impacted the results and ability to utilize and generalize the information gathered. In order to better address the initial research questions further study is definitely warranted. The study needs to be designed to better control the issues of participant experience, reliability of self reporting, impact of supervising teacher and increase the length of the study as well as the number of participants.

Care needs to be taken prior to the start of the study to assess the amount and depth of teaching experience that each PT had prior to the beginning of the study. No formal data was gathered regarding this experience and it was discovered during the study that the participant's experiences differed greatly. Gathering more data regarding these experiences would allow the researcher to create greater controls or develop a method to control for this variable.

The issue of self reporting is always of concern when undertaking a research project. There is a certain amount of trust that each researcher must have that the study participants are truthfully and accurately reporting the information that the researcher is trying to gather. In this research study it is felt that some of the PTs may have accurately completed the PAL either because of a lack of understanding of how the instrument was to be used or possibly because they were concerned about how the amount of time they

spent planning outside if the practicum could affect their practicum grade. It is felt that additional development of the PAL rating scales coupled with clearer sale directions could improve the reliability and validity of the information gathered on planning activities gathered using the PAL.

Another problem that has plagued university student teacher supervisors since the beginning of formal teacher training is the consistency of supervising classroom teachers. This study took steps to mitigate this issue with the help of the expert teacher but more latitude needs to be given to the university supervisors so they may more have more control over the consistency of the instructional role of the PT in the classroom.

The length and intensity of this research study posed a number of problems that can easily be corrected in future studies. Since the practicum was only four weeks long there were not many opportunities to assess instruction and coaching skills. Each participant was able only to be observed, to coach and to be coached twice. Additional teaching, observation and coaching opportunities would give the researcher more opportunities to assess change in instruction and coaching skills. A longer practicum would also allow the PTs to become more comfortable with the students, classroom surroundings and supervising teacher expectations which could also have an effect on their teaching and coaching skills. This would also decrease the intensity and pressure of the practicum possibly preserving more of the original sample also increasing the amount of data the researcher has available.

The ability to coach is not an innate skill, but one that can be taught and improved with practice (Hasbrouck, 1994). Beyond addressing the questions in this

research study, was the development and testing of the Coaching Efficacy Scale, an observation tool used to quantitatively measure and score a person on their coaching performance. Based on the literature reviewed, there was a consensus that structured observation tools which could be utilized by educators at all levels, be it preservice, in-service, with experienced teachers in all areas of education, were fundamental elements to improve teacher education and performance (Hasbrouck & Christen, 1997; Hasbrouck, 1994; Nishinosono, 2000; Showers, 1985; Sparks, 1986).

The purpose of this study was to examine the relationship between peer coaching skills and improved instruction among PTs through use of the Scale for Coaching Instructional Effectiveness (SCIE) (Hasbrouck, 1984) and a new instrument, the Coaching Efficacy Scale (CES)

The CES was developed as a tool to assist teachers and coaches in assessing feedback given during a debriefing session following a lesson taught by the teacher. The CES was developed specifically for this study because a review of the literature and available instruments did not reveal and instrument that was appropriate for this study. Developing a new instrument during a research study complicates the process because one of the instruments used to gather data has not been proven to be a valid measure

With the inclusion of the CES, we have a form for assessing a coaching session and posses a better understanding of what skills are required to be a good coach. It would logically follow that additional research should be conducted to further refine the CES or other structured form to serve as an outline or format to better assess the interactions that take place during a coaching/debriefing session. The CES can act as a

guideline in its development and could serve as an outline to ensure that the coaching/debriefing process is structured, organized and truly assists the coach in improving their skills and helps the PT become a better teacher. Given that coaching and peer coaching is a viable, useful, and practical method to improve teacher performance (Hasbrouck & Christen, 1997; Hunter & Russell, 1987; Miller et al., 1991; Showers & Joyce, 1996), the CES provided information that can be used to evaluate the coaching qualities of those in this practicum, and raised future research questions as to relationships between coaching skills and teaching skills. Further development of other evaluation and scoring "forms" would be beneficial in the overall repertoire of training elements for improving the quality of teacher instruction through the coaching process.

Studies corroborate the premise that coaching, and being coached, is a valuable and integral part of the overall learning process to become a teacher (Joyce & Showers, 1982, Hargreaves & Dawe, 1990). There is considerable learning and training for teachers beyond classroom lectures and field experiences. The additional training to become a coach serves a two-fold purpose. 1) It provides a methodology to enhance the performance of fellow educators and, 2) is a learning process which enriches the coaches overall skills. Much anecdotal data affirms the fact that coaches themselves learn new things through the coaching process. Coaches gain greater comfort ability and confidence as a coach through practice and the utilization of tools for observation and scoring.

There are some notable consistencies which do not directly address the research questions, but are, however worthy of discussion and possible further study:

1) PTs with the highest SCIE scores also have high CES scores. These results might cause one to speculate: Are good teachers good coaches?

2) PTs with low SCIE scores also had the top PAL scores. Again we might speculate, Are teachers who are not yet as confident in their classroom performance aware of the importance of planning and preparedness for performance improvement?

3) Future research should establish better procedures for evaluating planning activity. Further study would suggest that the PAL may need revision, with more instruction. And an accurate definition of planning itself should be established prior to utilization of the PAL.

Conclusions

Over a four week summer practicum taking place prior to student teaching, pairs of Preservice Special Education Teachers (PTs) participated in the first classroom teaching experience of their university teacher training program. As part of this training program PTs are provided additional training in the use of two tools, the Scale for Coaching Instructional Effectiveness (SCIE) which requires the PT to act as a teacher and a peer coach and the Planning Activity Log (PAL) which requires the PT to accurately track the type off planning activities engaged in by the PT, the resources consulted during the planning process and the amount of time spent planning for a lesson.

The development of various systematic observation instruments as tools to measure and score teacher skills is one of continued research, as well as ongoing studies of the coaching process to demonstrate its importance as an element in the mix of

methodologies used to train today's educators. This study addresses both. Coaching/peer coaching with preservice teachers, and the development of the Coaching Efficacy Scale (CES) to measure coaching skills.

This study adds to both qualitative and quantitative data affirming the importance of coaching, and addresses its impact on improved teaching skills and teacher planning. The CES is added to the instruments available to measure and score abilities – in this study, coaching ability and its impact on those being coached.

Further research adequately addressing the limitations of this study would help further the understanding of the peer coaching process and how it relates to teacher lesson planning and preparation. The practicum setting used allowed for greater controls than if the data had been collected during a longer more traditional student teaching experience. However, the short amount of time contributed to several issues that could easily be addressed with a practicum of 6 – 8 weeks. It would allow the PTs with little classroom experience to spend more time observing and "trying their hand at teaching" before they are evaluated as well as allow for additional evaluations and peer coaching opportunities.

Another avenue to improve the usability of the study findings would be to structure a preservice training program that would allow for instruction in the use of peer observation models prior to the beginning of the practicum. If PTs could be comfortable with the peer coaching instrument prior to the beginning of the practicum it would reduce the strain the participants reported feeling because they would already be comfortable and somewhat knowledgeable in the process and have one less new

experience to assimilate. Similarly, if the PTs were given an opportunity to utilize a self report planning tool prior to the beginning of the practicum they would be more familiar with the expectations and requirements for accurate reporting of data.

This study also brought to attention new questions worthy of future research. Questions on planning: its importance and perceptions from the viewpoint of PTs, and questions on coaching skills; their relationship to teaching skills and the enhancement of these skills.

REFERENCES

American Psychiatric Association. (1993). *Psychiatric consultation in schools.* Washington, DC: American Psychiatric Association.

American Psychological Association (APA); American Educational Research Association (AERA), & National Council on Measurement in Education (NCME) (1985). *Standards for educational and psychological testing.* Washington, DC: American Psychological Association.

Anastasi, A. (1986). Evolving concepts of test validation. *The Annual Review of Psychology, 37,* 1-15.

Anastasi, A. (1988). *Psychological testing* (6th ed.). New York, NY: Macmillan.

Bakeman, R., & Gottman, J. M. (1994). *Observing interaction and introduction to sequential analysis.* New York, NY: Cambridge University Press.

Beigel, A. R. (1993). *Peer teaching and special education preparation.* (ERIC doc. No. ED 373 510). Buffalo, NY.

Bredeson, P. V. (1992). *Responses to restructuring and empowerment initiatives: A study of teachers' and principals' perceptions of organizational leadership, decision making and climate.* (ERIC doc. No. ED346 569). San Francisco, CA: American Educational Research Association annual meeting, April, 1992.

Buck, G., Morsink, C., Griffin, C., Hines, T., & Lenk, L. (1992). Preservice training: The role of field-based experiences in the preparation of effective special educators. *Teacher Education and Special Education, 15* (2), 108-123.

Byra. M., & Coulon, S. C. (1992). *Preservice teachers' in class behaviors: The effect of planning and not planning.* (ERIC doc. No. ED 348 355). San Francisco, CA: American Research Association annual meeting, April, 1992.

Campbell, D. T., & Stanley, J. C. (1963). *Experimental and quasi-experimental designs for research.* Boston: Houghton Mifflin Company.

Carnahan, R. (1980). The effects of teacher planning on classroom processes (Tech. Rep. No. 541). Madison: Wisconsin R&D Center for Individualized Schooling.

Cohen, J. (1965). Some statistical issues in psychology research. In B. B. Wolman (Ed.), *Handbook of clinical psychology* (pp. 95-121). New York: McGraw-Hill.

Conoley, J. C. (Ed.). (1981). *Consultation in schools.* New York: Academic Press.

Cook, T. D., & Campbell, D. T. (1979). *Quasi-experimentation design & analysis issues for field settings.* Boston: Houghton Mifflin Company.

Cromwell, R. R., & Browne, C. S. (1993). A clinical supervision program prepares teachers to be effective change agents. *Teacher Education, 28* (3), 37-45.

Davis, H. S., & Tomkins, E. (1966). *How to organize an effective team teaching program.* Englewood Cliffs, NJ: Prentice-Hall.

Dunham, J. (1992). *Stress in teaching* (2nd ed.). New York: Routledge, Chapman & Hall.

Englert, C. S., & Sugai, G. (1983). Teacher training improving trainee performance through peer observation and observation system technology. *Teacher Education and Special Education, 6* (1), 7-17.

Fennell, H. (1993). *Student teachers' evaluation of their preparation for internship course: A case study.* (ERIC doc. No. ED 361 335). Ontario, Canada.

Fimian, M. J. (1986). Social support and occupational stress in special education. *Exceptional Children, 52* (5), 436-442.

Fleiss, J. L. (1981). *Statistical methods for rates and proportions* (2nd ed.). New York: John Wiley & Sons.

Florida Coalition for the Development of a Performance Measurement System (1984). *Florida Performance Measurement System* (FPMS) Tallahassee, FL: Bureau of Teacher Education, Florida Department of Education.

Fuchs, D., & Fuchs, L. S. (1994). Inclusive schools movement and the radicalization of special education reform. *Exceptional Children, 60* (4), 294-309.

Garmston, R. J. (1987). How administrators support peer coaching. *Instructional Leadership, 44,* 18-26.

Gelfand, D. M., & Hartman, D. P. (1975). *Child behavior analysis and therapy.* New York: Pergamon Press.

Gersten, R., Darch, C., Davis, G., & George, N. (1991). Apprenticeship and intensive training of consulting teachers: A naturalistic study. *Exceptional Children, 57,* 226-236.

Glickman, C. D., & Bey, T. M. (1990). Supervision. In W. R. Houston (Ed.), *Handbook of research on teacher education* (pp. 549-566). New York, NY: Macmillan.

Hargreaves, A., & Dawe, R. (1990). Paths of professional development contrived collegiality, collaborative culture, and the case of peer coaching. *Teacher and Teacher Education, 6* (3), 227-241.

Hasbrouck, J. E. (1994). The effects of peer coaching by preservice special education educators using the Scale for Coaching Instructional Effectiveness (SCIE). *Dissertation Abstract International, 56* (02), 512 UMI No. 9520378.

Hasbrouck, J. E. (1997). Mediated peer coaching for training preservice teachers. *Journal of Special Education, 31* (2), 251-271.

Hasbrouck, J. E., & Christen, M. H. (1997) Providing peer coaching in inclusive classrooms: A tool for consulting teachers. *Intervention in School and Clinic, 32* (3), 172-177.

Hendrickson, J. M., & others. (1988). *Peer coaching: A specific approach for improving teacher performance and trainee competence.* (ERIC doc. No. ED 303 942). St. Petersburg, FL: Florida Staff Development Leadership Conference annual meeting, September, 1988.

Heshusuis, L. (1989). The Newtonian mechanism paradigm, special education and contours of alternatives: An overview. *Journal of Learning Disabilities, 22* (7), 403-415.

Hindman, S. E., & Polsgrove, L. (1988). Differential effects of feedback on preservice teacher behavior. *Teacher Education and Special Education, 11* (1), 25-29.

Hunter, M. (1986). Comments on the Napa County, California, follow through project. *The Elementary School Journal, 87* (2), 173-179.

Hunter, M., & Russell, D. (1989). *Mastering coaching and supervision.* El Segundo, CA: TIP Publications.

Iano, R. P. (1990). Special education teachers: Technicians or educators? *Journal of Learning Disabilities, 23* (8), 462-465.

Idol, L. (1993). *Special educator's consultation handbook.* Austin, TX: Pro-Ed.

Idol, L., Nevin, A., & Paolucci-Whitcomb, P. (1994). *Collaborative consultation* (2nd ed.). Austin, TX: Pro-Ed.

Joyce, B., & Showers, B. (1980). Improving in-service training: The messages of research. *Educational Leadership, 37,* 379-385.

Joyce, B., & Showers, B. (1981). *Teacher training research: Working hypothesis for program design and directions for further study.* Paper presented at the meeting of the American Educational Research Association, Los Angeles, CA.

Joyce, B., & Showers, B. (1982). The coaching of teaching. *Educational Leadership, 40,* 4-10.

Joyce, B., & Showers, B. (1988). *Student achievement through staff development.* White Plains, NY: Longman.

Kriesberg, S. (1992). *Transforming power-domination, empowerment, and education.* Albany, NY: State University of New York Press.

Kukic, S., Fister, S. L., Link, D. P., & Freston, J. L. (1989). *The Scales for Effective Teaching* (SET) (2nd ed.). Reston, VA: The Council for Exceptional Children.

LeBlanc, P. R., & Zide, M. M. (1987). *Peer coaching in collaborative programs: From Theory to practice.* (ERIC doc. No. ED290 726).

Lieberman, A. (Ed), (1992). *The changing context of teaching.* Chicago, IL: The National Society for the Study of Education.

Lignugaris/Kraft, B., & Marchand-Martella, N. (1993). Evaluation of preservice teachers' interactive teaching skills in a direct instruction practicum using student teachers as supervisors. *Teacher Education and Special Education, 16* (4), 309-318.

Little, J. W. (1982). Norms of collegiality and experimentation: Workplace conditions of social success. *American Educational Research Journal, 19* (3), 325-340.

Little, J. W. (1985). Teachers as teacher advisors: The delicacy of collegial leadership. *Educational Leadership, 43,* 34-36.

Little, J. W. (1989). The 'mentor' phenomenon and the social organization of teaching. *Review of Research in Education, 5.* Washington, DC: American Educational Research Association.

Ludlow, B. L., Faieta, J. C., & Wienke, W. D. (1989). Training teachers to supervise their peers: A pilot practicum project. *Teacher Education and Special Education, 12* (1-2), 27-32.

McCarney, S. B. (1986). *The Teacher Evaluation Scale* (TES) Columbia, MO: Hawthorne Educational Services.

Messick, S. (1989). Validity. In R.L. Linn (Ed.), *Educational measurement* (3rd ed.) (pp.13-103). New York, NY: American Council on Education/Macmillan.

Metcalf, K. K. (1991). The supervision of student teaching: A review of research. *The Teacher Educator, 26* (4), 27-42.

Miles, M. B., & Huberman, A. M. (1994). *An expanded sourcebook qualitative data analysis* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Miller, S. P., Harris, C., & Watanabe, A. (1991). Professional coaching a method for increasing effective and decreasing ineffective teacher behaviors. *Teacher Education and Special Education, 14* (3), 183-191.

Millman, J., & Darling-Hammond, L. (Eds.). (1990). *Teacher evaluation assessing elementary and secondary school teachers.* Newbury Park, NJ: Sage Publications.

Morgan, R. L., Gustafson, K. J., Hudson, P. J., & Salzberg, C. L. (1992). Peer coaching in a preservice special education program. *Teacher Education and Special Education, 15* (4), 249-258.

Morgan, R. L., Menlove, R., Salzberg, C. L., & Hudson, P. (1994). Effects of peer coaching on the acquisition of direct instruction skills by low performing preservice teachers. *The Journal of Special Education, 28* (1), 59-76.

Neubert, G. A. & Stover, L. T. (1994). *Peer coaching in teacher education.* (ERIC doc. No. ED378 140) Bloomington, IN: Phi Delta Kappa.

Nishinosono, H. (2000). *Image, concept, model and proposition for instructional designing and its application in pre-service education: A framework to generate lesson plan for autonomous learning using IT.* (ERIC doc. No. ED 447 067). Japan.

Northwest Regional Educational Laboratory. (1990). *Effective schooling practices: A research synthesis 1990 update.* Portland, OR: Author.

Parker, R. I., & Hasbrouck, J. E. (1994). *Scale for coaching instructional effectiveness* SCIE. College Station, TX: Texas A&M University.

Parsons, R. D., & Meyers, J. (1984). *Developing consultation skills.* San Francisco, CA: Jossey-Bass.

Peck, C. A., Killen, C. C., Baumgart, D. (1989). Increasing implementation of special education instruction in mainstream preschools: Direct and generalized effects of nondirective instruction. *Journal of Applied Behavior Analysis, 22,* 197-210.

Peterson, P., Marx, R., & Clark, C. (1978). Teacher planning, teacher behavior and student achievement. *American Educational Research Journal, 15* (3), 417-432.

Peterson, S. K., & Hudson, P. J. (1989). Coaching a strategy to enhance preservice teacher behaviors. *Teacher Education and Special Education, 12* (1-2), 56-60.

Pugach, M. C., & Allen-Meares, P.A. (1985). Collaboration at the preservice level instructional and evaluation activities. *Teacher Education and Special Education, 8* (1), 3-11.

Rieck, W. A. (1992). *A study of current practice on the pre-service preparation of secondary school teachers.* (ERIC doc. No. ED 346 054). New Orleans: Louisiana.

Robbins, P. (1991). *How to plan and implement a peer coaching program.* Alexandria, VA: Association for Supervision and Curriculum Development.

Rolider, A., Pierce, M. M., Van Houten, R., Molcho, M., & Ylevitch, L. (1985). The effects of a comprehensive feedback component on the preparation of preservice educators. *Teacher Education and Special Education, 8* (1), 17-24.

Rosenfield, S. A. (1987). *Instructional consultation.* Hillsdale, NJ: Lawrence Erlbaum Associates.

Sanchez, G., & Valcarcel, M. V. (1999). Science teachers' views and practices in planning for teaching. *Journal of Research in Science Teaching, 36* (4), 493-513.

Semmel, M. (1978). Systematic observation. *Journal of Teacher Education, 29,* 25-27.

Shanoski, L. A., & Hranitz, J. R. (1991). *Learning from America's best teachers: What research tells us.* (ERIC doc. No. ED 358 060). Minot, ND: Supper Workshop of the Association of Teacher Educators, August, 1991.

Showers, B. (1985). Teachers coaching teachers. *Educational Leadership, 42,* 43-48.

Showers, B., & Joyce, B.(1996). The evolution of peer coaching. *Educational Leadership, 53* (6), 12-16.

Skoog, G. (1980). Improving college teaching through peer observation. *Journal of Teacher Education, 31,* 23-25.

Smith, N. S., & Acheson, K. A. (1991). Peer consultation an analysis of several types of programs. *Oregon School Study Council, 34* (6), 1-30.

Sparks, G. M. (1986). The effectiveness of alternative training activities in changing teaching practices. *American Educational Research Journal, 23* (2), 217-225.

Strother, D. B. (1989). Peer coaching for teachers: Opening classroom doors. *Phi Delta Kappan, 70,* 824-827.

Suen, H. K. & Ary, D. (1989). *Analyzing quantitative behavioral observation data.* Hillsdale, NJ: Lawrence Erlbaum.

Tai, S. W. (1978). *Social science statistics: Its elements and applications.* Santa Monica, CA: Goodyear Publishing Company, Inc.

Texas Education Agency (n.d.). *Texas Teacher Appraisal System* (TTAS). Austin, TX: Author.

Tindal, G. A., & Martson, D. B. (1990). *Classroom-based assessment: Evaluating instructional outcomes.* Columbus, OH: Merril.

Twardy, B., & Yerg, B. (1987). The impact of planning on inclass interactive behaviors of preservice teachers. *Journal of Teaching in Physical Education, 6* (2), 136-148.

Wazman, H. C., & Walberg, H. J. (Eds.). (1991). *Effective teaching: Current research.* Berkeley, CA: McCutchan.

Willerman, M., McNeely, S. L., & Cooper-Kaufman, E. (1991). *Teachers helping teachers-peer observation and assistance.* New York: Praeger.

Yin, R. K. (1994). *Case study research design and methods* (2nd ed.). Thousand Oaks, CA: Sage Publications.

APPENDIX A

THE SCALE FOR COACHING INSTRUCTIONAL EFFECTIVENESS (SCIE)

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Scale for Coaching Instructional Effectiveness (SCIE)

Date:____/____/____ Start Time:_____ Stop Time: _____ CODE # _____

Teacher:_____ Observer/Rater:_____

Grade/Class:_____ Number of students in instructional group:_____

Lesson Content:

KEY:

YES + = Good/excellent quality; high skill; occurs ALL or ALMOST ALL of lesson; with ALL/ ALMOST ALL students.
YES √ = At least fair/moderate quality; fair/moderate skill; MOST of lesson; with MOST of students.
NI = *Needs Improvement*: Not implemented *& should have been*; low quality/skill; SMALL part of lesson; only FEW students.
NtOb = *Not observed*; not applicable; cannot judge. Not implemented but not necessary. *A NEUTRAL rating.*

A. PLANNING & ORGANIZATION

	A1. Lesson Planning/Preparation	Yes		NI	NtOb
a	• T. selects APPROPRIATE objective(s)/ purpose for lesson (amount & quality). (MATCHES students' instructional needs, ages, background, developmental & skill levels; IMPORTANT/VALUABLE skill/knowledge for future learning or "real life"; REASONABLE number of objectives for students, topic and time available).		√	√-	
b	• T. PREPARES & ORGANIZES materials for lesson parts.	+	√	√-	
c	• T. LOGICALLY ORGANIZES lesson PRESENTATION (SEQUENCE/ORDER of lesson parts logically linked and enhance understanding).		√	√-	

	A2. Quality/Match of Curriculum Materials/Media	Yes		NI	NtOb
a	• T. uses GOOD QUALITY materials/media.		√	√-	
b	• T. USES materials necessary or beneficial to learning/ materials ENHANCE learning.	+	√	√-	

B. INSTRUCTION

	B1. Starting Lesson	Yes		NI	NtOb
a	• T. starts lesson PROMPTLY & PURPOSEFULLY (focused on objectives/purpose).	+	√	√-	
b	• T. skillfully GAINS STUDENTS' ATTENTION before beginning. (+ = ALL or ALMOST ALL students attending before starting; √ = MOST attending)	+	√	√-	
c	• T. helps students UNDERSTAND PURPOSE of lesson.		√	√-	
d	• T. "LINKS" prior knowledge, previously learned skills to current lesson (at least some mention made of how this lesson relates to previous learning, if appropriate).		√	√-	

	B2. Communication	Yes		NI	NtOb
a	• T. uses ACCURATE & APPROPRIATE LANGUAGE in speaking & writing (syntax/grammar, vocabulary, handwriting & spelling).		√	√-	
b	• T. uses voice at an APPROPRIATE VOLUME/TONE for communication and instruction.		√	√-	

	B3. Active Learning	Yes		NI	NtOb
a	• T. provides students with opportunities to ACTIVELY PARTICIPATE in learning tasks (talking, answering/asking questions, reading, writing, etc.; minimal time spent just listening).	+	√	√-	
b	• T. DISTRIBUTES opportunities to participate among students.		√	√-	
c	• T. keeps students FOCUSED & ENGAGED in activity; ON-TASK (+ = ALL or ALMOST ALL students for ALL or ALMOST ALL of lesson with skillful redirecting as necessary)	+	√	√-	

	B4. Lesson Pacing/Focus	Yes		NI	NtOb
a	• T. uses REASONABLE PACE (not rushed or dragging).	+	√	√-	
b	• T. MAINTAINS FOCUS on objectives/purpose; stays "on track." (+ = During ALL or AMOST ALL of lesson; √ = MOST of lesson).	+	√	√-	
c	• T. spends reasonable & appropriate AMOUNT OF TIME on lesson parts		√	√-	

	B5. Giving Directions	Yes		NI	NtOb
a	• T. skillfully GAINS STUDENTS' ATTENTION before giving directions (+ = ALL or ALMOST ALL students' attending; √ = MOST students attending).	+	√	√-	
b	• T. skillfully MAINTAINS STUDENTS' ATTENTION while giving directions. (+ = ALL or ALMOST ALL students' attention maintained; √ = MOST students).	+	√	√-	
c	• T. gives directions CLEARLY (appropriate difficulty/length to ages & skill levels) & COMPLETELY (essential parts of the directions given BEFORE task started).	+	√	√-	
d	• T. CHECKS FOR UNDERSTANDING before beginning task.		√	√-	

	B6. Presenting New Information/Skill/Strategy; Review, Practice	Yes		NI	NtOb
a	• T. skillfully PRESENTS a sufficient amount of relevant and helpful EXAMPLES or EXPLANATIONS of new information such as concepts, rules, facts, principles, operations (appropriate to lesson objectives & students' ages, developmental & skill levels).	+	√	√-	
b	• T. MODELS or DEMONSTRATES as necessary new or unmastered skill/ strategy (well-timed, well-paced, of reasonable duration to ensure learning).	+	√	√-	
c	• T. provides GUIDED PRACTICE as necessary to help students learn skill/strategy (well-timed, well-paced, of reasonable duration to ensure learning).		√	√-	
d	• T. MONITORS and PROVIDES FEEDBACK during independent practice.		√	√-	
e	• T. presents ACCURATE information (e.g., word definitions, statements of facts, explanations of concepts, etc.).		√	√-	
f	• T. uses a VARIETY of presentation & response modes & activities (appropriate to lesson objectives and students' ages, developmental and skill levels).	+	√	√-	

	B7. Monitoring Learning/ Responsive Lesson Adjustment	Yes		NI	NtOb
a	• T. PROMPTLY CORRECTS or CLARIFIES errors with patience & encouragement.	+	√	√-	
b	• T. PROMPTLY and APPROPRIATELY ACKNOWLEDGES correct responses.	+	√	√-	
c	• T. encourages students to MONITOR accuracy & quality of their own work.		√	√-	
d	• T. ADJUSTS lesson based on student responses (provides extra practice or examples; slows or speeds pace; modifies task/lesson)		√	√-	

	B8. Questioning Techniques	Yes		NI	NtOb
a	• T. uses questions which FOCUS on KEY ELEMENTS in lesson [appropriate to content (fact/recall or open-ended/interpretive) and to students].	+	√	√-	
b	• T. allows appropriate WAIT TIME after asking a question (varying for type of question, student ability/skill level).		√	√-	
c	• T. "STAYS WITH" or RETURNS TO student when initial response incorrect (prompts/probes for correct response; provides correct fact, returning later to repeat question).		√	√-	

	B9. Lesson Closure	Yes	NI	NtOb
a	• T. uses APPROPRIATE CLOSURE activities (May include: SUMMARIZING/ SYNTHESIZING key points; commenting on students' ACCOMPLISHMENTS; PREVIEWING upcoming learning; etc.]	√	√-	
b	• T. spends REASONABLE AMOUNT of TIME in closure.	√	√-	
c	• T. INVOLVES STUDENTS in closure activities when appropriate (given ages, skill levels, lesson subject & time available).	√	√-	

C. CLASSROOM MANAGEMENT

	C1. Rules: Understood; Consistently & Fairly Applied	Yes		NI	NtOb
a	• T. USES rules in teaching; REMINDS students of rules as necessary.		√	√-	
b	• T. ENFORCES rules APPROPRIATELY, CONSISTENTLY & FAIRLY.	+	√	√-	

	C2. Management Routines/Procedures	Yes		NI	NtOb
a	• T. uses PROACTIVE, PREVENTATIVE TECHNIQUES to minimize lesson interference (voice tones/volume; continuous scanning of students; purposeful movement among students; effective use of proximity control; non-verbal signaling; changes in pacing; removing distractions).	+	√	√-	
b	• T. has effective ROUTINES/PROCEDURES to MINIMIZE DISRUPTIONS TO LEARNING in place and USES them (handling student questions during work time; administrative tasks; tasks for those finishing work early, distributing/collecting papers/materials, etc.).	+	√	√-	
c	• T. ensures SHORT, SMOOTH TRANSITIONS between tasks & lessons minimizing confusion, off-task behavior & lost instructional time (students know what to do; function independently).	+	√	√-	
d	• T. PHYSICALLY ARRANGES CLASSROOM to minimize distractions & focus on learning.		√	√-	

	C3. Positive Reinforcement/ Motivation	Yes		NI	NtOb
a	• T. is POSITIVE, ENCOURAGING (tries to "CATCH students in the ACT OF BEING GOOD").	+	√	√-	
b	• T. uses SPECIFIC, DESCRIPTIVE age/ developmentally appropriate praise; CONTINGENT on good/correct behavior.	+	√	√-	
c	• T. demonstrates VALUE OF and/or sincere INTEREST in lesson content.	+	√	√-	
d	• T. uses mostly SOCIAL REINFORCERS (smiles, pats/handshakes, encouraging remarks, non-verbal signals, etc.); token/tangible reinforcements (stickers, candy, etc.) used appropriately & only as necessary.		√	√-	

C4. Off-Task, Negative Behaviors Addressed		**Yes**		**NI**	**NtOb**
a	• T. REDIRECTS OFF-TASK BEHAVIOR to on-task focus.	+	√	√-	
b	• T. effectively and appropriately IGNORES minor behaviors (paired with praise/appropriate attention).	+	√	√-	
c	• T. PROMPTLY STOPS DISRUPTIVE BEHAVIOR with minimum interruption of lesson.		√	√-	
d	• T. administers consequences FAIRLY, CONSISTENTLY & NON-EMOTIONALLY.	+	√	√-	

****

DEBRIEFING CHECKLIST

DATE/TIME of observation:_____ **DATE/TIME** of debriefing :_____

GOAL(s) TARGETED FOR IMPROVEMENT *(list SCIE items by number):*

Did you as a coach...	IMPROVEMENT NEEDED	ADEQUATE	VERY GOOD	COMMENTS
1. accurately **CODE** the lesson?				
2. **USE SCIE DESCRIPTORS** to interpret results during debriefing ?				
3. help set and maintain a **POSITIVE TONE**?				
4. **ENCOURAGE** the observed **TEACHER** to **EXPRESS** ideas/opinions?				
5. equally **SHARE** talk time?				
6. use **ACTIVE LISTENING** procedures?				
7. help **LOGICALLY PRIORITIZE** a target area for setting improvement goal(s)?				
8. uncritically encourage **BRAINSTORMING** of **IDEAS** for improvement?				
9. fairly **EVALUATE** ideas for improvement and help the observed teacher make a **SELECTION?**				
10. help with **LOGISTICS** (scheduling next observation; assigning tasks, completing forms, etc.)?				

APPENDIX B

COACHING EFFICACY SCALE

COACHING EFFICACY SCALE

COACH _____ **PRESERVICE TEACHER** _____

OBSERVER _____ **DATE** _____

Circle the rating that best describes the Peer Coaches effectiveness

+ = Good/Excellent quality, occurs all or almost all of session

√ = Adequate quality, occurs most of the time during session

√- = Poor Quality, attempted but needs improvement or not attempted and should have been

NO = Not observed but not necessary

1. PC asked PT to describe perceptions of observed lesson

√	√-	Not Ob
asks at beginning or near beginning but does **not** reflect	asks at some time during lesson and does not reflect	

2. PC identified instructional difficulties experienced by the PT

+	√	√-	Not Ob
identified specific difficulties gave detail most of the time	identified specific difficulties and gave detail some of the time	did not identify specific difficulties and gave little or no detail	

3. PC acknowledged PT's level of concern about instructional difficulties

+	√	√-	Not Ob
reflecting all or most of the time	reflecting some of the time but giving feedback	not acknowledging PT responses	

4. PC modeled professional language during the debriefing session

+	√	√-	Not Ob
modeled professional language all of the time	modeled professional language most of the time	did not model professional language or distracted from the debriefing	

5. PC used concrete language and was specific when discussing the lesson

+	√	√-	Not Ob
used specific examples when discussing lesson most of the time	used specific examples when discussing lesson some of the time	did not give specific examples	

6. PC encouraged PT to use concrete language when discussing the lesson

+	√	√-	Not Ob
reflected and modeled concrete language	probed or questioned when concrete language was not used	did not encourage the use of concrete language	

7. PC facilitated discussion of PT feelings and beliefs about the observed lesson

+	√	√-	Not Ob
PC initiated and responded to PT's feelings and beliefs	PC acknowledged PT's feelings and beliefs	PC did not ask for or acknowledge PT's beliefs and feelings	

8. PC validated PT knowledge, expertise, & efforts regarding the observed lesson

+	√	√-	Not Ob
PC realized and acknowledged	PC acknowledged	PC did not realize or acknowledge	

9. PC focused on goals of debriefing session , not personal issues

+	√	√-	Not Ob
PC acknowledged personal issues but refocused debriefing	PC refocused debriefing session	PC did not acknowledge issues or did not refocus debriefing	

10. PC accepted disagreement with PT as issue to be resolved

√	√-	Not Ob
PC accepted any disagreement	PC did not accept disagreement	

11. PC facilitated setting of goals for improvement based upon identified instructional difficulties

+	√	√-	Not Ob
PC facilitated goal development based upon instructional difficulties	PC facilitated the development of goals	PC did not facilitate the development of goals	

12. PC facilitated the development of a plan for attaining goals set during debriefing

+	√	√-	Not Ob
PC facilitated the development for the achievement of goals based upon debriefing	PC facilitated the development of a plan for improvement of instruction	PC did not facilitate the development of a plan for achieving goals	

13. PC identified outside resources to consult in order to improve instruction

√	√-	Not Ob
PC identified outside resources	PC did not identify outside resources	

14. Debriefing session was structured and organized

√	√-	Not Ob
Debriefing was structures and organized	Debriefing was not structures and organized	

15. PC accepted PT's feelings regarding instruction and debriefing

√	√-	Not Ob
PC accepted feelings	PC did not accept feelings	

16. PC closed by summarizing session activities , goals, and follow-up activities if necessary.

+	√	√-	Not Ob
PC summarized at least two of the areas	PC summarized at least one of the activities	PC did not summarize	

APPENDIX C

PLANNING ACTIVITY LOG

Planning Activity Log (PAL)

Name: _____ ___ __ Date: __/__/__ Lesson Content: _____

Approximate Total Planning Time: _____ Next SCIE: #1 #2 #3 Grade: ___

☐ Check here if planning was in preparation for a SCIE observation. Current SCIE goal(s): _____

KEY

Major = Spent a MAJOR amount of TIME and/or EFFORT in this area when planning today. More than 30 minutes **OR** 50% of your planning time.

Minor = Spent a MINOR amount of TIME and/or EFFORT in this area when planning today. Less than 30 minutes **OR** 50% of your planning time

None = Spent NO time in this area when planning today.

If you consulted with any of the following people while planning, place the highlighted letter in the MAJOR or MINOR column. If you did not consult with anyone, place an "**X**" in the appropriate column.

Preservice Teacher Classroom Teacher M.Ed. Supervisor Director Other(s)

Planning Activity	Major	Minor	None
Arranging Classroom for Lesson Decorating room, arranging desks, moving classroom equipment			
Gathering or Creating Student Materials Designing student assignments, gathering extra practice materials, gathering or creating materials to be used during lesson			
Preparing Proactive Management Strategies Designing rules specific to lesson, designing behavior plan for specific student(s), rearranging student seating			
Selecting Objectives Selecting purpose for lesson			
Selecting Content Selecting key vocabulary, reviewing content, researching content, matching content to student prior knowledge and prerequisite skills			
Organizing Lesson Presentation Determining logical order of content, selecting methodology, budgeting time for lesson parts, determine sequence of activities, planning transitions			
Rehearsing Lesson			
Designing Modifications for Diverse Skill Levels Anticipating individual student's needs, preparing modified assignments, tasks, and explanations			

Planning Notes:

VITA

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Educational Background:

Ph.D. (2004) Educational Psychology (Special Education) - Texas A&M University

M.Ed. (1988) School Psychology - Southwest Texas State University

B.S. (1987) University of Tulsa – Psychology

Professional Experience:

2003 – Present	President/ Clinical Director *Community Integrated Services; Seattle, WA*
2002 – 2003	Director of Education *New Haven Youth and Family Services; Vista, CA*
1995 – 2002	Deputy State Director (and other positions) *Mentor Clinical Care; Chicago, IL and Rancho Cucamonga, CA*
1993 – 1995	Educational Consultant *Various School Districts in Texas*
1993 – 1995	Graduate Teaching and Research Assistant *Texas A&M University; College Station, TX*
1988 – 1993	Director of Special Education (and other positions) *New Braunfels Independent School District; New Braunfels, TX*