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by

Abel K. Kalum

December, 2015

STRATEGIES FOR VIDEO-OBSERVATION MENTORING
OF PRESERVICE TEACHERS

A Dissertation Presented to the
Faculty of the College of Education
University of Houston

In Partial Fulfillment
of the Requirements for the Degree

Doctor of Education

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STRATEGIES FOR VIDEO-OBSERVATION MENTORING
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A Dissertation Final Abstract Presented to the
Chair of my Dissertation Committee
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December, 2015

Kalum, Abel K. "Strategies for Video-Observation Mentoring of Preservice Teachers." Unpublished Doctor of Education Dissertation, University of Houston, December, 2015.

Abstract

The purpose of this study was to explore mentoring strategies used in video-observation mentoring program at a four-year university teacher training program. This study was conducted with preservice teachers in the second most diverse urban campus in the United States. Carspecken's critical qualitative research method was adopted for this study as the complex process of mentoring preservice teachers cannot be explained by quantitative methods alone, it needs to be thoroughly examined through understanding the behavior and interactions of the participants involved. The data were collected from three sources: observations of two mentoring sessions; survey of 93 preservice teachers; and individual interviews with nine mentors and two preservice teachers. The data analysis of the strategies revealed similarities. Some prerequisites to a successful mentoring session include: (a) provide a flexible time frame for mentoring sessions, (b) ensure high quality and well-shot videos, (c) allow adequate time for self-reflection and self-assessment, (d) peer evaluation. There were also similarities in the strategies used during mentoring sessions: (a) active engagement, and (b) mentors should be supportive rather than supervisory. Whereas most mentors were worried about the technical aspects of video recording (ex. camera battery running out, bad audio, etc.), most preservice teachers were worried about disruption caused by video recording in the classroom. Most preservice teachers wanted to find ways of recording the lesson unobtrusively, whereas most mentors were concerned about the quality of the recorded videos. The data collected

from the survey of preservice teachers did not yield any post-mentoring strategies.

Longitudinal studies involving large populations should be carried out to fully determine how mentoring based on video-taped lessons affects performance of beginning teachers as they progress in their service. Also more field observations of the video-observation mentoring sessions would help in understanding how such sessions could be designed and conducted better.

Keywords: Teacher preparation; Teacher training; Video-observation mentoring

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CHAPTER I: INTRODUCTION

In an effort to gain a better understanding of the mentoring process in a four-year university teacher training program, I observed interactions between mentors and preservice teachers during their mentoring sessions. These observations were followed by online surveys of the preservice teachers and interviews of the mentors and preservice teachers. The resulting data were then analyzed to determine strategies that mentors used during the mentoring process.

Background of the Study

Past studies have recommended teacher educators increase their efforts in providing high quality teacher education in order to ensure that new teachers adapt well to their jobs and stay in the teaching profession longer (Matoti, Junqueira, & Odora, 2011; Sewall, 2009; Tschannen-Moran & Hoy, 2001). The question then is how do we ensure that beginning teachers are adequately prepared for their teaching profession? One way of doing this is through high-quality mentoring, where preservice teachers are guided by experienced teachers and university supervisors during their student teaching experience. Mentoring is carried out to ensure that preservice teachers are adequately prepared for the complex world of teaching. Mentoring in this study context implies the guiding of a less experienced teacher (i.e., preservice teacher) by a more experienced teacher educator (i.e., a cooperating teacher or a university supervisor) so as to improve their quality of teaching. In this study the association between a mentor and a preservice teacher is comprehensively defined by Ambrosetti and Dekkers (2010) as:

“A non-hierarchical, reciprocal relationship between mentors and mentees who work towards specific professional and personal outcomes for the mentee. The relationship usually follows a developmental pattern within a specified timeframe and roles are defined, expectations are outlined and a purpose is (ideally) clearly delineated.” (p. 52).

The relationship described by Ambrosetti and Dekkers (2010) is one that was observed in this study. Unlike the case of formal observations where the university supervisor evaluates teacher performance and mostly dispenses advice, the relationship during video-observation mentoring sessions is more cordial, the supervisor assumes a role of encouraging reflection. Moreover, evaluation is not on how well the preservice teacher taught, but on how well she reflected on the lesson taught.

Teacher mentoring not only increases retention of teachers, it also improves the quality of the retained teachers (Cherrington & Loveridge, 2014). Indeed, whatever teachers experience during their preservice teaching practice greatly affects their future performance (Ronfeldt, 2012). Significantly, self-efficacy perceptions formed at the beginning of a teacher’s career do not change much afterwards (Bandura, 1997).

Therefore it is important to capture the opportunity during preparation to ensure that early perceptions are positive.

Program Description

This study was conducted among teacher candidates who were in their final year of their teacher preparation program at the University of Houston. The teacher education program trains teachers for EC-6, 4-8, 8-12, and EC-12 certification levels, and has four phases: (1). Pre-Teaching, (2). Developing Teaching, (3). Student Teaching 1, and (4).

Student Teaching 2 (University of Houston Teacher Education, n.d.). In the pre-teaching phase, students take 15-16 credit hours, do formal one-day-a-week observations of classrooms in Houston area schools, and once they pass benchmark exams they are accepted as Teaching and Learning majors. At the Developing Teaching phase of the program, students take 18 credit hours and participate in small group teaching and re-teaching two days per week in Houston area schools. The third and fourth phases of the program are Student Teaching 1 and 2, which involve a full year, full time (five days a week, in alternating weeks) teaching practice in Houston area schools in tandem with 12-16 credit hours of coursework. This study was conducted with students completing the final phase (Student Teaching 2) of the teacher education program.

Background of the Researcher

As a former high school mathematics and science teacher in Kenya, one of the challenges I faced was improving the performance of the students in mathematics and science. This was mostly due to pressure from society for more science graduates. We need highly qualified and motivated teachers in our schools to ensure better performance in science and mathematics. In order to ensure that students do well in their final exams a teacher needs to use better teaching methods. There is a great tendency among the teaching community for teachers to instruct like their teachers taught them. This is exactly what I experienced during my high school teaching career, teaching like my former high school teachers. In my days as a high school student, teachers were not only in absolute control of their classes, but also strict disciplinarians. While pursuing my graduate studies I discovered that students learn better when there is democracy in the class, teaching is student-centered, and there is more student-student and student-teacher

interactions where students are free to construct knowledge with the teacher as a facilitator. During my undergraduate studies in Kenya, I was unaware of the reflective practice based on videotaped lessons. This practice was recently adopted in my home country.

When I moved to the United States for my graduate studies I had a chance to teach freshman chemistry laboratory at a four-year university in the Southern United States. This experience made me realize that new college students struggled with comprehension of science content and instructors had to work really hard to ensure the content is understood by students. After completion of my Master's degree, I landed another opportunity to further my studies at doctorate level. In this new capacity, my responsibilities included that of a video-observation facilitator during my first year as a doctoral student. I mentored about 400 preservice teachers in the course of that year.

I believe that strategic preservice teacher mentoring programs lays a firm foundation for producing high quality teachers who will ultimately improve our schools through better classroom management styles, innovative instructional strategies, and increased student engagement. A strong preservice mentoring program should be followed up with an equally robust professional development program for new teachers entering the profession. Experienced and successful teachers can provide invaluable guidance to new teachers.

The Purpose of the Study

Video-observation mentoring in this study is the process where a designated faculty mentor advises and guides preservice teachers on their teaching performance (among other areas of concern) while sitting side-by-side to review self-recorded

teaching videos. Through the use of video technology, teacher educators are able to mentor beginning teachers through video-observation.

While many past studies focus on the benefits and effects of mentoring, there is limited literature on the strategies that mentors use during the video-observation mentoring process. Two overarching research questions guided this study:

1. What kinds of video-observation mentoring strategies are used for preservice teachers' reflective practice and what are the processes of implementing them as understood by the mentors?
2. Are there discrepancies between mentors' and preservice teachers' perceptions on mentoring strategies? If yes, what are they and what are the possible explanations?

Conceptual and Operational Definitions

Preservice teacher in this study is a senior student enrolled in the teacher education program and has begun student teaching field experience.

Cooperating teacher is the teacher who hosts the preservice teacher in her classroom. The cooperating teacher is expected to allow the preservice teacher to teach some lessons with her guidance, allow the preservice teacher to observe as she teaches, and advise the preservice teacher on various teaching activities among other things.

University supervisor or mentor serves as a link or contact between the school and the university. A supervisor helps the preservice teachers solve problems they face in host schools. She also evaluates the preservice teachers and provides them with feedback regularly.

Mentoring of preservice teachers is the guiding of a less experienced teacher by a more experienced teacher educator (a cooperating teacher in the host school or a university supervisor).

Video-observation mentoring in this study is the process of advising and guiding preservice teachers to improve their teaching (among other areas of teaching and learning) based on their videotaped lessons. The video-observation mentoring meeting is centered on at least four short video sections (pause points) chosen by the preservice teacher before the meeting, based on self-appraised strengths and weaknesses (See Appendix D).

Video-observation mentoring strategies are the conditions or plans of action that lead to successful mentoring sessions.

Theoretical Framework on Mentoring of Teachers

This study is partly grounded in Dewey's view that teacher knowledge originates from personal and social experiences (Dewey, 1938). Dewey emphasized that the process and the goal of education are inseparable; that "education must be conceived as a continuing reconstruction of experience, that the process and the goal of education are one and the same thing" (Dewey, 1982, p. 542). We should be therefore be interested in the outcome as well as the process of learning. Dewey is also known for his ideas on progressive education where knowledge is not the preserve of teachers. In progressive education teachers also draw from learner's experience to guide their learning (Dewey, 1938). Such is the case with mentoring of preservice teachers, ideally mentors and the mentees should approach the process as collaborators who are ready to share their

experiences and compare notes on what could be done to improve the quality of instruction.

This study is also grounded on Schön's reflection in teaching. Schön (1983) supported the view of reflection during practice where the teacher reflects as he or she teaches as every situation is unique. According to Schön:

“when someone reflects-in-action, he becomes a researcher in the practice context. He is not dependent on the categories of established theory and technique, but constructs a new theory of the unique case. His inquiry is not limited to a deliberation about means which depends on a prior agreement about ends. He does not keep means and ends separate, but defines them interactively as he frames a problematic situation.” (Schön, 1983, p. 68).

Teaching, according to Schön, is not a static field based on theory, but a practice that improves with reflection (Schön, 1987). There are several kinds of teacher reflective behaviors: knowing in action (knowing how to act when confronted with unanticipated situation), reflection in action (making change to planned actions due improve instruction), reflection on action (identifying what one could have done better after a lesson), and reflection for action (planning to improve future lessons based on your past experiences).

Overview of the Study

The research design used in this study was Carspecken's critical qualitative research method (Carspecken, 1996). I began this study with two field observations of mentoring sessions in order to build a primary record. It was from these two field

observations that I was able to get a better understanding of the video-observation mentoring process and even get more questions to ask the participants during interviews I had with them later. Before the individual interviews of mentors and preservice teachers, I also requested the preservice teachers to complete a 15-minute survey on the mentoring process. I was also able to get more questions for mentors from analysis of the data from survey responses. The next step in the study was one to one interviews with the mentors and preservice teachers. The analysis of the data from the two field observations, survey of preservice teachers, and interviews of mentors and preservice teachers yielded major themes on strategies being used by mentors during the mentoring sessions. I would present a review of related literature, describe the research methodology, techniques used to support validity of data collected, discussion of results, implications of findings, limitations of the study, and finally recommendations for future research.

CHAPTER II: REVIEW OF RELATED LITERATURE

Researchers in most of the past and recent studies on mentoring based on videotaped lessons, have concentrated on the benefits and uses of video technology. Videotaping of lessons for purposes of reflection is not new in preservice and in-service teacher mentoring programs (Sewall, 2009). Videotape offers the medium for preservice teachers to directly observe and interpret their own teaching (Welsch & Devlin, 2006), so, accordingly, many preparation programs have incorporated video as a tool for preparation. Past studies have revealed other benefits and uses of video technology in preservice teacher mentoring and these include increased collaboration, increased reflection, videocase construction and discussion, improved consultative feedback and self-evaluation, and video aided recall. This literature review will focus on studies from recent years that have centered on the various uses and benefits of using videotaped lessons for reflections in teaching practices. These uses and benefits are grouped under various themes. Each of themes are discussed below.

Increased Collaboration.

In a study carried out in New Zealand, mentors used class records and videotaped lessons to promote group collaborative activities among teachers (Higgins & Parsons, 2009). According to the researchers, videotaped lessons help new teachers to accurately self-reflect on their practice. It is when teachers practice what they are taught in the training programs that they begin to improve their instructional practice.

Harford and MacRuairc (2008) conducted a study on peer videotaping that involved collaborative reflective discussions among preservice teachers teaching in the

same school. The study participants were 20 preservice teachers in an Irish university taking post graduate diploma in Education. The 20 participants who were paired were divided into two groups of 10 preservice teachers each for peer mentoring. Each peer mentoring session involved discussion based on two video clips each lasting about 10 minutes each. Each video clip dealt with an aspect of teaching and the presenter also included a brief introduction and a lesson plan of the recorded lesson. Each group had a facilitator whose role was to “encourage debate and foster reflection in a safe and collegial environment” (p. 1886) through asking questions instead of actually commenting. These mentoring sessions were not graded. The researchers noted that the fact that peer video recording was “student-led and student-centered provided a more democratic, collaborative and egalitarian environment within which to engage in the process of video recording and analysis” (p. 1886). The reciprocity in peer video recording where each participant was video recorded and also in turn did the video recording, improved relations between participants as each understood the challenges and problems faced during the video recording process. This study culminated in focus group discussions at the end of the year. Some of the problems noted by Harford and MacRuairc (2008) included added stress on students and teachers being video recorded, and also setting up the video recording equipment took a lot of time and even sometimes failed. However, peer video recording and the ensuing group discussions during peer mentoring sessions, helped the preservice teachers reflect more on their practice. Capturing footages on video had a great impact on preservice teachers’ teaching methodologies as noted by one of the participants who noted the practicality of peer video recording:

“Frank:

I found this more helpful than some core lectures. I would nearly prefer to do this twice a week than have to spend so much time attending lectures. Watching others in action, you learn more, you get practical things. Teaching is a practical profession. The more you see the practice of it, the better.” (p. 1888).

Another study that revealed some benefits of collaborative peer mentoring through reflection using videotaped lessons was carried out by So, Pow, and Hung (2009). The researchers carried out a study that involved preservice teachers in a learning community in their third and fourth years of their university program. The learning community shared their teaching videos through a central digital video database. After uploading the videos to the video database, the preservice teachers selected video segments to comment on and post to the database. The learning community members could then watch the video segments and comments, then write down their feedback comments. This way the learning community members were able to identify their effective teaching behaviors and also some useful suggestions for improvement of their overall teaching. The researchers noted that there was need to improve the quality of videos uploaded to the video database as this “might affect the understanding of what exactly was happening in the classrooms by viewers and therefore their comments” (p. 784). Also the researchers suggested that the lesson plan and an introduction or background of the lesson should be uploaded along with the videotape of the lesson.

Marsh, Mitchell, and Adamczyk (2010) found out that through the University of Sussex’s In-School Teacher Education Project (INSTEP), teacher trainees and instructors got online access to a variety of classroom practices. Importantly, the use of interactive video by science preservice teachers and their instructors in reviewing videotaped lessons

helped them develop reflection, pedagogical language, and collaborative learning among preservice teachers. The researchers noted that the preservice teachers did not get the chance, during this period, to teach in the schools. However, the teachers had opportunities to watch and learn from experienced teachers.

Increased Reflection.

Since Teacher Preparation Programs cannot train teachers to face each and every challenge out in the field, it is important that the preservice teachers are trained how to observe and critique their own teaching in order to increase their teaching efficacy (LaParo, Maynard, Thomason, & Scott-Little, 2012). In particular, the videotaped lessons affords teachers time to reflect and assess their lessons by linking what happened in the classroom with theory and best practices, hence keep these in mind for future lessons. In this study, a small group and a university instructor reviewed ten minutes of the videotaped lesson taught by each participant, then discussed it based on preservice teacher's strengths and challenges using the framework of a scoring system. The researchers found out that after the video review practice, scores in emotional support and classroom organization fields were higher than the scores in the instructional support field.

A study by Kong (2010) featured a self-monitoring video recording system and eventual retrieval of the recorded videos online. In this study, the participating preservice teachers used a self-monitoring video recording system that allowed the preservice teacher to monitor the video recording and then later retrieve it online. Two video cameras were used, one set at the back of the classroom focused on the teacher while the second one was set at the front of the classroom focused on the students. The preservice

teacher had a notebook computer to monitor what was being recorded. After teaching a lesson the preservice teacher could later retrieve the video and review it “without constraints of time and location” (p. 1774). Each preservice teacher reviewed two video clips per lesson, one focused on the teacher’s performance and the other focused on the students’ reactions. The preservice teachers’ reflections on their teaching were based on a four-dimension framework: curriculum planning and evaluation, pupils and pupil-teacher interaction, discipline and classroom management, and professional knowledge in teaching. The preservice teachers also wrote down their notes and comments on two forms, one form before browsing videos and the other form after browsing videos. Kong (2010) found the use of videotaped lessons for self-reflection increased preservice teachers’ reflective notes by about 50% and eventually improved the quality of their dialogue with their supervisors. Apart from the increase in the volume and depth of reflective notes, Kong (2010) noted that the most notable result of watching the videotaped lessons was that “the preservice teachers were able to discern more behavioral characteristics of their teaching, in particular in aspects related to lesson preparation, class management and pedagogical arrangements” (p. 1777).

Other recent studies have shown the use of video technology in mentoring to have increased reflection among teachers. Welsch and Devlin (2007), for instance, found out that written reflections based on watching videotaped lessons were enhanced compared to those based on just the memory of lessons taught. However, the researchers found out that “the use of videotape enhanced student reflection in areas of technical skills and overall perception (first level) rather than ability to ascertain next steps or better ways to accomplish their goals (second level)” (p. 58). Moreover, video-elicited reflection

increased the percentage of reflective comments made by preservice teachers, compared to the traditional observation-based debriefing (Sewall, 2009). It also promoted deeper and broader reflection commentaries.

Mena, García, Clarke, and Barkatsas (2015) analyzed three different approaches to student teacher mentoring and their impact on knowledge generation in practicum settings. The three approaches were dialogue journaling, regular conferences and stimulated-recall conferences. The researchers found out that dialogue journaling (written reflections) was useful for evaluation of the teaching practice, regular conferences dwelled mainly on artefacts and rules, and stimulated-recall (by means of videotaped lessons) favored more precision in the type of the arguments stated. The stimulated-recall approach was especially “suitable for examining learning and decision-making processes that occur in the lesson itself. Video has the potential to make the practice accessible not possible by other means.” (Mena et al., 2015, p. 5).

Videocases in Teacher Training.

Beck, King, and Marshall (2002) found out that preservice teachers who had practiced how to construct and analyze videocases of classroom teaching by their mentors did better in identifying, analyzing, and interpreting practices displayed in a videocase, compared to their counterparts who never had any videocase construction experience. One strategy suggested by the researchers to improve the quality of videotapes is the use of unobtrusive video camera to record classroom interactions. They proposed use of “a hand-held Cannon ZR-10 digital camera” (p. 353). In another study, Star and Strickland (2008) found out that when math teachers viewed videos of taped lessons their ability to observe teaching practices increased. These included key features like “classroom

environment, mathematical content of a lesson, and teacher and student communication during a lesson” (p. 107).

A study by Baecher, Kung, Jewkes, and Rosalia (2013) explored the use of videocases to prepare preservice teachers to critique their own videos. In this study, the researchers found out that preservice teachers who evaluated videocases of teaching prior to evaluating their own videos, evaluated their videos more accurately and their scores were close to those of supervisors. However those preservice teachers who never viewed videocases, and only read lesson descriptions and reviewed rubrics, rated their videos highly.

Another study utilizing video analysis to find out how to conduct better classroom discussions was conducted by Rosaen, Lundeberg, Terpstra, Cooper, Niu, and Fu (2010). The study highlighted the crucial role of video in analysis of complex classroom discussions. The study revealed that although teachers cannot actually analyze all the facets of a lesson as they teach it, video analysis provides them with a chance to carefully analyze a videotaped lesson. The study also revealed how videocase construction and discussion helped preservice teachers understand how they facilitated classroom discussions.

Seung, Park, and Jung (2013) carried out a study that focused on how evidence-based reflection via video analysis was used to explore preservice teachers’ and mentors’ understanding of inquiry-based teaching features. In this study, the preservice teachers uploaded videotapes of recorded lessons into a server for analysis. The researchers highlighted the importance of recording the lessons unobtrusively, that “the preservice teachers videotaped their teaching of science lessons using a hard disk drive camcorder,

which was set up at the back of the classroom so as not to interrupt the class” (p. 513). During the video analysis each preservice teacher chose the sections of their video they wanted to analyze, recorded the start and end times, and wrote reflections for the video clip chosen. On their part the mentors created their own video clips after watching chosen preservice teachers’ videotapes, and also wrote down their reflections. The preservice teachers could only read mentors’ reflections after they had written their own reflections. All these reflections are based on certain identified features. The researchers state that “to facilitate their evidence-based reflection, six features of inquiry-based teaching were provided in the VAT system as scaffolding lenses on which their reflections focused” (p. 513). The researchers revealed that many of the preservice teachers and mentors participating in the study did not connect or misconnected science inquiry features to teaching observed.

Improved Consultative Feedback and Self-Evaluation.

A study by Capizzi, Wehby, and Sandmel (2010) provided evidence that supported the use of expert consultation and self-evaluation of videotaped lesson delivery to enhance teacher candidates' instructional quality. Results from this study suggested that field-based practicum experiences can be enhanced with the addition of an in-depth consultation session between a supervisor and teacher candidates to review videotaped lesson delivery and provide feedback. Another implication of this study is that guided discussion of specific teacher behaviors in consultation sessions enhances teacher candidate behaviors. In this study, the consultant and teacher candidates identified areas of strength and improvement. Although the researchers refrained from generalizing the findings to mean intervention could fully replace on-site supervision, they suggested that

structured feedback plays a big role in improving instructional efficacy. They recommended further research on the use of expert consultation and self-evaluation of videotaped lesson delivery to enhance teacher candidates' quality of teaching regardless of the size and resources of teacher preparation programs.

In a study by Akcan and Tatar (2010) to investigate the nature of feedback given to preservice English teachers during their practice teaching experience, the researchers found out the use of videotapes to be valuable in “increasing student teachers’ language awareness, making them aware of their strengths and weaknesses, and noticing pronunciation mistakes” (p. 161). The researchers also pointed out that the university supervisors encouraged student teachers to reflect more “on their teaching performance so that they could improve their instruction” (p. 160). The university supervisors and cooperating teachers approached the mentoring activity in different ways, and this is clearly stated by the researchers: “They (university professors) also helped the student teachers to be more aware of their teaching practices by establishing an interactive and a communicative environment for reflection. On the other hand, the cooperating teachers did not communicate feedback in supervision, they made direct comments about situation-specific instances” (p. 160).

Nam, Seung, and Go (2013) conducted a study aimed at determining the effect of collaborative mentoring efforts on preservice teachers’ teaching practice. In this study the mentor watched and analyzed preservice teacher’s videotaped lesson, then gave oral advice and comments to the preservice teacher. Apart from the weekly mentoring meetings, the mentors and the preservice teachers also attended weekly science education seminars, mentoring group discussions, and the preservice teachers also had the

opportunity for self-evaluation of their lessons and mentoring meetings. The self-evaluation process involved journal writing before and after lessons, and also after the mentoring meetings. The researchers reported that preservice teachers changed their instructional strategies to more thought-provoking tasks for their students. Also as a result of collaborative mentoring, preservice teachers gradually changed their classroom culture from teacher-centered to student-centered, and even increased their interactions with the students. The researchers noted that the mentoring sessions provided “beginning teachers with opportunities to reflect on practice, rather than simply transferring skills and knowledge” (p. 832).

In his reflections about personal experiences on reflections based on recorded video Cahalan (2013) states that “a video recording can be watched over and over, with the educator looking for different details each time or studying a particular interaction repeatedly until its many aspects become clear.” (p. 45). There is a possibility that something that could have been missed the first time one watches a video can be seen in the next session. The preservice teacher uncovers more details each time they watch a video again. Cahalan (2013) points out that video recording helps set the record straight for teachers on what actually happens in their classroom, he states that “we could close that gap between what we are actually doing in the classroom and what we think we are doing and want to do” (p. 49).

Video Aided Recall.

Keltinga, Jenkins, and Gaudreault (2014) explored the use of video stimulated recall where a university supervisor and a preservice teacher held a post-lesson conference to review the lesson and analyzed it. Video stimulated recall allowed one to

catch what could have been missed during the lesson. The researchers also found the video stimulated recall facilitated preservice teachers to “focus more on the students and the content than on-site supervision” (p. 35), the skills being developed, and what students need more help. The wait time between the lesson and the post-lesson conference allowed for reflection before the meeting. Tripp and Rich (2012) found video-aided reflection in teaching helped preservice teachers in six main ways: (a) see the need to change, (b) focused analysis of video of their lessons helped them see their teaching from a fresh perspective, (c) because of the recorded video preservice teachers didn’t have to struggle to remember everything and they trusted the corroborated feedback they received from observers, (d) seeing the mistakes made with own eyes made preservice teachers feel the need to change their teaching, (e) remember to effect changes, and (f) repeated video analysis of several lessons enabled preservice teachers monitor their progress.

Beyond Uses and Benefits

Despite the numerous benefits and uses of video-based mentoring, some researchers have warned that this type of mentoring should be carried out cautiously. Mentors are caught in a perilous position of being forthright about preservice teachers’ weaknesses while trying to nurture them at the same time (Friedus, 2002). Friedus noted that being too critical when evaluating a new teacher’s lesson can dampen their self-efficacy beliefs. It is therefore imperative that a mentor should not only advise and guide the preservice teacher constructively, they should also appreciate successful practices of the beginning teacher. The mentoring process greatly affects beginning teachers’ self-efficacy perceptions. Furthermore the quality of the mentoring, and not the frequency,

actually has greater effect on a teacher's efficacy during the early period of their career (Richter, Kunter, Lüdtke, Klusmann, Anders, & Baumert, 2013). Self-efficacy beliefs of preservice teachers have sometimes declined after during student teaching field experiences (Matoti et al., 2011). This decline was especially significant in student engagement and instructional strategies subscales. The researchers emphasized the crucial need for supporting trainee teachers as they initially venture into teaching. Another challenge faced by some mentors and mentees during use of video and collaborative reflection included lack of time and space for meetings, and lack of critical assessment of teacher's knowledge of students (Cherrington & Loveridge, 2014). It is therefore important for all the stakeholders in teacher training programs to know which mentoring practices and strategies work.

The use of videotaped lessons to enhance reflection in teaching has not been without problems. Cahalan (2013) revealed that some of the problems tied to video recording and watching include "nervousness beforehand about being video recorded, embarrassment and even pain when watching and listening to ourselves afterwards, fear that our privacy is going to be violated, and concern that video recording will disrupt or alter what happens in our classroom" (p. 46). This nervousness and embarrassment is elevated if the video is watched with someone else. The researchers also reported that it is always beneficial if the recording devices are small, unobtrusive portable video cameras.

Lasagabaster and Sierra (2011) found out that most teachers do not prefer to be recorded while teaching. Only 12.7% of the 185 teachers who took part in the study preferred to be videotaped while the majority preferred to be observed by someone who took notes while watching them teach. The majority of the participants preferred

classroom observation methods that were less intrusive. The teachers who preferred video-observation, thought this method gave them a global perspective of their classroom and revealed things which could not be revealed by other observation methods (an example being body language of the teacher). The authors believed that preference for video use depended mainly on the personality of the teacher. Some of the things that can be adopted for a successful observation include creating a friendly and supportive environment, understanding that observation takes time, making the observation as inconspicuous as possible, establishing objectives and procedures early, observers should offer constructive and objective criticism, experienced observer, time coordination between the observer and the observed, and the observation should be voluntary.

This study aims to understand the interactions between the mentors and their mentees (preservice teachers). In particular, the focus was on finding strategies used by the mentors during the mentoring sessions. In order to understand the social interactions between the mentors and their mentees, Carspecken's five-stage critical qualitative inquiry method was employed. The next chapter will be dedicated to discussion of the methodology that was used in this study.

CHAPTER III: METHODOLOGY

The purpose of this study is to explore what kind of mentoring strategies are used in the video-observation mentoring program at a four-year university teacher training program. The research questions were

1. What kinds of video-observation mentoring strategies are used for preservice teachers' reflective practice and what are the processes of implementing those strategies as understood by the mentors?
2. Are there discrepancies between mentors' and preservice teachers' perceptions on mentoring strategies? If yes, what are they and what are the possible explanations?

This chapter details the methodology used in this study, including the (a) setting for research; (b) research design; (c) participants; (d) data collection procedures; and (e) data analysis of results.

Setting for Research

My study is centered on finding out what strategies mentors use during the one on one video-observation mentoring sessions. These are sessions where the mentor and the preservice teacher sit side by side to watch the videotaped lesson and together they discuss the preservice teacher's areas of successful practice and areas of potential improvement. These strengths and weaknesses are identified by the preservice teacher who has to self-observe and self-assess the videotaped lesson before scheduling to meet the mentor. The success of the mentoring process is tied to various aspects which

included preparation before the mentoring session, interaction between the mentor and the preservice teacher during the session, and follow-up opportunities available if any. Most of the mentors interviewed during this study have extensive teaching experiences and educational backgrounds, so they have a wealth of experiences to share.

I am aware of the biases I bring into this research. I had the opportunity of working as a video-observation mentor at the beginning of my doctoral program in 2012. As mentioned in the introduction, I mentored about 400 preservice teachers in a span of a year. Most preservice teachers I mentored expressed their surprise at what they found in their videotaped lessons. Most preservice teachers appreciated that the videos of their lessons revealed to them the mistakes they made, and were open to discussions on how they can improve their teaching. I realized that the video-observation mentoring was not only a great complementary tool to direct field observation (where teachers are observed directly by mentors in their host schools) but it was also an effective way of mentoring as it revealed to the preservice teachers what was really happening in the classroom as they taught. I found that most of the preservice teachers accepted constructive criticism as video offered concrete evidence of what went on rather than being told of what they did. I intend to document all the processes involved in this study, check up the findings, and adhere to a structured methodology throughout the process in an effort to avoid my biases tampering with the results of this study.

Research Design

In order to get a better understanding of the mentoring process, Carspecken's critical qualitative research method was adopted for this study (Carspecken, 1996). The complex process of mentoring preservice teachers cannot be explained by quantitative

methods alone; it needs to be thoroughly examined through understanding the behavior and interactions of the participants involved. This is done by examining “the nature of action, experience, and their conditions as part of their methodological framework” (Carspecken, 1996, p. 26).

Carspecken’s critical qualitative research enables one to critically analyze a process and come up with a well-articulated social theory. This study, therefore involved five stages of Carspecken’s critical qualitative research (Carspecken, 1996) that are preceded by preliminary activities stage:

1. Preliminary activities,
2. Stage 1: Building a primary record,
3. Stage 2: Preliminary reconstructive analysis of the primary record,
4. Stage 3: Generation of dialogical data,
5. Stage 4: Description of system relations, and
6. Stage 5: Use of system relations to explain the findings.

Preliminary activities

Before one begins the five stages of critical qualitative research as laid down by Carspecken (1996) there are some preliminary activities that are required. As a researcher some of the activities you have to carry out are stated below.

- state your interest in the project or what motivated you to do the study,
- compile a list of questions that you are interested to get answers for,
- ensure that the list of the questions should be specific enough to be useful, but broad enough to allow for manipulation in future stages of the study;
- list of data sources that you will collect that will help answer the questions,

- describe the participants and the site of study,
- undergo a bias interview with a peer to get to know your biases and have this in mind as you collect and analyze data, and
- explore your value orientations with your peer.

Stage I: Building a primary record

The primary record is on interactions as they happen; that is, the record involves multiple access, meaning that other people would agree with the observations recorded had they been present during the observation, and they would find no glaring absences in it (Carspecken, 1996).

The researcher does not seek to talk to the participants, but rather the data collection is monological (it is based on observations of the researcher alone). There is no penetrating dialogue between the researcher and any of the participants. The researcher takes a purely third-person perspective in reporting what is going on at the site; she remains uninvolved (Carspecken, 1996).

Data are collected in stage 1 through the following procedures:

- passive observation of interaction at the site, and
- recording of the passive observations in notebooks, audiotapes, and sometimes even videotapes.

Techniques that support validity in stage 1 include:

- use of multiple recording devices and multiple observers,
- use of a flexible observation schedule to disrupt unconscious biases in attention,
- prolonged engagement to reduce Hawthorne effects,
- use of a low-inference vocabulary in the written record to keep objectivity high,

- use of peer debriefing to check possible biases in attention and vocabulary, and
- use of member checks on the record of what took place.

Stage II: Preliminary reconstructive analysis of the primary record

In stage 2, the researcher begins to analyze the primary record that has been built so far (Carspecken, 1996). The reconstructive analysis of primary record begins with several readings of the record to note down patterns and behavior, and also anomalies. Based on the low-level coding, the researcher begins work on meaning fields and observer comments by position-taking on sections that are representative of the data collected. Meaning fields and observer comments are put in brackets and the comment begins with the initials MF and OC respectively. The aim of this is to put words into actions of the subjects based on the position-taking of the researcher hinged on norms, values, and beliefs of the way humans act in such situations. The researcher assumes that the subjects experience certain subjective states and the researcher has to reconstruct the observations based on norms, values, and beliefs.

In the analysis of the primary record the researcher employs various procedures which include:

- hermeneutic inferences for meaning reconstruction,
- validity reconstruction,
- analysis of pragmatic and semantic meaning units and their constituting structures,
- role analysis,
- power analysis,
- analysis of cultural and interactive power,

- high and low level coding, and
- reorganization of coding scheme, elicitation of themes, and choice of themes for analytic emphasis.

Techniques that support validity in stage 2 include:

- use of negative case analysis (working with peer debriefers to find out why some of the data do not fit into existing analysis),
- use of stage-three techniques like interview and group discussions in non-leading ways,
- practice prolonged engagement to increase capacity to assume insider's perspective,
- use of strip analysis (analysis of small sections of the primary record to see if they fit into existing themes),
- use peer debriefing, to check possible biases in attention and vocabulary or absences in reconstruction; and
- use of member checks on reconstructions to equalize power relations and to confirm inferences.

Stage III: Generation of dialogical data

In stage 3, the researcher ceases to be the only voice in building and analyzing the primary record (Carspecken, 1996). It is at this stage that the researcher finally gets data from the participants rather than from observations and reconstruction of collected data alone. This new data will be used to check for accuracy of what was collected in stage one and reconstructed in stage two. The ontological categories emphasized here are normative-evaluative and subjective. The researcher begins to intensely converse with the subjects.

Data are collected in stage 3 through the following procedures:

- interview protocol (start off questions, covert categories, follow up questions);
- facilitated group discussions (facilitate, redirect the discussions); and
- Kegan's Interpersonal Process Recall method among other methods (videotape watching, stopping, commenting, recording the views and reactions).

Techniques that support validity in stage 3 includes:

- interview the same subjects repeatedly;
- conduct consistency checks between observed activity and what is said in interviews,
- use of non-leading interview techniques,
- use of peer debriefers for checks on possible leading,
- use of member checks, and
- encourage subjects to use and explain the terms they employ in naturalistic contexts.

Stage IV: Description of systems relations

The ontological categories emphasized here are normative-evaluative and subjective (Carspecken, 1996). In stage 4 the researcher looks at several social sites similar to the site being studied.

Data are collected in stage 4 through the following procedures:

- comparative analysis of reconstruction produced on the data of social sites, and
- specialized interview and group discussion to elicit subjects' experiences of several social sites.

Techniques that support validity in stage 4 include:

- prior fidelity for validity in stages 1 to 3,
- match between the researcher and subjects' perceptions of culture existing at the research site,
- match between researcher's reconstructions and those published by other researchers, and
- use of peer debriefers.

Stage V: Use of systems relations to explain findings

The ontological categories emphasized here are objective, normative-evaluative and subjective. In stage 5 the researcher strives to explain and connect the findings from stages 1 to 4 to broader system features or existing social theories which are tied to economic and political resources and constraints, and cultural traditions (Carspecken, 1996).

Data are collected through the following procedures:

- analysis of material and social-psychological interests,
- analysis of environmental conditions,
- analysis of political resources and constraints,
- analysis of economic resources and constraints, and
- analysis of the broad distribution and currency of cultural themes.

Techniques that support validity in stage 3 include:

- prior fidelity for validity requirements in stages 1 to 4,
- wide appeal,
- sound arguments connecting the findings to existing social theories, and
- expression of consent from the audience.

Participants

This is a study of a video-observation mentoring process for senior university students in the teacher education program who are in their final semester before graduation. The senior students are placed in host schools around the Houston area to observe and practice teaching. There are a minimum of five mentoring sessions, one to two of which are based on a videotaped lesson the preservice teachers taught, while the rest are based on observations of live lessons in the host schools. During the spring semester of 2015 there were about 150 preservice teachers finalizing their teaching practice. They were being mentored by 12 mentors. Participants for the study were selected based on a sample of convenience. The criteria for selection of both the mentors and preservice teachers was prior participation in video-observation mentoring process during the spring semester of 2015.

Participating Mentors

Nine mentors participated in this study. The table below contains brief descriptions of the mentors. Pseudonyms have been used to protect the identity of the participants.

Table 1. Descriptions of Participating Mentors

Participant	Description
<i>Mentor 1</i>	Former assistant principal for 29 years. Has a master of education degree. Trained in educational leadership and administration.
<i>Mentor 2</i>	Has a doctorate in education leadership.

	<p>Has experience supervising reading specialists for 12 years.</p> <p>Taught education courses for graduate level students for 11 years.</p>
<i>Mentor 3</i>	<p>Former school principal.</p> <p>Has trained to observe and conference with teachers.</p>
<i>Mentor 4</i>	<p>Former school principal</p> <p>Has some formal training in effective mentoring in the past.</p>
<i>Mentor 5</i>	<p>Former principal for five years.</p> <p>Alternative Certification Program specialist for three years.</p> <p>Supported the work and training for the program supervisors.</p> <p>Stepped in when teacher interns encountered difficulties.</p> <p>Has fourteen years as an elementary human resource director.</p>
<i>Mentor 6</i>	<p>Former school principal.</p> <p>Has extensive teaching experience.</p>
<i>Mentor 7</i>	<p>Department chairperson at a high school for 5 years.</p> <p>Served as a high school teacher for 12 years.</p>
<i>Mentor 8</i>	<p>Extensive experience of over 38 years in education.</p> <p>28 years as an administrator (principal, deputy superintendent, superintendent of schools).</p>
<i>Mentor 9</i>	<p>Served as a principal for 11 years.</p> <p>Taught for 24 years.</p> <p>Has written a lot of curriculum for a school district.</p>

Participating Preservice Teachers

A total of 93 preservice teachers responded to the survey. The survey response rate was 62%. Of the 93 respondents, majority were female (88 out of 93) and 5 were male. Their areas of certification were as follows: EC-6 (67), 4-8 (12), 9-12 (10), and EC-12 (1). A total of 74 participants identified themselves as senior students, while 15 identified as masters students, and one participant identified himself or herself as junior. The majority of the participants (82) had taught in classrooms for less than two years, and only 8 participants claimed they had teaching experience of more than two years. The table below shows the demographics of the preservice teachers who took part in the study.

Table 2. Demographics of participating preservice teachers

Demographic	Classification	Responses (self-reported)
Gender	Male	5
	Female	88
Area of certification	EC-6	67
	4-8	12
	8-12	8
	EC-12	1
Class year	Junior	1
	Senior	74
	Masters	15

Teaching experience	Less than a year	51
	1-2 years	31
	More than 2 years	8

Data Collection

I collected data from three sources: observations of mentoring sessions, survey of preservice teachers, and individual interviews with mentors and preservice teachers.

Table 3. Data Collection Procedures

Procedure	Description
Observations	Two observations were carried out. The discussions between the mentor and the preservice teacher were recorded each time using an audio recorder. Took notes. Each meeting took about an hour.
Online survey	Developed in Qualtrics survey software. Send to all preservice teachers by course instructor. Expected to last at most 15 minutes. Survey questions are in Appendix A. Data collected were used to create more interview questions.
Interviews	Semi-structured one on one interviews focusing on what mentors and their mentees are expected to do before, during, and after the video-observation mentoring sessions. Interview protocols were used as guides (See Appendices B and C). Most of the interviews lasted between 30-45 minutes, but follow-up interviews took shorter times between 20-30 minutes.

The data from the two observations of video-observation mentoring sessions were used to guide interview questions and were analyzed for common themes of mentoring strategies. In the two observations the venue was in the host schools where the preservice teachers were doing their student teaching.

The online survey took at most 15 minutes. It began with a brief description of the importance of the survey and a confidentiality statement. The length of the survey and the estimated time of the survey was stated too. Participants were required to fill in what area of teacher certification they are seeking, the grade in which they are student teaching, and their teaching experience (See Appendix A).

The interview protocols were designed based on interview guidelines laid down by Carspecken (1996). Each interview protocol consisted of three domain topics, several lead-off questions under each domain topic, and finally several covert categories that consist of areas that the participant is expected to cover during the interview (See Appendix B and C). The interview protocols were used as guides on what was to be covered during the interviews. However more questions were asked during the interviews based on the responses of the participants.

The first round of individual interviews were conducted face to face or over Skype and lasted an average of 35 minutes each. However, subsequent follow-up interviews were conducted over phone, Skype, or face to face and took less time (about 25 minutes each).

Data Validation

The following techniques were used to ensure data collected and analyzed met the validity requirements.

Use of multiple recording devices.

Multiple recording devices were used to record what was observed at the mentoring sessions. I made notes in notebooks as well as recorded the audio of the conversations between the mentor and the preservice teachers. I noted the time of each of

the comments written down in the notebook so as to corroborate the interpretations from the audiotapes.

Flexible observation schedule.

One of the observations was conducted in midmorning, while the second one was observed in the afternoon. The two observations involved the same mentor meeting different preservice teachers. In order to reduce the Hawthorne effect resulting from participants' awareness that they are being observed, a flexible observation schedule was adopted to help disrupt participants' unconscious biases in attention (Carspecken, 1996).

Prolonged observation schedule

I also prolonged my observation to fully get an insider's view. I really wanted to know what mentors go through during the mentoring process. I did this by observing the mentoring process and staying through both sessions. Each session lasted about an hour. I recorded the interactions of the mentor and mentees on audio recorder and I also made field notes.

Low level coding.

Low level coding rule was adhered to when making observation notes during building of primary record and preliminary reconstructive analysis. This was to ensure that objectivity was kept high. This also ensures researcher's bias is reduced, as the researcher does not make high-level inferences, especially in the first three stages of Carspecken's critical qualitative research method.

Peer debriefing.

I consulted a fellow doctoral student to find out if anything was left out of the recorded observations of the mentoring sessions. This was done after fully briefing the

former doctoral student about the study. This doctoral student was in the final stages of the program and had completed foundational research courses in the program. The student was knowledgeable about qualitative and quantitative methods, and had also taken the critical theory research course. Thus, the student could give provide insight on the mentoring sessions. The student studied at the observation and interview transcripts, and the emerging themes from collected data. The student agreed that I should group the themes into three categories: preparation for mentoring strategies, strategies employed during mentoring sessions, and the follow-up strategies for helping the preservice teachers after the mentoring sessions. The student advised me to merge some of the themes.

Non-leading interview questions.

The interview questions were created carefully so as not to lead the participants. The participants were also informed they did not have to answer questions they were uncomfortable with. Non-leading questions enable a researcher to talk about their experiences without having to lean to a certain perspective.

Member checks.

I send the initial data analysis of the observations to one of the mentors, in order to determine if the analysis was indeed a true record of what went on during the observations. The mentor was the one who was observed during the two mentoring sessions observed during this study. The mentor suggested that I should merge some of the initial themes and also ensure that I do not use same quote more than twice. The mentor also suggested that I should add more text to the paragraphs that introduced the quotes. The mentor liked the use of quotes to reinforce my points. In general the mentor

agreed with what I presented as being a true record of what went on during the observations of mentoring sessions. After getting the feedback I implemented the mentor's suggestions by rewriting some sections of my data analysis.

Follow-up interviews.

I carried out follow-up interviews among seven out of the nine mentors who participated in the initial interviews. None of the preservice teachers interviewed during the first round of interviews were available for a follow-up interview. The follow-up interviews with the mentors helped clarify some of the things that were not clear after the first interview.

Data Analysis

The data analysis of this study involved preliminary reconstructive analysis of monological data from the two field observations and dialogical data from survey and interviews. The data analysis was carried out following the guidelines outlined by Carspecken (1996). This analysis included looking out for any patterns or even unusual events which warrant further investigation. The initial data analysis involved identification of possible mentoring strategies from the data generated by observations, survey, and interviews. Mentoring strategies extracted from observations and interviews of mentors and preservice teachers were then compared with that extracted from the qualitative survey of preservice teachers.

The statements from data collected through observations, surveys, and interviews were analyzed by horizon analysis, power analysis, and role analysis. Horizontal analysis (as shown by the example below) places validity claims within three categories: objective, subjective, normative evaluative, and identity. The vertical analysis

differentiates the level of inference for each of the horizontal claims into two categories (backgrounded and foregrounded levels).

Example of Horizon Analysis

From page 6 of First Field Observation Notes.
<p>Mentor: “So after looking at this what would you say your take away is?” [OC: Mentor maintains eye contact, shows interest].</p> <p>Preservice teacher: “(Seems to hesitate, thinking). Definitely I would continue working on my pacing. Some of the students get restless after sometime. Try to limit some of the steps, combine some as you said earlier. Try to get a little more excited, keep a little smile on my face. Not to concentrate so much on thinking what is coming next!” [OC: Preservice teacher seems excited, smiles, frowns].</p> <p>Mentor: “Oh yeah?” [OC: Nods, smiles approval]</p> <p>Preservice teacher: “I know that with more lessons the transitions will be easier for me so I don’t have to worry a lot as every step will be kind of automatic. So definitely, I want to keep my pacing down.”</p>
<p>Possible Objective Claims (on mentoring strategies used by <u>mentor</u>):</p> <p><i>Foreground:</i> My role as a mentor is to be actively engaged in listening and also encourage reflection among preservice teachers.</p> <p><i>Background:</i> In video-observation mentoring mentor’s role is to be supportive rather than supervisory.</p>

<p>Possible Subjective Claims:</p> <p><i>Foreground:</i> Preservice teachers should be given enough time to adequately assess and reflect on their teaching performance.</p> <p><i>Background:</i> Preservice teachers need more nudging to actually say what their areas of potential improvement are.</p>
<p>Possible Normative-Evaluative Claims:</p> <p><i>Foreground:</i> I am here as a reflection facilitator to ensure my mentees reflect on their teaching weaknesses and strengths.</p> <p><i>Background:</i> The work of a mentor is to encourage self-reflection and self-assessment before offering advice.</p>
<p>Possible Identity Claims:</p> <p>I am a good listener. I am good at asking probing questions to make my mentees to reflect. I am the mentor.</p>

Figure 1. Example of Horizon Analysis.

This figure is an excerpt of a conversation between mentor and preservice teacher during my first field observation of mentoring session.

Example of Role Analysis

Setting: This conversation between a mentor and a preservice teacher, occurs towards the end of the mentoring session. Excerpt from Observation 1 Notes, p. 6.

Mentor:

“So after looking at this what would you say your take away is?”

<p>Preservice teacher:</p> <p>“(Seems to hesitate, thinking). Definitely I would continue working on my pacing. Some of the students get restless after sometime. Try to limit some of the steps, combine some as you said earlier. Try to get a little more excited, keep a little smile on my face. Not to concentrate so much on thinking what is coming next!”</p>
<p>Mentor:</p> <p>“Oh yeah.”</p>
<p>Preservice teacher:</p> <p>“I know that with more lessons the transitions will be easier for me so I don’t have to worry a lot as every step will be kind of automatic. So definitely, I want to keep my pacing down.”</p>

Figure 2. Example of role analysis.

Roles assumed by the mentor in the above exchange:

1. The reflection facilitator

The mentor takes the role of facilitating discussion in a way that ensures the preservice teacher reflects on their strengths and weaknesses with minimal input from the mentor. Most of the mentor’s responses were meant to just spur the preservice teacher to add more comments on what they had just said.

2. The constructive critic

The mentor made some critical comments or observations during the observation that were meant to correct certain behaviors and improve the teaching performance of the preservice teacher. Such comments the mentor made are shown below.

“You need to smile more.”

“You should be checking for understanding all through the lesson.”

3. The good listener

The mentor allowed the mentee to do most of the talking. She encouraged the preservice teacher to reflect on her strengths and weaknesses, and then state how she will improve her teaching based on the discussion. The mentor maintained eye contact and asked probing questions to show she was actively engaged.

4. The supportive advisor

The mentor not only asked probing questions and provide a listening hear, she also provided advice on how some instructional issues could be resolved. The mentor provided anecdotes from her teaching experience on how she resolved some of the issues the preservice teacher was facing.

Example of Power Analysis

Setting: During the observation of the first mentoring session, the mentor made positive comments as they watched a video with the preservice teacher (mentee). The mentor made a comment about the hook the preservice teacher used at the beginning of the lesson to get students’ attention. . Excerpt from Observation 1 Notes, p. 4.

Mentor: “The hook was really very good!” [OC: Nodding approval].
Mentee: “Yes it was!” [OC: smiles].
Mentor: “You need to smile more.”
(Later) Mentor: “Good! You should be checking for understanding all through the lesson.”

Figure 3. Example of Power Analysis.

Coercive

No use of coercive power was observed. The mentor was actually very friendly during this observation.

Legal-rational

The relationship between the mentor and the mentee was underscored by a tacit contract between the two which structures their relationship as advisor and advisee. This tacit claim is articulated by the exchange above. Although the relationship is not strictly that of a superordinate and a subordinate, the advisor took the role of an experienced mentor who is expected to advise the mentee accordingly.

Although the mentor does not dominate the conversation, her word carried weight when she made a comment. Her comments are based on what is observed in the video, so the mentee accepts the advice. The mentor does not assert herself nor is she vocal. The reflection process is to allow the mentee vocalize her reflective thoughts and get advice on how to improve her teaching practice.

Charismatic

During the course of the mentoring session, the mentor referred to earlier observations to encourage the mentee to continue making improvement. She reminded the mentee how she had made tremendous improvement. After having made such comment, the mentor then pointed out the areas the mentee still needed to improve on.

Normative

The mentor holds the normative power. This is illustrated by mentee accepting most of what the mentor recommended. The mentors were former teachers with extensive teaching and administrative experience. The mentor made recommendations shown below.

“You need to smile more.” (Observation 1 Notes, p. 4).

“You should be checking for understanding all through the lesson.” (Observation 1 Notes, p. 4).

CHAPTER IV: DATA ANALYSIS

The purpose of this study was to explore the kinds of mentoring strategies were used by mentors and their mentees during video-observation sessions. The data that were collected from preservice teachers were from interviews and surveys. The data collected from the mentors were obtained through interviews and observations. The data collected were validated through member checks, recording using multiple devices, flexible and prolonged observation schedules, low level coding to keep objectivity high, use of non-leading interview questions, and follow-up interviews to get clarifications.

The coding of data from observation notes, survey results, and interview transcripts revealed that the strategies used in video-observation mentoring could be grouped into three categories: mentoring preparation strategies, strategies being used during mentoring, and post-mentoring strategies. Each category is discussed separately below.

A. Data Analysis of Mentoring Session Observations and Mentors' Interviews

I carried out two observations of mentoring sessions and interviewed nine mentors. Coding of data obtained from observations and interviews of mentors resulted in the identification of the following mentoring strategies used by this particular teacher preparation program.

Preparation and planning for video-observation mentoring sessions

1. *Hire mentors with extensive background in teaching field:* Most of the mentors interviewed during this study were former teachers and the majority were trained

as (or had been) school principals. This helps the mentors deal with various questions that preservice teachers ask during the mentoring sessions.

2. *Allow time for self-reflection and self-assessment:* The preservice teachers had sufficient time to evaluate their own videotaped lessons in order to identify what they did well and what they needed to improve upon. This was done between the time the video was recorded and the time the preservice teacher met the mentor. Comments from some of the mentors support use of videos as tools for self-reflection.

“I feel the video-taped lessons are more valuable to the student teachers. They are able to observe their teaching and often notice things that they did not know about the effects of their lesson delivery.” (Mentor 2 Interview Transcript, p. 3).

3. *Clarify expectations:* The mentors clarified what was needed from the preservice teachers as they started the video-observation assignment. The following are comments from mentors.

“We have to clarify what the expectations are for designing and delivering a good lesson by discussing in detail the rubrics that guide the evaluation. Having student first do a video-taped lesson and using the rubrics to self-evaluate their own work is very helpful.” (Mentor 2 Interview Transcript, p. 4).

“From the very beginning I make my goal as their student teaching supervisor clear. My goal is to support that you have a successful student teaching experience.” (Mentor 5 Interview Transcript, p. 4).

“By the time I sit and view the video lesson that is actually the first time they present a lesson to me, I generally have held an orientation with the entire group of student teachers and covered observations, lesson planning, lesson cycle, etc. It is an ice breaker at the very beginning of the semester. We have a Q&A session at that time. However, I also do a school visit and meet the student teacher and the cooperating teacher. I hold a small individual conference with each student teacher on their campus. Generally, all I do with the cooperating teacher is introduce myself and provide a short letter of introduction. In addition, I do group and individual emails to student teachers and the cooperating teachers covering housekeeping information needed to help all three of us know what is needed, expected, and provide a two way communication system with me.” (Mentor 5 Interview Transcript, p. 6).

4. *Establish rapport:* Mentors engaged the preservice teachers in small talk to make them relax and be more open during the mentoring process. This was clearly the case in the two observations I did. By showing genuine interest in what the preservice teacher was talking about the mentor encouraged the preservice teacher to feel that what they were saying mattered. Below are some of the comments from mentors.

“I believe that making student teachers comfortable about opening up in order to have an honest discussion about their concerns and areas of need the first step is to build a rapport with them and to ensure them that your role is to support them and help them grow.” (Mentor 2 Interview Transcript, p. 4).

“I contact students by phone calls and emails with information that they should have in order to help them understand their responsibilities. Communication is very important to me. I want to build a strong rapport with students and cooperating teachers. I provide dates and times for all five of their school observations within the first two weeks of the semester. I feel that having them feel secure on timelines and being a good example of organization is very important.” (Mentor 5 Interview Transcript, p. 4).

5. *Review the lesson plan and video-observation coversheet:* Preservice teachers and mentors went over the lesson plan and video-observation coversheet (See Appendix D) before the mentoring session. This enabled the mentor to prepare for various questions the preservice teacher might ask and also it acted as a guide during the mentoring session, especially because time was limited and the mentor wanted the preservice teacher to forward the video to a particular point. These are some comments from the mentors.

“Before I go to observe a student teacher, I do two things. I look through the lesson plan that the student teacher has sent me for the lesson I am about to observe.” (Mentor 9 Interview Transcript, p. 1).

6. *Provide a flexible time frame for mentoring sessions:* Mentors had flexible time frames as mentoring differed for each preservice teacher. Some may require more time than others. In both observations I realized that the mentor always caught something in the video (a teaching strength or a teaching weakness) that a preservice teacher had missed. She also allowed each preservice teacher to discuss something new they noticed about their teaching as they watched the video together. Therefore mentors planned for adequate time to review for extra video clips or engage in a longer discussion. Below are some of the comments from mentors.

“There is no required time frame for the length of the follow-up conference. I believe you should conference for as long as is needed to thoroughly review the lesson and identify targets for improvement.”

(Mentor 2 Interview Transcript, p. 5).

One mentor liked watching the whole video of a preservice teacher to get a better feel of the lesson. Although such an undertaking is time-consuming she thought it was worth the effort.

“The short video clips are fairly worthless in and of themselves... teaching is a holistic experience. The student doesn't usually yet see how a stumble may actually transition into a positive or how a positive clip can be immediately undone with the next teacher action or statement. So the lesson needs to be processed as a whole. Which is time-consuming but what can you do?! The clips, if chosen by the student, are usually (and

quite naturally) what they think shows them in the best possible light. Not always the best way to learn or get worthwhile coaching. However, by allowing the student to identify those two celebrations or two areas to work on, the student retains a sense of control, achievement, and face-saving even with the worst lesson. This is valuable in and of itself to the mentoring process. It gives me insight into what the student is or isn't seeing and lets me go from there. However, I don't base the session on their clips... the clips just open up the discussion.” (Mentor 4 Interview Transcript, p. 8).

Other mentors also supported the idea of watching more than just short clips of the video.

“I have observed some lessons in their entirety, but generally only observe the sections that the student teacher has documented from the video cover sheet. Many times, a student teacher does not record the entire lesson due to technical problems as stated earlier.” (Mentor 5 Interview Transcript, p. 8).

“I prefer viewing the entire lesson primarily because I find scoring the evaluation instrument to be very biased and subjective when only viewing bits and pieces of a video, but much is lost most times anyway due to low volume and lack in viewing the class as a whole.” (Mentor 5 Interview Transcript, p. 8).

One mentor made the interesting observation that it is not the length of the video clips that matter, but rather what can be viewed in the video clips. This suggestion brings to mind the other idea of ensuring that videos should be well shot and of high quality.

Here is the comment.

“For this type of lesson review (self-reflection), video clips are just as helpful. From my perspective, I find it difficult to do a quality observation and review using a video because I cannot view enough of the classroom to see what students are doing and how the student teacher interacts with them. For example, things that would be missed include students who are off-tasks and how the student teacher handles this, students’ readiness for the lesson and if the student teacher makes adjustment if they are not, or how observant the student teacher is about what is happening in the classroom.” (Mentor 2 Interview Transcript, p. 7).

7. *Review past preservice teacher’s evaluations:* The mentor went over the record of past live and video observations that the preservice teachers has been through. This helped in getting a fuller picture of how the preservice teacher has improved and what things the preservice teacher needs to continue to work on. This also seemed to indicate to the preservice teacher that the mentor had done her homework and knew her job. Some comments from the mentors supported this view.

“I also look back at my previous observation evaluation, to see what we targeted as an area for improvement. For example, if we talked about

having a more engaging hook to begin the lesson, I know I will be looking for this.” (Mentor 9 Interview Transcript, p. 1).

8. *Choose an appropriate location for video-observation mentoring:* In both mentoring sessions I observed, the preservice teachers had chosen a quiet venue with less human traffic, ensuring the video played without interruption and without disturbing anyone. This also ensured that the mentoring session would be undisturbed. However, despite this, there were small interruptions like an announcement over the school communication system in the first observation and a janitor pushing a trash bin and picking trash in the library in the second observation. Some comments from the mentors supported this.

“I believe that a private location for the mentoring conference to review lessons is essential. This allows for more open communication and protects the confidentiality for the student teacher.” (Mentor 2 Interview Transcript, p. 6).

“Venue should be private, no one likes to have a witness to their stumbles or eavesdropping on their corrective conversation or sometimes, even the praise! Quiet, so that we can both hear the audio and each other, as well as have the mental space to think and analyze) and without interruptions (this is serious conversation, so should be treated as such).” (Mentor 4 Interview Transcript, p. 7).

“(The venue for mentoring) should be as private and free of distractions as possible. I have found that the teachers’ lounge is not an ideal location for debriefing a lesson. I try to have the student teacher and cooperating teacher figure out a place at their school. But, sometimes, I also have to request a place from the office staff. A corner of the library works at some schools, cafeteria if not lunchtime, or a conference room. Outside courtyard works too!” (Mentor 5 Interview Transcript, p. 8).

“I believe that a private location for the mentoring conference to review lessons is essential. This allows for more open communication and protects the confidentiality for the student teacher.” (Mentor 2 Interview Transcript, p. 6).

9. *Ensure high quality and well-shot videos:* Most mentors complained that the videos taken by the preservice teachers are sometimes of poor quality and do not show enough of the class for a comprehensive mentoring session. This is in part because preservice teachers often use their phones or iPads to record. Below are some of the comments from mentors.

“The video-taped lessons are mostly difficult to evaluate from my perspective. The video limits the range of what I can observe of the lesson. It is difficult to tell what the students are doing.” (Mentor 2 Interview Transcript, p. 2).

“Often, the student teacher is not a video expert and the quality is poor, which also limits my ability to evaluate what is happening.” (Mentor 2 Interview Transcript, p. 2).

“Video-taped lessons are very difficult for supervisors to fully evaluate the lessons. We cannot see what is happening in the entire room. Much of what is important is how students are behaving during the lesson. We often cannot see enough of that to determine if the students are engaged, on-task, understanding of concepts presented, or if the student teacher is pacing the lesson correctly. There is much much more that needs to be accessible to the supervisor.” (Mentor 2 Interview Transcript, p. 5).

“Some teachers have technical problems in adjusting for the correct volume, all students cannot be observed, loss being able to get a good grasp of the entire class atmosphere, and other taping challenges.” (Mentor 5 Interview Transcript, p. 2).

“Personally, I find it difficult to assess the videotaped lessons as I do not always have a good grasp of visuals in the areas assessed by the instrument we use for observations. Student teachers seem to lack the technical skills to record a full lesson; not enough space in the phone or camera being used, volume problems, not able to see the entire classroom, to mention a few.” (Mentor 5 Interview Transcript, p. 5).

“The video observation, itself, is not a helpful instrument for me, mainly because the student teachers record these with a cell phone, or an iPad. The quality is often poor. Many times the entire video does not get recorded, or the video is focused entirely on the student teacher and you can't see what the students are doing.” (Mentor 9 Interview Transcript, p. 3).

“It captures some of the instruction, but misses a lot. Sound quality is bad. The person filming followed the student teacher, but did not focus on students. Sometimes the person filming just shows the head of the student teacher (worried that the students should not be filmed.) The battery ran out.” (Mentor 9 Interview Transcript, p. 6).

Poor quality videos can also cause other problems as one mentor noted:

“From my perspective, I find it difficult to do a quality observation and review using a video because I cannot view enough of the classroom to see what students are doing and how the student teacher interacts with them. For example, things that would be missed include: students who are off-tasks and how the student teacher handles this, students' readiness for the lesson and if the student teacher makes adjustment if they are not, and how observant the student teacher is about what is happening in the classroom.” (Mentor 2 Interview Transcript, p. 7).

10. *Peer evaluation:* During the interview, one mentor revealed that peer evaluation by fellow preservice teachers was helpful. This is how she described her approach.

“For the student teaching 2 program, if the students are strong in their teaching, I pull them together in small groups. I do this by grade level. Students view one another’s videos and provide feedback. Actual scores are not discussed or shared. The students give me their completed rubrics. I have found that students learn from watching one another and provide and receive appropriate feedback. I did have a case where a student asked for a private viewing and I did honor the request.”

(Mentor 1 Interview Transcript, p. 1, 2).

Strategies used during video-observation mentoring sessions

1. *Focus on the objective of the mentoring session:* The mentor stated the goal of the meeting early in the session to guide the preservice teachers regarding the expectations for the mentoring session. In observation 1 and 2 the mentor clearly states the objective of the session as can be seen from the excerpts below.

“The areas you have had problems in are questioning and pacing. Keep that in mind as you go through the video.” (Observation 1 Notes, p. 3).

“We are going to review what you have been doing the whole semester.”
(Observation 2 Notes, p. 1).

2. *Active engagement:* During both observations, when talking with the preservice teachers, the mentor maintained eye contact with the mentees. This seemed to help the mentor to engage the preservice teacher and gauge whether they were uncomfortable, disengaged, or even confused.
3. *Positive reinforcement:* The mentor noted the areas of successful practice the preservice teachers showed. She praised the preservice teachers with positive comments like the one below.

“The hook was really very good!” (Observation 1 Notes, p. 4).

“You are really in it!” (Observation 1 Notes, p. 4).

“Good! You should be checking for understanding all through the lesson.”

(Observation 1 Notes, p. 4).

4. *Constructive criticism:* The mentor also encouraged the preservice teachers to avoid making mistakes seen in the video. During my first and second observation, the mentor pointed out what the preservice teachers needed to improve upon. During the first observation the mentor reminded the preservice teacher that she needed to improve in two areas.

Mentor: *“The areas you have had problems in are questioning and pacing strategies”* (Observation 1 Notes, p. 3).

5. *The mentors should be supportive and not supervisory:* During both mentoring sessions, I observed that the mentor did not act as a supervisor, rather she acted as a collaborator, discussing with the preservice teachers how their teaching could be improved. When asked if preservice teachers ever differed in their interpretations of the videos, one mentor state clearly that they did.

“Yes, they have! I listen carefully to their rationale, and if it makes sense, I will back off. Sometimes something appears one way, but with more info, I better understand the decision-making process they followed and can then interpret what I saw more accurately. Whatever recommendations I give are just that, just recommendations. Resistance to a different viewpoint can be mediated if there is a willingness to hear the opposite viewpoint. If the student feels heard, they are often more willing to consider what I have said. I also try to offer at least two or three options for a possible solution with a statement that there’s always several ways to fix something and that part of their task is to learn who they are as a teacher and build a repertoire of techniques that fit who they are. How I would solve a particular issue can be very different and uncomfortable for someone with a different teaching personality from my own. I try to honor that difference. I also try to frame the issue as objectively as possible so that the teacher has more of a chance to also step back from it and view it impersonally. If they still disagree with me, then that is their choice. It’s not about me being right. It’s about them learning. And they’ll learn one way or the other! My belief is that if I am respectful of their view, then when they make the same mistake again, they’ll remember both parts of our past conversation, my identification of the issue as a problem for their students and what I suggested. Then, if they try my suggestion and find it was helpful, they haven’t lost face. And the same end goal is still reached.” (Mentor 4 Interview Transcript, p. 4).

6. *Be friendly:* In both observations, I noted that the mentor tried her best to act as a friend with a good listening ear. At the beginning of the first observation the mentor discussed a job offer given to the preservice teacher. The mentor listened intently and even offered some useful job advice to the preservice teacher. At the end of the second observation the mentor gave some career advice to the preservice teacher. She encouraged the teacher and told her to be persistent in her job search as someone would soon notice her great teaching qualities and hire her.
7. *Ask more challenging and probing questions:* In both observations I did the mentor asked more challenging and probing questions which in my view forced the preservice teachers to reflect more on their teaching strategies. In one occasion a preservice teacher exclaimed:

“I didn’t even think about that!” (Observation 1 Notes, p. 5).

Mentors also expressed the need for asking preservice teachers questions during the mentoring session.

“I utilize questioning techniques in areas that I want to reinforce as well as questions to have the student teacher think about how he or she might have made some changes if given the opportunity to do the lesson again. Many times the teacher asks for additional suggestions as to how to respond to areas of their own concern.” (Mentor 5 Interview Transcript, p. 2).

8. *Effective closure:* With each preservice teacher, the mentor discussed the teacher's achievements, made recommendations regarding the areas in which the teacher was still struggling, and then laid out an action plan for how to address problems.

Strategies to support preservice teachers after video-observation mentoring sessions

1. *Continue discussion during formal observations:* The mentors planned to continue the mentoring process with the formal live observations, creating a sense of continuity in an integrated mentoring process. These are comments from the interviews of mentors.

“Since video conferences are typically followed by formal observations, discussions happen at that time. For the most part, preservice teachers will bring up things they learned from the experience and applied it to their next lesson.” (Mentor 1 Interview Transcript, p. 2).

“I put notes down that I can refer to for the next observation. With 10 to 15 student teachers, you must be organized and remember what to look for.” (Mentor 8 Interview Transcript, p. 2).

“I refer back to the previous observation prior to going in for the new observation. I make comments on the document as to how the student

teacher did. I also verbally share this with the student teacher.” (Mentor 8 Interview Transcript, p. 2).

2. *More video-observation with the cooperating teacher (CT):* One mentor requested that the cooperating teacher in the host school help with the video-observation mentoring process by taking the video and having the preservice teacher do more self-evaluation of her teaching.

“If a teacher needs further mentoring, I usually suggest that the cooperating teacher video them and the students take home and watch. I let the student teacher know that I have asked the cooperating teacher to do this. Most preservice teachers are open to this if they see a need. They find it helpful.” (Mentor 1 Interview Transcript, p. 2).

B. Data Analysis of Preservice Teachers’ Survey and Interviews

Coding of the data obtained from the interview and survey of preservice teachers yielded the following mentoring strategies:

Preparation and planning for video-observation mentoring sessions

1. *Unobtrusive recording of the lesson:* Some preservice teachers complained that the video recording process was disruptive. However, some preservice teachers recorded their lessons by setting up the camera in a corner of the classroom to be as unobtrusive as possible. Yet, teachers found it difficult to set up the video camera. Below are some of their comments.

“The students tend to be more focused on the camera and the person holding the camera, rather than the lesson.” (Preservice Teachers’ Survey Response #86).

“Hard to set up a recording device in a good location to get good picture and sound. It was difficult to position the camera to where everything was in view.” (Preservice Teachers’ Survey Response #87).

“Students were distracted by the camera, I wasn't able to view the entire classroom” (Preservice Teachers’ Survey Response #91).

“Hard to record whole class. The students being distracted by camera.” (Preservice Teachers’ Survey Response #105).

“Explain to students what to expect or have camera placed in discreet location to where they don't take note of it.” (Preservice Teachers’ Survey Response #168).

One solution to this problem could be to place a camera tripod in the corner of the classroom.

“Perhaps allowing students to rent a camera with a stand.” (Preservice Teachers’ Survey Response #155).

2. *Allow time for self-reflection and self-assessment:* The preservice teachers liked the video-observation process as it gave them time to identify what they did well and what they needed to improve upon. Comments from some of the preservice teachers supported the use of videos as tools for self-reflection.

“I liked being able to see myself teaching. I like to be able to catch mistakes I normally wouldn't catch. I liked that it would make it easier to reflect, you can go back and re-watch the video if you forgot something.” (Preservice Teachers' Survey Response #2).

“Chance to criticize self. Chance to verify critique of others. Opportunity to monitor improvements.” (Preservice Teachers' Survey Response #5).

“It gave me the opportunity to watch myself and have time to reflect on my teaching.” (Preservice Teachers' Survey Response #6).

“Once the lesson has been videotaped, I then schedule to meet the supervisor. But first I have to watch my video several times to identify pause points I would show my supervisor. These are the weaknesses and strengths of my teaching. I have to think about what I could have improved on.” (Preservice Teacher 2 Interview Transcript, p. 1).

3. *Provide a flexible time frame for mentoring sessions:* Some preservice teachers felt that the length of the video clips showed to the mentors should be increased to give the mentors a better perspective of the lesson. Here are some of the comments from the preservice teachers.

“I felt like the video-observation wasn't a thorough way to observe a lesson because my supervisor only got to see small portions of the video and I once decided to record another lesson to submit because I wasn't

completely satisfied with the video I originally recorded.” (Preservice Teachers’ Survey Response #102).

“Adviser and student teacher sit down and watch the whole video together so the adviser gives their feedback also.” (Preservice Teachers’ Survey Response #151).

“The only thing that the video-observation mentoring program needs to improve is making the video clips longer so that the supervisor can see more of the lesson.” (Preservice Teachers’ Survey Response #167).

4. *Ensure high quality and well-shot videos:* Some preservice teachers complained about the poor quality of the videos they had recorded. This affected the mentoring process as the mentor could not get the full picture of the lesson. Below are some of the comments from the preservice teachers.

“The camera did not pick up everything, so some portion of my lesson were not clear. It’s awkward, and the kids like to make funny faces for you to see afterwards on the recording.” (Preservice Teachers’ Survey Response #85).

“It is always a pain getting the actual video done. Finding proper equipment that gives a good quality picture, and having your CT record always results in unwanted events, like her phone ringing, redirecting

students, and shaking the camera.” (Preservice Teachers’ Survey Response #86).

“The volume was kind of low.” (Preservice Teachers’ Survey Response #100).

“The audio quality sometimes not the best. The lighting in the classroom makes a difference. Sometimes loud noises seem off task, but are not.”
(Preservice Teachers’ Survey Response #101).

5. *Peer evaluation:* Some of the preservice teachers expressed interest in having someone else other than the mentor critique their video. Below are some of the comments.

“I feel like I should get more feedback from more than one person.”
(Preservice Teachers’ Survey Response #108).

“Having a more experienced teacher review the whole video and what I could have missed.” (Preservice Teachers’ Survey Response #124).

“I wish I could view it with my cooperating teacher.” (Preservice Teachers’ Survey Response #180).

Strategies used during video-observation mentoring sessions

1. *Active engagement:* Some preservice teachers mentioned that they expect that after all the hassle of videotaping and analyzing a lesson they do expect that

the mentor should make an effort to watch most of the video and actually engage them in a productive discussion. Below are some of the preservice teachers' comments.

“I did not like that it was a hassle to set up the video. I did not like that my supervisor very rarely viewed the video and told me it was really for self-reflection. I thought that we were supposed to receive feedback on all of the lessons including the videos. I did not like having to rely on the ability to video a lesson.” (Preservice Teachers' Survey Response #80).

“Supervisor did not have a chance to view the whole video so we did not receive their input.” (Preservice Teachers' Survey Response #84).

2. *The mentors should be supportive but not supervisory:* Some preservice teachers liked the idea that the reflection on recorded lesson based on mutual respect and collaboration. The preservice teachers had control of what was being discussed as well. The preservice teachers also have a chance to verify or discuss further what the mentor was telling them. Here are the comments.

“Self-reflection, creating stopping point to discuss problem areas, I control what we discuss.” (Preservice Teachers' Survey Response #17).

“I have a chance to criticize myself, verify critique of others, and opportunity to monitor improvements.” (Preservice Teachers' Survey Response #5).

The next chapter is dedicated to the discussion of the findings, implications of the findings to teacher preparation, limitations of this study, strengths of this study, recommendations for further research, and conclusion.

CHAPTER V: DISCUSSION, IMPLICATIONS AND RECOMMENDATIONS

The purpose of this study was to explore mentoring strategies used by mentors and their mentees during video-observation sessions. Qualitative methods were employed to collect data through observations of mentoring sessions, online surveys, and semi-structured interviews. This chapter will elaborate on the findings and conclusions drawn from this study, and will discuss the limitations, strengths, implications, and recommendations for further research.

The following research questions guided this study:

1. What kinds of video-observation mentoring strategies are used for preservice teachers' reflective practice and what are the processes of implementing them as understood by the mentors?
2. Are there discrepancies between mentors' and preservice teachers' perceptions on mentoring strategies? If yes, what are they and what are the possible explanations?

Improvements

The data analysis of the strategies extracted from the mentors' observations and interviews and the preservice teachers' survey and interviews revealed some similarities. Some prerequisites to a successful mentoring session included (a) provide a flexible time frame for mentoring sessions; (b) ensure high quality and well-shot videos; (c) allow adequate time for self-reflection and self-assessment; and (d) peer evaluation. There were also some similarities in the strategies used during mentoring sessions: (a) active

engagement, and (b) mentors in a supportive role rather than supervisory. Here are some suggestions for improvement of the video-observation mentoring process. The data collected from the survey of preservice teachers did not yield any post-mentoring strategies, most preservice teachers' responses were limited to what strategies were employed in preparing for the mentoring sessions and how the mentoring sessions could be conducted successfully. There are a few areas that needed improvement. These areas of improvement will be discussed below.

Technology Integration

Whereas most mentors were worried about the technical aspects of video recording (ex. camera battery running out, bad audio etc.), most preservice teachers were worried about the disruption caused by video recording in the classroom. Most preservice teachers wanted to find ways of recording the lesson unobtrusively, whereas most mentors were concerned about the quality of the recorded video. Teacher training programs should not only be concerned with the quality of the mentoring sessions, there is a need to make the video recording process as smooth and unobtrusive as possible (Seung et al., 2013; Beck et al., 2002). One way to address this is to introduce or strengthen existing technology integration courses to adequately prepare preservice teachers for the video recording assignment.

Mentor's Role

The role of a mentor is slightly different from that of a supervisor in a teacher training program. Although in this case the mentors in video-observation mentoring sessions were the same people who also did the supervision and observation of live lessons, the mentors change their roles slightly during video-observation sessions. This is

indeed not a new practice as mentors take both supervisory and mentoring roles during the mentoring process (Ambrosetti & Dekkers, 2010). In video-observation session the mentor takes the role of a collaborator discussing how a lesson can be improved.

However, at the beginning of the meeting the mentor sets the tone of the meeting by setting clear expectations about what they intend to accomplish during the session.

Mentor's also act as assessors when analyzing the way preservice teachers reflect on their teaching. The mentor, then changes into a more supportive role of being a collaborator as the discussion starts. Both the mentor and the preservice teacher control what is discussed during the meeting, each can ask any question at any point, each can stop the video to discuss some strategy or ask a question, and the preservice teacher is not assessed based on the quality of their teaching but rather on how they reflect during the session. As the session progresses the mentor takes the role of advisor, facilitator, role model, critical listener, emphatic listener, and friend among other roles. The preservice teacher takes the role of being a clarifier, trainee, and attentive listener. At the end of the video-observation mentoring session the mentor shifts her role to that of being an assessor again by summarizing what they have accomplished, what the preservice teacher needs to do after the session, and informing the preservice teacher how she did during the reflection.

Permission to Record

Both the preservice teachers and the mentors felt that the process of obtaining permission to record students is arduous in some schools. Most preservice teachers complained that it was difficult to obtain video recording permission from parents. A better way to ameliorate this could be seeking parents' permission early in the semester.

Here are some comments from both the mentors and preservice teachers that supported this view.

“Determining if permission slips and parent information are needed and then gathering these forms.” (Mentor 5 Interview Transcript, p. 6).

“School gave issues about not allowing students to get recorded.”
(Preservice Teachers’ Survey Response #136).

“It was hard to get all permission slips signed.” (Preservice Teachers’ Survey Response #138).

“It was very time consuming, extremely difficult to get parent permission slips in the demographic I teach.” (Preservice Teachers’ Survey Response #106).

This process should be improved, as several preservice teachers talked about the frustration of video recording only some students in a particular classroom due to failure to get permission to video record all students. A preservice teacher complained that a video recorder ended up recording only the teacher as she was not sure who among the students should not be recorded. One way this situation could be improved is to seek permission early during the semester, or encourage enactment of a school wide policy about video recording in the classroom for educational purposes.

Video Recording Process

The mentors and the preservice teachers felt that it is better to record the lessons unobtrusively preferably from the back of the class so that it does not interrupt students. A high-quality camera with a stand in the back of a classroom makes the most sense for shooting footage. Mentors suggested that a full, clear picture of the entire classroom that is well-shot provides the best evidence for preservice teachers using these tools for self-reflection.

Collaborative Reflection

There should be adequate time for the preservice teachers to carefully assess their strengths and weaknesses, and reflect on how they could have improved the lesson long before they meet the mentor for guidance (Keltina et al., 2014; Rosaen et al., 2010). Some preservice teachers preferred to have someone else (ex. cooperating teacher or fellow preservice teacher), other than the mentor, watch their video in advance of the mentoring session. Some of the mentors also encouraged preservice teachers to form small peer groups to view and provide feedback on teaching videos. Preservice teachers found the video-observation mentoring beneficial. One preservice teacher stated that it is good to have a fresh set of eyes to catch what one missed.

“Often we see what others see different and this helps you improve and grow.”

(Preservice Teacher 1 Interview Transcript, p. 2).

Successful Strategies for Mentoring Sessions

There were some observations I made during the course of this study that I found to be helpful in ensuring that the interactions between the mentors and the preservice teachers were successful. The whole video-observation mentoring process was organized

and the participants were well aware of what the overall objectives were. Below are some of the successful strategies.

Active Engagement

During the observation of the mentoring sessions, I always noticed that maintaining eye contact was a great tool used by mentors to ensure that they do not miss nonverbal cues from the preservice teachers. By maintaining eye contact, the mentor ensures that they appear actively engaged and interested in what the preservice teacher is discussing, and are able to respond accordingly. Most preservice teachers liked the video-observation mentoring sessions, as they were able to self-reflect on their practice (Harford & McRuairc, 2008) and to identify areas of their practice that needs improvement, to discuss with their mentor. They felt that this complemented the direct field observation where the mentor evaluates preservice teacher's performance during teaching practice.

Hiring Qualifications

Almost all of the mentors who participated in this study were former school principals. The mentors had a firm grasp of what teaching entails, and school policies and administration. Hence, they were able to guide their mentees on various school related issues raised during the mentoring sessions. Thus, the need to hire mentors who have extensive experience in the education field is imperative as the accrued experience provides a solid foundation for preservice teachers to obtain feedback about the challenges and issues they come across in their school placements.

Organizational Tools

In order for a mentoring session to be successful, the mentor and mentee should have a framework to base their reflection. In this study, the preservice teachers used an assessment rubric (see Appendix E) to self-evaluate their performance. At the beginning of each Spring and Fall semesters, preservice teachers in Student Teaching 1 and 2 programs attend orientations where their mentors clarify what is expected of the preservice teachers during their student teaching practice. During subsequent school visits to meet the preservice teachers and their cooperating teachers, the mentors strived to establish rapport with the preservice teachers. The mentors also kept in contact with preservice teachers through emails and phone calls.

Flexible Mentoring Duration

There was no popular preferred length of time for the video-observation mentoring sessions. Some mentors felt that 20-30 minutes were enough for reflection. However, other mentors felt that watching and reflecting on 4-5 video clips in 20-30 minutes is not adequate to reveal the whole picture of what went on in the classroom. One mentor actually preferred watching the video of the whole lesson. The mentor recognized that watching the video clips serves as a good starting point to having an open discussion. Flexible mentoring duration would enable a mentor to spend more time guiding a preservice teacher who has experienced problems teaching in her host school. In such cases the mentor can choose to watch the whole video or most of the video, and spend more time discussing ways that the preservice teacher can improve her teaching performance.

Mentoring Venues

Most mentors stressed that the venue for video-observation mentoring should be a private quiet place. This allowed for better listening to the audio of the recorded video, and also because most preservice teachers are hesitant to be watched by even the mentor let alone other people passing by. Some of the preservice teachers admitted that they were uncomfortable having to watch a video of their lesson with someone else. On being asked if they felt any discomfort during the video-observation mentoring meeting, one of the preservice teachers interviewed agreed with this and also revealed how mentors remedy this situation through reassurance that beginning teachers are not perfect.

“Yes, I was uncomfortable because I was not sure what type of feedback I would get.” (Preservice Teacher 1 Interview Transcript, p. 1).

“Explain that everyone has been through this process and often it doesn’t go well as planned but that’s how we improve in teaching.” (Preservice Teacher 1 Interview Transcript, p. 2).

Safe Reflection Environment

Most of the mentors felt that having a chit chat or small talk before the mentoring session helped make the preservice teachers comfortable and more open. During my observations of the mentoring sessions, I noticed that the mentor assumed a role of a friendly counsellor, someone the preservice teachers could confide in and get some advice. One of the preservice teachers interviewed admitted that they are uncomfortable as they did not know what the mentor will tell her. There is a need to create a safe and comfortable environment for reflection and open discussion (Akcan & Tatar, 2010;

Harford & MacRuairc, 2008). The meeting should be planned well in advance to ensure that both the mentor and the mentee are furnished with all necessary information needed. Trust should exist between the mentor and the mentee in order for the mentee to open up about the areas they need to improve on.

Implications for Preservice Teachers Mentoring

Teacher training programs should work with host schools to improve ways of obtaining permission from parents and guardians to record students. This should preferably be done earlier in the semester, to ensure more permissions are obtained by the time of recording. In this study I noted that mentors and preservice teachers were frustrated by the existing arduous process of obtaining permission. It was difficult to record a lesson where some students cannot be recorded as their parents had not granted consent for them to be recorded. In such cases, the mentors and the preservice teachers would not get a full picture of what went on during the lesson as only part of it was recorded. It would be more ideal if most of the students could be recorded.

One of the main concerns expressed by the mentors was that the quality of the videos was poor. Some videos had bad audio and some were not well-shot. There is need to improve ways of shooting the videos to ensure that the resulting quality is high. Well-shot and high quality videos would enable the mentors and the preservice teachers to make better judgments based on accurate observations of what actually transpired during the lesson.

It is important that mentors create a collegial environment that encourages the preservice teachers to reflect on their teaching practice without fear of being penalized or ridiculed for the mistakes they made while teaching. Mentors should offer constructive criticism as well as positive reinforcement. Mentors should encourage the preservice teachers to learn from their mistakes.

Limitations

The sample size of the preservice teachers was small as only two preservice teachers were interviewed. Most of the preservice teachers were busy as they were in their final semester of their studies and were spending about four to five days in the host schools. This was a short study that lasted for only three months. If time had allowed, it would have been much better to find out preservice teachers' perceptions on video-observation mentoring during the final two years of their teacher training program.

Strengths of the Study

This study draws its strength from the structured research design proposed by Phil Francis Carspecken (1996). This study thus involved five stages of Carspecken's critical qualitative research as discussed in the previous chapters. In order to avoid researcher bias interfering with the findings, I underwent a bias interview to ensure that he does not let his beliefs interfere with the findings. Every stage of this study had data validation procedures. These data validation procedures helped confirm the observations made. So, although the survey data are self-reported they are not completely reliable as some participants can respond to some items in a socially desirable manner, I did take time to validate the survey data through other sources like interviews and observations. During observations, survey, and interviews of the participants some of the validation tools that were used included recording data using multiple recording devices, low level coding, peer debriefing, member checks, non-leading interview questions, and follow-up interviews among other procedures. Apart from surveys, I also carried out interviews and observations of mentoring sessions were also carried out. I compared interview data and observations data to find out the common themes.

Recommendations for Future Research

The contributions of this research to the field of teacher preparation can be extended by researchers in the future in a number of key ways. First, researchers should engage in longitudinal studies, such as interrupted time series research studies, in order to investigate links between video-observation mentoring and preservice teachers' performance over a significant period of time. Additional research is needed to determine how novice teachers can be guided and mentored in their new profession. The process of teaching and learning is complex, and teachers need to be motivated to be able to engage and excite students to participate in meaningful learning. Researchers should strive to find more practical ways that will help train teachers to be more efficient in their work. We need to train teachers in our universities and colleges to be innovative. More field observations of the video-observation mentoring sessions would help us understand how such sessions could be designed and conducted better.

I began this study in hopes of answering the question of how to ensure that beginning teachers are adequately prepared for their profession. At the conclusion of this study, I found that reflection, especially through video is one of my most powerful ways in which beginning teachers can prepare for their profession. And, through the additional aid of guided video mentoring, both analysis and development of teaching are enhanced through the mentoring strategies used during the sessions. Throughout my work with mentors and preservice teachers, I found that the strategies for guided mentoring were essential in facilitating successful guided video mentoring sessions. High quality video mentoring by experienced teachers and university supervisors is a valuable experience for preservice teachers that are preparing for the complex world of teaching.

Conclusion

Preservice teachers value what others say about their teaching practice. Most of what they are told by their mentors and their peers all count towards making them better teachers. It is a process of continuous improvement. As Dewey (1982) put it more clearly, education should be seen as a continuous process of learning through experience. It is not a static field that one just accumulates knowledge (Schön, 1987). It is a practice that improves with reflection based on the experiences we encounter. This was underscored by one of the preservice teachers during the interviews, as shown by the excerpt below.

“Feedback is always great. Often we see what others see different and this helps you improve and grow. After my observations we discuss what needs to be improved and she allows me to work on this by giving me more opportunities to during class time.” (Preservice Teacher 1 Interview Transcript, p. 2).

Video-observation mentoring is a vital component for reflection in many teacher training programs and in-service programs. One of the strengths of video-observation mentoring is that it provides an opportunity to a preservice teacher to observe what really went on in the classroom. By watching their own videos of their teaching performance, preservice teachers can pinpoint what they need to improve on based on actual footage. This is evidence-based reflection at its best. Preservice teachers have a chance to rewind and watch the video as many times as they assess and reflect on what their strengths and weaknesses are. Preservice teachers have the opportunity to observe what actually happened in the classroom (Cahalan, 2013; Welsch & Devlin, 2006) and reflect on ways they can improve their teaching. Video is a great tool that teachers can use regularly to

monitor their progress (Keltina et al., 2014) so that they can see how they are improving.

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Appendix A

SURVEY QUESTIONS FOR PRESERVICE TEACHERS

Your responses are confidential. Participation is confidential, voluntary and is estimated to take no more than 15 minutes.

What is your gender?

- Male
- Female
- I would rather not say

What is your area of certification?

- EC-6
- 4-8
- 8-12
- EC-12

What is your class year?

- Freshman
- Sophomore
- Junior
- Senior
- Master's degree student
- Doctoral student

What is your teaching experience?

- None
- Less than a year
- 1-2 years
- More than 2 years

Have you taught a class this semester at your teaching practice host school?

- Yes
- No

Have you video-taped your lesson during teaching practice this semester?

- Yes
- No

Have you met your advisor to discuss your teaching strengths and weaknesses based on your video-taped lesson?

- Yes
- No

In your view what three things did you LIKE about the video-observation mentoring?

- 1.
- 2.
- 3.

In your view what three things did you NOTLIKE about the video-observation mentoring?

- 1.
- 2.
- 3.

What would you like improved in the video-observation mentoring program?

Appendix B

INTERVIEW PROTOCOL #1 (FOR MENTORS)

Strategies for video-observation mentoring of preservice teachers

Interview Protocol (for Mentors)

Research Questions

1. What kinds of video-observation mentoring strategies are used for preservice teachers' reflective practice and what are the processes of implementing them as understood by the facilitators?
2. Are there discrepancies between mentors' and preservice teachers' perceptions on mentoring strategies? If yes, what are they and what are the possible explanations? (*This question would be modified based on the data collected.*)

Topic Domain 1: Preparation for mentoring sessions

[Lead-off Question]

How did you join the mentoring program?

Are there some preparations you have to do before the mentoring sessions?

[Covert Categories]

Mentors teaching background

Training for mentoring

Scheduling

Conversation techniques

[Follow-up Questions]

Does the university have any formal training sessions for mentors? Or do you just use your past teaching experiences as a guide?

How do the preservice teachers schedule to see you? Do you know beforehand what they will be discussing with you?

Do you have to watch the whole videotaped lesson before the mentoring session?

Do the preservice teachers send any documents to you before the mentoring session?

Topic Domain 2: Strategies used during the mentoring session

[Lead-off Question]

Describe for me what you do during a mentoring session, from when a preservice teacher comes to see you until they leave the session.

[Covert Categories]

Providing feedback

Sharing experiences

Strategies for managing challenges

[Follow-up Questions]

So were there anything you liked about the mentoring sessions? If so, what are they?

So were there anything you didn't like about the mentoring sessions? If so, what are they?

So were there any aspects of the mentoring session that could be improved?

If you are mentoring a preservice teacher who is not providing enough information or you feel is holding back how do you deal with this?

Have you had a case where a preservice teacher disagrees with what you recommend?

If yes, how do you deal with such situations?

Topic Domain 3: What follows after mentoring sessions?

[Lead-off Question]

Can you tell me how you interact with the preservice teachers after the mentoring sessions?

Has there been a case where you think a preservice teachers needs further video-observation mentoring? If so, explain to me what happened?

Are there some programs in place to ensure they get mentoring assistance whenever they need?

[Covert Categories]

How do you follow up on what was resolved during mentoring sessions?

For cases of preservice teachers who have difficulties in the field how do you follow up on this?

[Follow-up Questions]

Do you monitor how your mentees are doing after the mentoring?

For cases where you think a preservice teacher needs further mentoring what usually happens?

Appendix C

INTERVIEW PROTOCOL #2 (FOR PRESERVICE TEACHERS)

Strategies for video-observation mentoring of preservice teachers

Interview Protocol (for Preservice Teachers)

Research Questions

1. What kinds of video-observation mentoring strategies are used for preservice teachers' reflective practice and what are the processes of implementing them as understood by the facilitators?
2. Are there discrepancies between mentors' and preservice teachers' perceptions on mentoring strategies? If yes, what are they and what are the possible explanations? (This question would be modified based on the data collected.)

Topic Domain 1: Preparation for mentoring sessions

[Lead-off Question]

Are there some preparations you meet the mentor for a video-observation mentoring session?

Do you have to watch the whole videotaped lesson before the mentoring session?

Do you have to send any documents to your mentor before the mentoring session?

Should the venue for mentoring meet certain conditions so as to increase your focus and attention span? If yes, what are some of these conditions?

[Covert Categories]

Materials submitted before mentoring session

Preparation process before mentoring

Scheduling

Meeting venue conditions

[Follow-up Questions]

How do you schedule to see the mentor? Do you know beforehand what they will be discussing with you?

Do you have to watch the whole videotaped lesson before the mentoring session?

Do you send any documents to you before the mentoring session?

Topic Domain 2: Strategies used during the mentoring session

[Lead-off Question]

Describe to me what you do during a mentoring session, from when you meet the mentor till you leave the session.

[Covert Categories]

Providing feedback

Sharing experiences

Strategies for managing challenges

[Follow-up Questions]

Were you apprehensive or uncomfortable to watch your video? If yes, what are some of the things your mentor did to make you comfortable during the mentoring session?

Describe for me what you do during a video-observation mentoring session, from when you meet the mentor until leave the session.

So were there anything you liked or didn't like about the mentoring sessions? If so what are they?

So were there any aspects of the mentoring session that could be improved?

Do you prefer that your mentor play a whole video of your lesson or would short video-clips just do?

What strategies did the mentor use to make you share things which you were at first uncomfortable sharing?

Have you ever disagreed with what your mentor said? If so, what happened?

Topic Domain 3: What follows after mentoring sessions?

[Lead-off Question]

Can you tell me how you interact with your mentor after the video-observation mentoring sessions? Do you still carry on the mentoring based on what you discussed?

Have you ever needed further mentoring after the video-observation session? If so, explain to me what happened?

[Covert Categories]

How do you follow up on what was resolved during mentoring sessions?

For cases of preservice teachers who have difficulties in the field how is this followed up?

[Follow-up Questions]

Does your mentor still follow up on what was discussed during the video-observation mentoring meeting?

For cases where you think you need further mentoring what usually happens

Appendix D

OBSERVATION COVER SHEET

<u>Video-observation Cover Sheet</u>	
Name: _____	
Area of certification: _____	Grade level: _____
Title of lesson: _____	
Learning objectives of lesson: _____	
<u>Pause Point 1</u> Category (circle one): Successful practice / Area of potential improvement	
Background information: _____	
Video time segment (for example, 2:35 through 3:35): _____	
<u>Pause Point 2</u> Category (circle one): Successful practice / Area of potential improvement	
Background information: _____	
Video time segment: _____	
<u>Pause Point 3</u> Category (circle one): Successful practice / Area of potential improvement	
Background information: _____	
Video time segment: _____	
<u>Pause Point 4</u> Category (circle one): Successful practice / Area of potential improvement	
Background information: _____	
Video time segment: _____	

Appendix E

UH LESSON PLAN ASSESSMENT RUBRIC

Performance Expectation	Beginning	Developing	Proficient	Comments
Standards	Some standards are listed, but may be incomplete.	Related content and/or technology standard(s) are listed.	Related content and technology standard(s) are detailed and TEKS identified.	
Objectives	Lesson objective(s) lack clarity and/or measurability; connection to standard not apparent.	Lesson objective(s) are somewhat clear and measurable; partial connection to standard.	Lesson objective(s) are clear, measurable, and specific to standard; lesson is developmentally appropriate.	
Resources, Materials, Use of Technology	List of materials, vocabulary, and use of technology is given limited attention.	List of materials, vocabulary, and/or use of technology is incomplete or inaccurate. Teacher resources, websites, materials needed and any special preparation is not included.	List of materials, vocabulary, and/or use of technology is provided for both teacher and students. All teacher resources, websites, materials needed and any special preparation are included in the procedures, including a rationale for why each is vital to support learning.	

Lesson Sequence	There is inadequate sequence to the lesson plan, or there may be some logical steps missing.	Provides a step-by-step description of the scope and sequence of lesson activities.	Provides a step-by-step description of the scope and sequence of lesson activities, including actual wording and questions that will be used. Clear alignment between all instructional activities and the stated objective is evident. Lesson shows evidence that teacher understands the content and the learning processes, and that instruction is planned to be engaging. Consideration is given for parts of the lesson that might be difficult, ensuring student understanding, and what students will do if they finish their work early. Effective lesson closure occurs.	
Lesson Management	Does not describe how the lesson will be managed.	Describes lesson management in general terms.	Describes how each stage of the lesson will be managed, including role of teacher and learners (who is doing what at each point),	

			location, and any special considerations, such as for differentiated instruction.	
Resource Management	The teacher does not have a plan to effectively manage student and/or teacher resources.	Resources that are planned are listed.	Resources that are planned are listed and how they will be used is described in detail, including who will be using the tool and in what ways.	
Differentiation/ Accommodation	Includes no modifications or accommodations.	Includes only general modifications/accommodations for special needs students, English Language Learners, and gifted and talented students.	Includes strategies and modifications for diverse learners: special needs students, English Language Learners, gifted and talented students, and others; strategies are specific to the lesson content.	
Assessment	Assessment provided for the lesson but doesn't measure, or inaccurately measures the objective(s).	Assessment provided for the lesson but incompletely measures the objective(s).	Formative and/or summative assessment is developed, age-appropriate, and has clear relationship to the lesson objective(s).	