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Instructional Supervision: A Descriptive Study Focusing on the Observation and Evaluation of Teachers in Cyberschools

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INSTRUCTIONAL SUPERVISION: A DESCRIPTIVE STUDY FOCUSING ON THE OBSERVATION AND EVALUATION OF TEACHERS IN CYBERSCHOOLS

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ABSTRACT

Title: Instructional Supervision: A Descriptive Study Focusing on the Observation and Evaluation of Teachers in Cyberschools

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Since 1996, K-12 schools are increasingly moving from a traditional, face-to-face educational environment to an online learning environment utilizing technologies to deliver instruction primarily via the Internet. As this trend continues, administrators familiar with traditional supervisory methods will observe and evaluate teachers of online learning as per state and local mandates. The rapid growth of online learning is outpacing federal, state and local instructional supervision policy, creating a need for researchers and practitioners to better understand how administrators supervise instruction in online learning environments. This study describes performance criteria, supervisory practices, and the impact these practices had on instruction in three cyberschools enrolling full time students.

This study reported performance criteria were similar for both traditional and online teachers in sample schools, however, criteria specific to an online environment such as "multi-tasking" and "technical skills" were also identified in the study. Many instructional criteria did not translate to an online environment, however, administrators adapted supervisory practices to observe and evaluate instruction in cyberschools.

Evaluation documents and policies were not modified to address the shift from face-to-face to online instructional delivery; however, additional instructional techniques observed in lessons were added to evaluations as addenda. Delivering and supervising web-based

instruction seems to require separate performance criteria and practices requiring researchers to examine instructional supervision in virtual learning environments.

Supervisory practices were adapted to online learning environments and administrators observed lessons by logging into Learning Management Systems to evaluate instructional delivery. The impact supervisory practices had on instruction were reported by teachers and administrators as having varying degrees of usefulness.

Findings indicate a need for cyberschool accreditation to standardize performance criteria and supervisory practices that facilitate successful instructional supervision in an online environment. In addition, coursework and training on pedagogical practices in cyberschools can provide teachers and administrators with skills to work productively in an online environment. These recommendations could eliminate simply replicating supervisory techniques in a traditional environment and promote innovative practices in an online environment. Technology offers practitioners alternate means to supervise cyberschool teachers and can provide accountability, improvement strategies, and enhance student achievement in schools in the twenty-first century.

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Finally, to the marginal student, in the classroom, making everyone laugh, ignoring your potential, and unable to find direction. Please, find a purpose. You can achieve any goal if you work hard and persevere. Do not quit, do not give up. You can do anything. I am proof. I want this accomplishment to serve as motivation. Aspire to do.

I have one last thing to say…to my wife at home, Yo Joanie, I DID IT!

Dedication

For Joanmarie,

You are my strength and give my life meaning. I dedicate this accomplishment to you because without you this would not have been a part of my life. Thank you for the family, time, understanding, courage, hope, love, and patience you have given me over the past 20 years. I love you.

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CHAPTER 1

OVERVIEW OF THE PROBLEM

In any job it is important to assess a person's performance in completing the tasks required by the employer. Businesses and corporations supervise and evaluate employee performance for a variety of reasons including retention, promotion and accountability for completing job related tasks. Education is no different, requiring supervision of classroom instruction to evaluate a teacher's effectiveness. This generally involves an administrator observing and evaluating lessons in a classroom, documenting the teacher's performance, and sharing suggestions for improvement. School districts utilize checklists and narrative documents to record and analyze teacher performance as a supervisory practice (Glickman, Gordon & Ross-Gordon, 2001).

The process of instructional supervision in schools is conducted by administrators and generally involves face-to-face visits to the teacher's classroom in an observation and evaluation model (Glickman et al., 2001). Certain criteria are observed and recorded and a report is generated as a part of the supervision process in a physical school environment. The report is analyzed and suggestions for improvement are shared with a teacher to enhance teaching performance. The primary objective of the supervision process in public schools is to offer teachers direct assistance to improve their performance toward the goal of increasing student learning (Glickman et al., 2001). Current technologies, however, have enabled educational organizations to provide distance learning options that do not require physical attendance in a school building (Anderson, 2004) which has altered the face-to-face classroom observation and evaluation model of instructional supervision.

Administrators currently supervise teachers in schools using observation data gathered from lessons observed in physical classrooms. This generally requires the supervisor's attendance in a classroom with the teacher during instruction. Typically, in this form of direct assistance, the administrator observes a lesson and records a variety of indicators to provide feedback designed to enhance a teacher's instruction. School districts around the United States offering online learning conducted through computers and Internet applications have created challenges for the instructional supervisor. The U.S. Department of Education, Office of Information Technology (USDOE-OIT, 2004) has recommended e-Learning and virtual schooling opportunities for high schools, however, there is little research describing the process of supervising teachers in these learning environments (Watson & Ryan, 2006). The rapid growth of online learning has resulted in a gap in the literature regarding the instructional supervision of online learning.

Distance learning uses technologies such as U.S. mail, radio, television, video, computers and Internet to offer students an alternative to traditional education in a classroom in a physical school building (Anderson, 2008). Educational organizations are currently offering numerous online learning options for K-12 students, which do not require attendance in a physical classroom (Learning Point Associates, 2007) and enrollment in online courses is growing at an enormous rate (Allen & Seaman, 2007). Internet and computer technology are enabling educational organizations to provide online courses to K-12 students and offer course materials, assessment options, synchronous and asynchronous interaction, and communication that are similar to those in a face-to-face classroom (Anderson, 2008). Synchronous interactions occur in real time and asynchronous interactions occur over time through a bulletin board system or forum-type discussion. Additionally, public schools have utilized various Learning Management

Systems (LMS) to create a virtual learning environment with several options for delivering instruction (Taylor, 2001). This change from a face-to-face environment to an online environment will require administrators to supervise a different model of instruction.

The purpose of the study was to describe the practices and tools educational leaders are currently utilizing to supervise instructors of online learning in Pennsylvania and New Jersey high schools.

Background

Supervision is a multifaceted process that focuses on instruction to provide teachers with information to improve their teaching performance (Beach & Reinhartz, 1989). A common characteristic of instruction and supervision is that these processes occur in a face-to-face environment. The process of teaching occurs in a building, in a classroom, where students and teachers are physically together during the instructional process. Supervision of instruction takes place in a building, in a classroom, mainly through observation and evaluation of the teaching process (Glickman et al., 2001) and is described as Direct Assistance. Technology is facilitating instructional delivery through computer and Internet technologies that do not require teachers and students to be in the same physical location (Anderson, 2008). Various models of distance learning are available in education and current technologies are providing an easily accessible means for students to learn in an online environment.

Online learning is emerging as the predominant 21st Century model of distance education (Taylor, 2001). Students can enroll in various forms of online learning. Online learning classrooms are student's home computers, computer labs, or a combination of each model. Distance education provides opportunities for students to learn from teachers that are not in the

same physical location, eliminating geographical and scheduling limitations (Smith, Clark & Blomeyer, 2006).

Distance education has evolved through various forms of technology including correspondence education via U.S. mail, films, television, and later, video and audio conferencing, and finally, computer conferencing (Anderson, 2008). Online learning is changing the delivery of instruction from traditional face-to-face classes to online courses taught by instructors via web-based applications (Learning Point Associates, 2007). Online courses for secondary and higher education students have grown at an extremely rapid pace over the past decade (Allen & Seaman, 2007). This growth has occurred for several reasons. Online course offerings adapt to schedule conflicts, provide classes unavailable at local institutions, can accelerate or decelerate content for course completion, and offer convenience to learners with other obligations (Smith et al., 2006). Margaret Spellings, The U.S. Department of Education Secretary (2008) stated:

> Although online learning is a relatively new enterprise in the K-12 arena, it is expanding rapidly, with increasing numbers of providers offering services and more students choosing to participate. As with any education program, online learning initiatives must be held accountable for results. Thus, it is critical for students and their parents—as well as administrators, policymakers, and funders—to have data informing them about program and student outcomes and, if relevant, about how well a particular program compares to traditional education models. To this end, rigorous evaluations are essential. They can identify whether programs and online resources are performing as promised, and, equally important, they can point to areas for improvement (Pg v.)

A majority of K-12 educational leaders (69%) believe the demand for online learning will continue to grow and online enrollments will increase significantly in the next decade (Allen & Seaman, 2007). Evidence suggests the increase in K-12 distance education through online learning could mimic the enormous growth seen in higher education (Picciano & Seaman, 2007). There have been significant increases in secondary and higher middle school online enrollments over the past five years (Allen & Seaman, 2007).

The goal of instructional supervision is to assist teachers in improving instruction (Glickman et al., 2001; Zepeda, 2003). Supervision of instruction is mandated by Departments of Education and local school districts to assist teachers in providing high quality instruction to public school students. The process of supervising a teacher in an instructional setting often involves direct assistance to improve the strategies of classroom practice through observation and evaluation of teacher performance (Glickman et al., 2001). This procedure is currently practiced in local school districts through checklists and narratives forms that evaluate teachers in a face-to-face setting. As more students enroll in online learning, administrators will need to observe and evaluate instruction in a virtual environment rather than a physical environment (Collins, 2004). Online learning can occur without a student and teacher ever physically meeting in a classroom.

The phenomenon of online learning means that instruction occurs via computer and Internet technologies rather than in a face-to-face setting. The rapid growth of online learning and the complexity of delivering instruction via web-based applications requires the attention of educators and administrators regarding the pedagogical, economic, systemic, and political characteristics of online distance education systems (Anderson, 2008). Online learning will

impact the delivery, supervision and management of instruction in educational organizations that enroll students in online courses (Anderson, 2008).

Statement of the Problem

Over the past twenty-five years, a simple computer network developed into a global Internet transforming the functions of business, government and education (Taylor, 2003). Educational institutions traditionally deliver instruction in a physical setting and may not adapt quickly to online learning in a virtual environment (Taylor, 2003). Throughout the past decade, secondary students have been enrolling in online courses as an alternative to attending classes in a physical school setting (Picciano & Seaman, 2007). The growth of K-12 online learning programs is estimated at 25% per year with 42 states having supplemental and online learning programs (Watson & Ryan, 2006). The online mode of delivering instruction is unlike traditional face-to-face learning in brick and mortar schools, however, instruction in a public school environment must be observed, evaluated, and documented for compliance with local, state and federal guidelines (Collins, 2004). The rapid growth of online learning has not been supported by research on how administrators supervise and evaluate performance of online teachers (Watson & Ryan, 2006).

U.S. public schools are rapidly migrating from a brick and mortar environment to an online setting for staff, students and administration (Zandberg, & Lewis, 2008). Anderson (2008) wrote that the most compelling characteristics of the net-based culture we are currently experiencing are the multiplicity of communications coupled with the enormous increase in information production and retrieval. These characteristics have led to efficient delivery models and methods of interactions that are contributing to the massive growth of online learning (Taylor, 2001). In 2000, the U.S. Department of Education acknowledged that education must

address new technologies, and in e-Testimony stated "There is no going back. The traditional classroom has been transformed." (U.S. Department of Education, Web-Based Education Commission, (USDOE-WBEC, 2000, p. 1). Evidence suggests within six years, 10% of secondary courses will be computer based, while 50% of courses will be delivered online by 2019 (Christensen & Horn, 2008). This will require administrators to supervise a vastly different delivery of instruction than public schools traditionally offer students in a physical school building (USDOE-WBEC, 2000).

The benefits of online learning include flexible scheduling, increased class offerings, and higher course completion rates (Smith et al., 2006) providing students with an alternative to physical attendance in a school building for instruction. Technology is making online learning more accessible for students and is causing an increase in enrollment in online courses in K-12 schools (Zandberg & Lewis, 2008). Because of these benefits, nearly all states sanction some form of online learning in K-12 schools (Watson & Ryan, 2006). These benefits could be contributing to the sudden expansion of online learning which is far exceeding the implementation of other educational initiatives by public schools in the United States (Watson, Winograd & Kalmon, 2004).

As secondary courses quickly migrate to a virtual setting, researchers must investigate how school districts are supervising teachers of online courses. This change in instructional delivery displaces the current model of supervision in a K-12 school environment (Collins, 2004). Supervisory practices utilized by administrators in a physical school environment may not be appropriate in a virtual school environment (U.S. Department of Education, Office of Innovation and Improvement, USDOE-OII, 2008). This proposed descriptive research study will examine how administrators are currently supervising instruction in online learning

environments in school districts in Pennsylvania and New Jersey lack of empirical research and add to the literature.

Research Questions

The three research questions are as follows:

Research Question 1: What criteria do administrators use to observe and evaluate online instructors?

Research Question 2: What practices do administrators use to supervise online instructors?

Research Question 3: To what extent do supervisory practices impact instruction?

Limitations

- This study is limited to two high schools in Pennsylvania and one New Jersey that were identified as providing online learning to full time students.
- The Socio-economic status of student populations in the sample districts created a possible limitation because a powerful computer and high speed Internet connection could be required in the student's home to navigate web-based applications for online learning.
- The socio-economic status of two schools was reported, but Sample School A's socio-economic status was unclear because school enrollment did not provide that data to the researcher.
- The sample size was small and limited the amount of analysis the researcher could carry out with the data.

- Data from this study may not be generalizable to other school districts in Pennsylvania, New Jersey, or in the United States.
- Qualitative data from interviews conducted in the study could influence subjectivity in the selection and interpretation of data.

Definition of Terms

***Asynchronous communication*:** Communication in which the participants interact in varied time spaces (e.g., e-mail, threaded discussions, homework, message boards)

***Blended/Hybrid Course*:** Course blending online and face-to-face delivery. Substantial proportion (30-79% of the content is delivered online).

Blog*:** (a contraction of the term ***weblog) is a type of website, usually maintained by an individual with regular entries of commentary, descriptions of events, or other material such as graphics or video.

***Cyberschool (virtual school)*:** An online learning program in which students enroll and earn credit towards academic advancement (or graduation) based on successful completion of the courses (or other designated learning opportunities) provided by the school

***Data Warehousing*:** A data warehouse is a repository of a school's electronically stored data, designed to facilitate reporting and analysis.

***Distance learning*:** Educational activity in which the participants are separated by space (e.g., correspondence courses, online learning, videoconferencing)

***E-learning*:** Instruction and content delivered via digital technologies, such as online or CD-ROM, or learning experiences that involve the use of computers.

***Learning Management System (LMS)*:** The technology platform through which online courses are offered; a LMS includes software for the creation and editing of course content,

communication tools, assessment tools, and other features designed to enhance access and ease of use.

***Chat*:** Primarily meant to refer to direct one-on-one chat or text-based group chat using Internet applications.

Ning: An online platform designed for people to create their own private or public social networks, many are used for educational purposes.

***Online learning*:** Education in which instruction and content are delivered primarily via the Internet; online learning is a form of distance learning. Eighty percent of seat time is replaced by online activity.

***Seat time*:** The actual physical presence of a student in a brick-and-mortar school setting, often used for attendance and funding

***Social networking*:** Online communities of people who share interests and/or activities, or who are interested in exploring the interests and activities of other members. Most of the social network services are web based and provide a variety of ways for users to interact, such as chat, video conferencing, forum-discussions, and e-mail.

***Synchronous communication*:** Communication in which the participants interact in the same time space (e.g., telephone calls, face-to-face meetings, physical classrooms, chat rooms, videoconferencing)

***Threaded discussion*:** An electronic discussion (e-mail, e-mail list, bulletin-board, newsgroup, or Internet-forum) in which users visually group messages in a hierarchy by topic.

***Web 1.0*:** One dimensional web design where an Internet browser displays hosted information to the user. Also, a retronym of the state of the World Wide Web, and any website design style used before the advent of the Web 2.0 phenomenon.

***Web 2.0*:** A second generation of web development and web design. It is characterized as facilitating communication, information sharing, interoperability, and collaboration on the World Wide Web. It has led to the development and evolution of web-based communities, hosted services, and web applications.

Web 3.0: A supposed third generation Internet-based service which emphasizes machine-facilitated understanding of information. This can provide a more intuitive and productive user experience. Web 3.0 is also known as the Semantic Web.

***Web-Facilitated Course*:** Course that uses web-based technology (1-29% of the content online) to facilitate what is essentially a face-to-face course.

***Web portal*:** Provides a way for organizations to provide a consistent look and feel with access control and procedures for multiple applications, which otherwise would have been different entities altogether.

***Wiki*:** Used to create collaborative websites and to power community websites. Wikis are used in education to provide intranet and Learning Management Systems.

An examination of instructional supervision, distance education and online learning was presented in Chapter 2 to provide a background for the study which describes the practices and criteria administrator's used to supervise teachers of online learning.

CHAPTER 2

REVIEW OF RELATED LITERATURE

This review of literature is divided into three main sections. The first section will describe the background, history and evolution of instructional supervision and discuss instructional strategies used by teachers in the classroom. This review will provide examples of research and classroom practices throughout the history of public schooling. The second section will describe models of instructional supervision and provide current examples of supervisory practices in school districts. The third section will deal with the evolving landscape of education and instructional supervision in the advent of online instruction.

Instructional Supervision

The supervisor's function in an organization is to oversee an employee's performance in completing tasks required by the employer. Educational leaders face the same dilemma as leaders of any other organization; to improve the productivity of the teachers they supervise. Alfonso, Firth and Neville (1981) define instructional supervision as behaviors designated by the organization that affects teacher behavior to facilitate pupil learning and achieve the goals of an organization. Departments of Education in each state mandate the supervision of teacher performance in local school districts for accountability and the improvement of schools (Glickman et al., 2001; Firth & Pajak, 1998).

Supervision is the cycle of activities between a supervisor and a teacher with the objective of improving classroom performance (Patrick & Dawson, 1985). Patrick and Dawson describe the classroom performance of a teacher as implementing curriculum, planning, classroom management, and instructional techniques. Sergiovanni & Starratt (1993) view supervision as a focus for improving teacher's knowledge, skills, and abilities to make informal

decisions and problem solve effectively. The intent of educational supervision is to assist teachers in improving instruction (Goldhammer, Anderson & Krajewski, 1993; Hoy & Forsyth, 1986; Lovell, 1978). Individual goals of school districts may vary; however, improvement of teacher performance is a common goal of instructional supervisors (Glickman et al., 2001; Zepeda, 2003).

Supervisors in educational organizations have individual goals for improvement and Lucio and McNeil (1962) and Sergiovanni and Starratt (1971) believe the purpose of instructional supervision is to achieve those specified goals. Supervision requires the leader to oversee, assess, evaluate, and direct employees to ensure an organization is meeting its goals (Glickman et al., 2001). Successful supervision promotes a vision to implement change in organizations that facilitate improvement (Sergiovanni & Starratt, 1993; Collins, 2001).

Educational reports from the U.S. government such as *A Nation at Risk* (1983) and *No Child Left Behind* (2001) legislation include specific standards for evaluating program effectiveness. This standard based approach structures teaching and learning based on school districts' performance on high stakes testing and a variety of other administrative criteria. Other criteria include attendance, teacher quality, technology, and Adequate Yearly Progress toward achievement percentages (US Department of Education, 2001). Public school accountability in the United States takes its form most strongly in the state-level accountability systems that are required by federal education legislation (Gunzenhauser & Hyde, 2007). New Jersey state legislation requires the supervision process in local school districts through accountability standards and requires observations and evaluations of teachers by certificated instructional supervisors (New Jersey Department of Education Administrative Code, NJDOE-AC, 2005). Evaluation rubrics address standards in checklists and Likert type scales for documenting teacher

observation data (Glickman et al., 2001). Evaluation models, though not formative in nature, provide a component of supervision that can be valuable in assessing teacher effectiveness (Glickman et al., 2001).

Accountability for teacher performance was mandated following numerous reports on the reformation of American education during the 1980's that called for measurable results from teachers and students and prompted educational supervisors to focus on the evaluation of instruction (White & Daniel, 1996). The complex process of instruction supervision developed into two dominant perspectives to meet the need for measurable results; accountability and professional/personal growth (Harris, 1986). These theories are also known as "evaluation based" (accountability) and "clinical based" orientations (improvement). These orientations are seen in supervisory models currently used by administrators and accountability and improvement are used interchangeably (Sullivan & Glanz, 2000).

Supervision is the link between teacher needs and organizational goals so individuals can improve and work together toward the vision of the school (Glickman, 1990). Supervising staff involves achieving the local goals and many school districts utilize checklists, rating scales and narrative forms as a component of observing and evaluating teacher performance as a component of supervision (Glickman et al., 2001). Supervision is a multifaceted process that focuses on instruction to provide teachers with information about their teaching to improve performance (Beach & Reinhartz, 1989). The complex task of supervising teachers incorporates many different functions and tasks to achieve the goal of improvement (Glickman, 1990). There have been several models of supervision throughout the history of education.

History of Supervision

The requirements and responsibilities of any job evolve through time by means of various social, political and technological trends. The evolution of instructional supervision is evident throughout history as a reflection of learning theory and social and political influences (Fine, 1997). In colonial New England the process of instructional supervision was external inspection conducted by appointed citizens who would inspect teachers and students in schools (Glanz, 1977). This "inspection" process of school supervision made judgments about the management of the school and the teacher rather than the teaching or student learning (Burnham, 1976). This theory of school supervision at this time is known as Administrative Inspection (Lucio & McNeil, 1962). Instructional supervision processes and periods were evolving through the years as the United States population grew and federal and state governments began funding school systems and standardizing the practices of public education (Glanz, 1991).

The formal activity of instructional supervision by professional personnel began in the second half of the nineteenth century as population growth in major cities necessitated the formation of school systems (Glanz, 1977). Educational reformers Nicholas M. Butler and Andrew S. Draper sought to transform schools into efficiently operated centralized systems in the late nineteenth century (Glanz, 1977). The efforts of early reformers shifted the supervision of schools from bureaucratic and political influences to an individual superintendent in school districts who supervise instruction whose primary responsibilities were to expertly control, legislate and supervise the school (Glanz, 1991).

The primary role of a superintendent during the late nineteenth and early twentieth centuries was a supervisor of instruction (Glanz, 1977). This process was comprised mainly of inspection of classroom teaching and the correction of teacher behaviors (Glanz, 1977). Glanz

provides the following excerpt of an 1888 address to the National Education Association by James M. Greenwood. Greenwood, a prominent superintendent during that time provided an excerpt from an observation:

> What to do? 1. Go in quietly. 2. I watch the teacher and the pupils for a while…3. Sometimes I conduct a recitation, and thus bring out points in which she may be deficient…4. If suggestions should be made to the teacher, I do so privately, or request her to call after school…I think the question may be put in this form: Given the teacher, the school, the defects; how to improve them? (p. 4)
>
> Greenwood continued with the signs to look for in the classroom "1. Common sense. 2. Good health. 3. General scholarship….5. Order.6. Ability to manage hard cases. 7. Power to teach….14. Pleasant voice….17. Disposition to scold and to grumble…19. Neatness and cleanliness of room, desks, etc." (p.4). These examples display the inspection as a primary source of instructional supervision from the late nineteenth century. These examples of inspection rely on the observation and evaluation process to identify teaching behaviors that may need improvement.

The superintendent directed the function of supervision in schools in the late nineteenth century and was responsible for improving the instruction of teachers (Glanz, 1977). A. W. Edson, a county supervisor in Massachusetts in the early 20th Century believed a superintendent should "be first a teacher of teachers, and to teach the teacher how to teach. (Edson, 1893). This led to evaluation and improvement suggestions for teachers as a part of the inspection process (Burnham, 1976). The role and function of the superintendent seemed clear but the burgeoning profession of instructional supervision produced new responsibilities for educational leaders (White & Daniel, 1996).

Physical education, fine arts and foreign languages were added to the curriculum and required supervision to ensure teachers were prepared to teach these subjects (Burnham, 1976). Population growth in the United States and industrial forces fostered the need for a new approach to supervision in schools during the early 20th century (Fine, 1997). Lucio and McNeil (1962) have labeled this era (approximately 1876-1936) the Period of Efficiency Orientation.

The rapid growth in the amount of schools and students and the standardization of curricula by the NEA required school administrators to supervise larger and more diverse school systems. In 1890 there were 2,771 high schools with two-hundred thousand students. By 1925, there were 21,700 high schools with nearly four million students (The United States Bureau of Education). The response to the expansion of curriculum and student services was a need for improved supervision and accountability (Fine, 1997). Frederick W. Taylor's ideas of improving efficiency and reorganization in industry, published in The Principles of Scientific Management (Taylor, 1911) offered a method for managers to control the aspects of industrial operations in factories and businesses. School administrators started to apply concepts of scientific management to educational supervision during the early twentieth century (Fine, 1997).

Callahan (1962) believes the implementation of scientific management was a result of the public's perceived feeling that schools were wasteful and mismanaged. Criticisms of educational institutions were common in magazines such as the Ladies Home Journal and the Saturday Evening Post. A large portion of those magazines readership had a growing dissatisfaction with schools (Fine, 1997). Scientific management was promoted as a successful model in business and industry and its application could transform schools into efficient business enterprises. School administrators could implement the tenets of scientific management for

improvement and accountability to provide a positive change in supervisory processes (Glanz, 1977).

Ellwood P. Cubberly, a pioneer in school administration, as cited in Glanz (1977), wrote that the adoption of scientific management in schools would change school administration from guesswork to scientific accuracy and would change school supervision from a political job to a skilled piece of professional social engineering. This model of supervision would frame schools as industrial plants, administrators as industrial managers, teachers as workers, and pupils as raw products to be processed (Fine, 1997).

The Department of Supervisors and Directors of Instruction of the National Education Association in 1931 defined instructional supervision as:

> …all activities by which educational officers may express leadership in the improvement of teaching. Such activities as observation of classroom instruction, conduct of teachers' meetings and group and individual conferences are clearly within the meaning of this term. The development and execution of plans looking toward the increased effectiveness in reading, arithmetic, and some other area of the school program, and the organization or reorganization of curriculum and method are still further examples of what is meant by supervisory activities. (p. 3).

The process of the inspection was primarily used as a means to supervise instruction (Glanz, 1991). Other components of instructional supervision began to emerge; however, a lack of theoretical explanation became evident in instructional practices (Mosher & Purpel, 1972). The criteria for measuring teaching effectiveness were imprecise. Theories of education were emerging and teaching became a scientific process with a framework of processes and procedures (Lucio & McNeil, 1962). This theoretical conflict for teachers and supervisors

lacked a shared conceptual understanding of the instructional process and did not lend itself to the process of improvement (Glanz, 1977; Lucio & McNeil, 1962). Until a greater understanding of pedagogy could be agreed upon, the processes of supervision would remain vague (Mosher & Purpel, 1972). Educational models and theories were influencing pedagogy, and supervision began to reflect these theories (Lucio & McNeil, 1962).

The student population in the United States was continuing to grow and the responsibilities of school administrators grew as curricular, supervisory and management responsibilities increased (Burnham, 1976). Lucio & McNeil refer to this time period (1937-1959) as the Period of Cooperative Group Effort. Burnham (1976) describes this era as a shared responsibility of all administrators to practice in-service education and curriculum development as a democratic as well as cooperative and creative concept of supervision for the improvement of instruction. This formative approach to instructional supervision became prevalent in supervisory practice rather than the previous model of inspection and evaluation (Burnham, 1976).

According to Lucio and McNeil (1962) the next generation of supervision (1960-1970) was the Period of Research Orientation. Competition with other countries, technological advancements and the availability of federal grant monies became factors in this time frame and began much of the accountability movement in education (Burnham, 1976). Accountability is a major theme in instructional supervision in American education for social and political reasons (Burnham, 1976; Glickman et al., 2001; Sergiovanni & Starratt, 1993). Instructional supervision has many forms in school districts and involves processes and procedures to support improvement and accountability (Glickman, 1990). As political, social, and economic issues created an atmosphere of accountability; instructional theories and research-based strategies were

being implemented as instructional supervision (Glanz, 2000). These processes were put into practice in school districts across the nation in various forms. As these supervisory processes and policies were implemented in schools during the Period of Research Orientation later in the 20th Century, it was not until the 1990's when these policies were examined in implementation studies (Blasé & Blasé, 1998).

The processes of instructional supervision still relied upon the observation and evaluation process during the late 20th Century in what Gordon (1997) called "control supervision" that was primarily inspection, oversight, and judgment of classroom instruction. Collaborative approaches to instructional supervision in the form of clinical supervision were emerging in schools during this time where administrators and teachers worked together during the observation process to identify areas of improvement (Goldhammer et al., 1993). Sergiovanni & Starratt (1993) suggested other means of collaboration including peer supervision, self assessment, and action research. These options were less labor and time intensive for administrators and offered alternatives to the traditional "inspection" process teachers were accustomed to as instructional supervision. Although school districts in Pennsylvania and New Jersey require the observation and evaluation of staff annually (NJDOE-AC, 2005; PDE 426 427 and 428, 2003), current trends in instructional supervision offer multiple processes for administrators to improve teacher performance in schools (Zepeda, 2007).

Practices of Instructional Supervision

Observation and evaluation are a required components of instructional supervision in Pennsylvania and New Jersey and is a mandated requirement for public schools to oversee teacher performance (NJDOE-AC, 2005; PDE 426 427 and 428, 2003). Evaluation is a summative process for school leaders to make decisions regarding tenure, retention and

promotion (Acheson & Gall, 1997); whereas supervision refers to improving instruction and achieving goals (Sergiovanni &Starratt, 1993). Glickman et al. (2001) asserts;

> Summative teacher evaluation is an administrative function intended to meet the organizational need for teacher accountability. It involves decisions about the level of a teacher's performance. Summative evaluation seeks to determine if the teacher has met minimum expectations. If the teacher has not met his or her professional responsibilities, the summative process documents inadequate performance for the purpose of remediation and, if necessary, termination (p. 299).

Accountability is the goal of the evaluation process and complies with state and local policies regarding teacher supervision. Evaluation relies on rating scales and summative assessments to document a teacher meeting certain criteria based on state and local standards (Sergiovanni & Starratt, 1993). Although the supervision and evaluation processes are related, the outcome objectives can differ between improvement and accountability (Glanz, 2000; Glatthorn, 1990; Glickman, 1990; Sergiovanni & Starratt, 1993).

Formative and summative evaluations are not mutually exclusive and both are necessary in schools (Glickman et al., 2001). The two types of evaluation have entirely differently purposes and should be kept separate to avoid conflicts (Acheson & Gall, 1997; Popham, 1988). Evaluation is a summative process whereas supervision is a formative method for teacher improvement (Glickman, 1990; Glatthorn, 1990). Supervision involves assisting in the improvement of teaching (Glickman et al., 2001). Summative and formative evaluation differ in purpose, however, both methods provide data that can be used interchangeably. In addition to observed instruction, evaluation criteria can include non-instructional areas such as compliance with school regulations, extra-curricular assignments and cooperation with colleagues (Glickman

et al., 2001). Formative criteria may include professional development or action planning in individual classrooms (Zepeda, 2007). These criteria can be included as criteria of locally approved supervision and evaluation models under the guidelines of state policies. Evaluation has frequently become a substitute for instructional supervision due to its measurable and quantifiable characteristics and because of state and federal accountability standards (Sergiovanni,& Starratt, 1993).

State and local policies mandate teacher evaluation and this process can overshadow instructional supervision (Sullivan & Glanz, 2000). Summative evaluation is necessary to make employment decisions, but may not lead to improvement for most teachers (Stiggins & Bridgeford, 1985). Summative evaluation meets the organizational need for accountability while formative evaluation focuses on professional growth and the improvement of individual teaching (Glickman et al., 2001). The observation and evaluation process meets the local state and local policies for supervision and has become the main supervisory practice in many school districts (Sergiovanni,& Starratt, 1993). The practice is defined locally by teacher contracts, and can be impacted by collective bargaining units through Act 195 in Pennsylvania (Hazi, 1980).

The Pennsylvania Public Employee Relations Act (195) offers teacher bargaining units the opportunity to resolve disputes regarding supervisory practice and criteria (Hazi, 1980). These disputes can include who supervises teachers and how teachers are supervised. Many states have similar legislation; however, current research suggests supervisory practice and criteria are still vaguely defined within teacher contracts (Ellett & Garland, 1987). The National Council on Teacher Quality (2006) compiled a database of the nation's 50 largest school districts and found that evaluation policy and practice lacked detail in the structure of instructional

supervision. Brandt, Mathers, Oliva, Brown-Sims and Hess (2007) determined that teacher policies in several Midwest states indicated:

- One half of policies provide guidelines when to evaluate teachers
- Approximately two thirds of policies described how often to evaluate teachers
- Slightly more than one half of policies identify an evaluation instrument
- One third determine how the evaluation is presented
- One half of policies require specific supervisory methods (most common classroom observation)
- Slightly more than one third of districts identified teacher behaviors and characteristics that are evaluated
- Slightly more than one fourth of policies identified research to inform policy
- Less than one tenth of policies require supervisor training

Koppich (2005) suggests expanding the role of collective bargaining from the focus on policies and contracts that focus on wages, working conditions and hours, to specific instructional supervision practices such as observation and evaluation to improve instruction and thus enhancing student learning.

Observation and evaluation offer a variety of information about teacher performance. The information in a school district evaluation form is based upon district goals, teacher responsibilities and state and federal standards (Glickman et al., 2001). The criteria in evaluation forms judges teachers on their quality of instruction and include other areas such as classroom management, planning, the teaching act and classroom climate (Shinkfield & Stufflebeam, 1995). The observation and evaluation process within schools is conducted by supervisors and generally involves face-to-face visits to the instructor's classroom to provide direct assistance.

Some educators resent the “snoopervision” (Sullivan, 1980) associated with instructional supervision, however, the process of direct assistance provides feedback for teacher improvement through classroom observation (Glickman et al., 2001). Glickman includes that direct assistance provides data for evaluation and summative assessments. A teacher receiving direct assistance is a crucial component of a successful school (Rosenholtz, 1985).

Direct assistance of a teacher’s classroom behavior is a component of summative and formative models of evaluation (Glickman et al., 2001). Direct assistance provides feedback in the form of suggestions to teachers regarding observable classroom behaviors (Goldhammer, 1969; Cogan, 1973). The model of teacher observation by a peer or instructional supervisor is reasonably accepted as a component of supervision (Sullivan, 1980; Adams & Glickman, 1984; Pavan, 1983).

The observation and evaluation process within schools requires face-to-face visits by the supervisor to the instructor’s classroom and certain observable criteria and behaviors are analyzed as a part of the supervisory process in a traditional school environment (Glickman et al., 2001). Sergiovanni,& Starratt (1993) believe supervision has become an evaluative process that supports bureaucratic accountability rather than teacher improvement. Instructional supervision utilizes evaluation as a component of the supervisory process with the intent of improving instruction (Acheson & Gall, 1997). Data from observation and evaluation can be used to make decisions regarding tenure, rehire and promotion (Sullivan & Glanz, 2000). The improvement process may benefit from observation and evaluation as a part of the instructional supervision process (Glickman et al., 2001). If teacher improvement is a goal, instructional supervisors implement a formative process to enhance teacher practice rather than rely on evaluative checklists and student achievement on standardized testing (Popham, 2008). Current

models of supervision vary in school districts; however, administrators have local procedures and processes to assess teacher accountability, and improvement of classroom instruction through supervision (Glickman et al., 2001).

Direct Assistance, or conducting an observation and evaluating teacher performance, is the primary method administrators use to supervise instruction (Glickman et al., 2001; Brandt et al., 2007). Teacher evaluations should measure and identify behaviors, instructional strategies and delivery that meet district goals and positively impact student learning (Shinkfield & Stufflebeam, 1995; Danielson & McGreal, 2000). Observation and evaluation derived from the early role of a superintendent in the late nineteenth and early twentieth centuries (Glanz, 1977) and is central to current models of supervision that require classroom visits to observe and identify classroom instruction (Zepeda, 2007). Observation and evaluation has supplanted instructional supervision as a quantifiable substitute to meet federal and guidelines for accountability rather than means to improve instruction (Starrat, 1997).

Models of Supervision

Numerous models of supervision are currently implemented in school districts; however, the majority of school districts implement a single evaluation system (Glickman et al., 2001). Schools comply with state policies and implement locally approved methods to supervise staff. Supervision models are directed by the supervisor, peers, or individual to evaluate practice and drive improvement (White & Daniel, 1996). These models can be classified into three basic categories; directive, non-directive and collaborative (Glickman et al., 2001). These three categories provide a variety of supervisory options for school districts and are evident in different models of supervision.

Glickman et al., (2001), describes this supervisory inventory as:

Table 1

Supervisory Inventory Categories

Type	Directive	Non-Directive	Collaborative
Who sets goals	Supervisor	Teacher input	Agreed upon goals by teacher and supervisor
Examples	Inspection	Clinical, Developmental, Differentiated	Peer coaching portfolio assessment

An educational administrator is responsible for a myriad of management and supervisory tasks within a school; however, the main goal is to improve instruction to achieve organizational goals (Glickman et al., 2001). Administrative positions in schools do not all involve direct instructional supervision of teachers although the purpose of educational leadership is maintaining accountability and facilitating improvement to achieve organizational goals (Glickman et al., 2001). This includes managing, administering, evaluating or any activity in which the principal is involved in the process of running the school (Drake & Roe, 1999). Principals, department heads, and assistant superintendents serve a supervisory function, but have additional duties not directly related to working with teachers (Wiles & Lovell, 1975).

Clinical Supervision

A model of clinical supervision was developed by Goldhammer and Cogan in the late 1960's. This model utilizes a collaborative approach by the supervisor and teachers to constructively and continually improve instruction (Goldhammer et al., 1993). Acheson and Gall (1997) explain the clinical model to include three basic processes: pre-conference,

observation and post or feedback conference. This direct interaction between teacher and supervisor emphasizes an accurate understanding of practices and specifically identifies areas of improvement (Goldhammer, 1969; Cogan, 1973). Clinical supervision provides a teacher with an action plan to meet instructional improvement goals after conferencing with the supervisor after an observation (Goldhammer, 1969). Goldhammer adds that defining the goals of the observation and evaluation during the pre-conference assists in the assessment of instruction. This collaborative model creates a counseling-guidance setting and helps teachers to better perform a job according to their capabilities (Goldhammer, et al., 1980).

Snyder (1981) argued clinical supervision offers a coaching model but expresses concern that clinical supervision could evolve into refined teacher inspection technology with the movement toward increasing standardization. The idea of using clinical supervision for evaluation purposes seems untenable considering the models intent to improve teaching, not judge teachers (McFaul & Cooper, 1984). The Hunter model of Clinical Supervision is similar, but eliminates the pre-conferencing model and relies upon an observer's predetermined checklist of seven effective teaching practices (Pavan, 1983). Much of the literature that promotes clinical supervision also address other methods of supervision including portfolio supervision, action research, peer coaching and other self-directed models (Zepeda, 2003; Sullivan & Glanz, 2000; Nolan, 1997).

Developmental Supervision

In developmental supervision the teachers assume responsibility for their own instructional improvement and the instructional supervisor creates reflective and autonomous teachers through non-directive supervision (Glickman et al., 2001). Glickman et al. (2001) continue explaining a developmental model utilizes collaborative or in some cases directive

approaches to improve teacher performance dependent upon individual developmental levels and offer a five step approach to developmental supervision that includes Prerequisites, Function, Tasks, Unification, and a final Product of Improved Student Learning.

Instructional supervision in a developmental model relies on three prerequisite skills for the instructional supervisor. These prerequisite skills for instructional supervisors are 1) Knowledge, 2) Interpersonal skills and 3) Technical skills. Glickman et al. (2001) contend that these skills are necessary to affect the process of unifying organizational goals and meeting teacher needs. Developmental supervision facilitates the goal of teacher improvement through a reflective approach fostering consistent self-improvement (Glickman, 1981). In a developmental approach toward supervision, a supervisor must employ a number of tasks to achieve a school's goals and objectives. According to Glickman et al. (2001), these tasks include 1) Direct Assistance, 2) Group Development, 3) Professional Development, 4) Curriculum Development, and 5) Action Research. This concept is known as developmental supervision. The idea of developmental supervision implements supervisory behaviors based on the individual needs of a teacher.

The three underlying propositions of developmental supervision are that 1) Teachers backgrounds and experiences vary and require different levels of professional development, 2) Teachers at different levels of need must have varying levels of structure and directions through supervision and 3) Supervisory goals should be to increase teacher's abilities to grow toward higher levels of thought (Glickman, 1990). Developmental supervision is the practice of creating reflective teacher that actively practice self-improvement through various levels of collaborative approaches (Glickman, 1990). Other collaborative approaches involve teachers working together under the supervision of an administrator help one another improve teaching performance.

Peer Coaching

Peer coaching is the process of two or more professional colleagues working together to reflect on current practices, build new skills, share ideas, teach each another, conduct classroom research, or solve problems in the classroom workplace (Robbins, 1991). Joyce and Showers (1982) define peer coaching as "involving the analysis of teaching for the purpose of integrating skills and strategies into a curriculum, and developing instructional goals and a personal teaching style through a collegial approach." (p. 170). The cycle of the pre-observation, observation, post-observation model is evident in the peer coaching model and occurs in the daily activities of teachers and administrators (Zepeda, 2007). To achieve district goals, prior to implementing a peer coaching model, clear objectives and purpose are necessary to achieve district goals (Garmston, 1987). Glickman et al. (2001) conclude that the direction of teachers in developing instructional improvement goals as a result of peer coaching is the role of instructional supervision. Research suggests that peer coaching is successful because the focus is on improving practice rather than rating teaching (Munro & Elliot, 1987).

Action Research

Action research engages teachers in a reflective practice regarding their teaching and help to examine factors that promote student achievement (Glanz, 2005). This reflective process encourages teachers to examine practices in their classrooms that directly influence student achievement (Danielson, 2002). Glanz (2005) concludes that "action research is used by principals and teachers to discover which pedagogical processes are most effective in raising achievement levels for particular classes or students in a given school or grade." (p. 24). According to French and Bell (1978) action research is a data-based, problem-solving model replicating the steps involved in action research including: data collection, feedback of the data,

and action planning based on feedback of the data. French and Bell (1978) conclude that action research is an approach to problem solving as well as a process for problems solving through events and activities.

Zepeda (2007) writes that although numerous models of action research exist, only slight variations distinguish them from each other. Mills (2000), for example, provides basic steps for an action research plan through by 1) Selecting a focus, 2) Collecting data, 3) Analyzing and interpreting data, 4) Action planning. This planning provides teachers with a structured plan to address a specific problem in the classroom. Miller & Pine (1990) adds that action research focuses efforts to improve the quality of instruction and is designed and conducted by practitioners who analyze the data to improve their own practice. Marchack (1997) similarly describes action research by teachers through forming a research question central to their professional practice and devising methods of collecting data applicable to the questions to address the classroom problems.

Glanz (2005) provided two case studies of action research and found improvement in individual classrooms at the high school level in math and writing scores when action research methods and treatments were implemented. Improvement on scores on pre- test and post-test in case studies in New York City suggest significant improvement in student achievement as a result of the action research process. (Glanz, 2005). Many observation and evaluation models are currently used and involve similar strategies of observation and evaluation as well as other techniques for accountability and teacher improvement (Zepeda, 2007).

Instructional Supervision in the Early 21st Century

Guidelines for supervision are determined by state and local school districts and utilize checklists and narrative forms to evaluate teacher performance (Glickman et al., 2001). In New

Jersey, Chapter 32 of School District Operations, Section 6A:32-4.4 and 4.5 are the evaluation of tenured and non-tenured teaching staff members The procedures require tenured teachers to be evaluated once a year and non-tenured teachers to be evaluated three times per year. The criteria for evaluation include "promoting professional excellence and the improvement of student learning and growth (pg 3)". Local school districts develop individual supervisory practices with guidance from the New Jersey Department of Education and Article VII Supervision and Evaluation is Woodbridge Township School District's contract with the Woodbridge Township Education Association defines the system of supervision and teacher evaluation (Employment Contract between the Woodbridge Township Board of Education, 2006). The contract describes the classroom visit and observation processes and the conference in which the supervisor can offer constructive suggestions to improve teaching techniques, classroom organization and lesson planning. This process is designed to meet the needs of students and properly implement minimum curriculum standards. The form used by supervisors to observe and evaluate instruction is the Woodbridge Township School District Observation Form. The observation document reflects this policy and evaluates teachers through a narrative and checklist to ensure teachers meet expected criteria.

The Pennsylvania Department of Education (PDE) supplies an instrument for supervising staff members with 24 criteria for teacher evaluation available on the PDE website for school districts (PDE 426 427 and 428, 2003). The observation and evaluation document has four sections: planning and preparation, classroom environment, instructional delivery and professionalism. The rating scales for the elements in each section are satisfactory or unsatisfactory. An open-ended Justification for Evaluation provides a section for a narrative explanation of the process as well as a section for the Justification for Evaluation. The

Pennsylvania Department of Education provides evaluation forms for tenured and non-tenured teacher observation and evaluation for teachers.

Glickman (1990) describes the observation and evaluation process within schools as conducted by administrators or supervisors and generally involving face-to-face visits to the instructor's classroom and defines this process as Direct Assistance. A supervisor observes, records and analyzes district approved criteria of teacher performance and a report is generated as a part of the supervision process in a traditional school environment (Firth & Pajak, 1998). New Jersey and Pennsylvania require a certified supervisor to observe and evaluate tenured and non-tenured teachers in local school districts (PDE 426 427 and 428, 2003). The supervisor or administrator completes the observation and evaluation process to provide the teacher with direct assistance and instructional supervision. This supervision using observation and evaluation complies with state and local standards policy.

Summary of Instructional Supervision

Instructional supervision in the United States has evolved over time reflecting emerging learning theories, social and political influences, and a growing population (Fine, 1997). The purpose of supervising teachers is mainly for accountability, improving performance, and achieving school goals (Firth & Pajak, 1998). There are many methods and processes in supervisory models and the task of supervising teachers is complex (Glanz, 1995). These models include of directive, non-directive, and collaborative processes employed by administrators to achieve the goal of improved teacher performance (Glickman, 1990). Instructional supervision has several processes; however, inspection and direct assistance are common in most supervisory models (Zepeda, 2007).

There are several processes of instructional supervision; however, the primary method of supervising teachers has included observation and evaluation to provide direct feedback regarding performance (Glickman et al., 2001). This observation and evaluation of teachers complies with the state and local policies of instructional supervision (Collins, 2004). The process of instructional supervision has generally occurred in a face-to-face setting (Glickman et al., 2001) with teachers and administrators physically present in the same location. This traditional model of instruction is being threatened by online learning opportunities that are changing the delivery of instruction to a virtual environment (Anderson, 2004).

History of Distance Education

Distance education as a mode of instruction has frequently been a delivery component in education (Anderson, 2004). Holmberg (1986) said:

> distance education includes the various forms of study at all levels which are not under the continuous, immediate supervision of tutors present with their students in lecture rooms or the same premises, but which, nevertheless, benefit from the planning, guidance and tuition of a tutorial organization. (p. 276).

Distance education has evolved through various forms of technology and communication including correspondence education via U.S. mail, films, television, and later, video and audio conferencing, and finally, computer conferencing (Anderson, 2008). Distance education provides opportunities for students to learn from teachers not in the same physical location, thus eliminating geographical and scheduling limitations (Smith et al., 2006). Distance education is not a new phenomenon and has evolved throughout the history of education (Taylor, 2001). Distance education has advanced from infrequent postal delivery communications to

synchronous video/audio communications via computer and Internet technologies (Anderson, 2004).

Continued increases in memory, chip speeds and Internet speeds have enabled developers of software applications to create programs with the ability to provide information and communicate via the Internet (Taylor, 2001). Computer and Internet based methods of communication and access to information are evident in the capabilities of several different instructional delivery technologies (Taylor, 2001). This confluence of technologies is creating a virtual community of global learners (Taylor, 2001). Technology is changing how educational organizations deliver instruction and provide materials and information to staff and students with approaches that embrace anytime, anywhere, at any pace learning (USDOE-WBEC, 2000). The USDOE-WBEC (2000) acknowledged that the policies of education were written for an earlier model of instruction and called for a revision of outdated regulations that now impede innovation because it relies on a physical school setting rather than embrace the evolving environment of online learning.

Web-based learning management systems and the U.S. Department of Education, Office of Information Technology's Technology Plan (USDOE-OIT, 2004) urges school districts to implement the delivery of instruction via online learning over the next decade (USDOE-OIT, 2004). The delivery of distance education through web-based instruction is currently known as e-learning (Anderson, 2004). This delivery of online learning offers an alternative to traditional face-to-face delivery of instruction in brick and mortar schools when the teachers and students are not in a school building (USDOE-OII, 2008). The implementation of online learning is growing at an exponential rate in high schools, colleges and universities in the United States (Allen & Seaman, 2007).

The growing power of the Internet and computers is providing more opportunities for e-learning for students (Taylor, 2001). As technology advances and personal computers become more affordable and accessible, opportunities for learning electronically are readily available to students (Taylor, 2001). Distance provides online learning opportunities to students due to the availability of computers and the Internet. Anderson (2004) describes the technological contexts of five generations of distance education in the rapid evolution and development of online teaching and learning.

The Five Generations of Distance Education

As technologies evolved throughout history, advancements in technology resulted in more effective and efficient modes of delivering online learning (Taylor, 2003). Although K-12 education has been slow to change and adapt to new technologies, online learning has grown more quickly than state and local governments can manage (USDOE-OII, 2008). Distance education evolved slowly over the past two centuries, however, computer and Internet technologies and capabilities have significantly transformed business, government and education (Anderson, 2008). Taylor (2003) describes these five generations:

First generation model of distance education is also known as the Correspondence Model, using print media and U.S. postal service to provide instruction without the physical presence of students and teachers in a building. Course materials were sent and received by teachers and students enabling instruction to occur in different parts of the country. A defining feature of first generation is the independence of learning and the freedom to schedule learning time to complete courses at the convenience of teachers and students. These cost effective courses could be mass produced for thousands of students. Interactions between teachers and students were conducted

asynchronously via the U.S. mail, but evolved quickly through the use of email and telephone as those technologies became available.

Second generation, also known as the Multi-Media Model, is defined by the newer technologies of mass and broadcast media. The courses involved students interacting with simulations, multimedia drill and practice and self-paced tutorials. Courses were conveyed via CD-ROM and video tapes on independent or networked computers and televisions. The courses provided "interactive computer assisted instruction" for students and were more costly due to multimedia production costs. Direct interaction between students and teachers was still limited to phone, mail and email, however Bates (1995) noted that second generation technology supported more interactions between students and teachers. These courses were created by companies to provide a designated curriculum to students and teachers were available to support and evaluate students. An example of a second generation e-learning is the learning management system PLATO. PLATO is a corporate integrated learning system that provided curriculum and educational activities for students, however, student and teacher interactions were limited to phone, emails and chat rooms.

Third generation, also known as the Telelearning Model, took advantage of synchronous and asynchronous modes of communication available through telecommunications including audio, video and computer mediated conferencing. The continued growth of the Internet facilitated communication technologies and enabled discussions, problem-based curriculum and collaborative projects for students. Through the growing power of the Internet, e-learning supported the strengths of previous generations but was enhanced by the growing interactions available for between teachers and students. These enhanced computer and Internet based

interactions added to the growth of e-learning as a major subset of distance learning (Anderson, 2008).

Fourth generation e-learning, as suggested by Lauzon and Moore (1989) and Taylor (2001) emerged from the major components of the Internet. These included retrieval of vast amounts of information, the processing power of computer assisted programming and the interactive capacity of computer mediated communications. The rapid development of Learning Management Systems such as WebCT and Blackboard contributed to the fourth generation or e-learning. These systems provided students with course materials and a means to interact with teachers in an anytime, anywhere virtual environment. These systems created a web-based platform for students to learn through the growing capabilities of computer and Internet technologies.

The fifth generation is described by Taylor (2001) as an "intelligent, flexible learning model" and provides "intelligent functions" like automated responses to frequently asked questions. Taylor includes an integration of access to school related administrative services via a web portal as defining parts of fifth generation distance learning. These administrative services include registration, reporting and other personalized functions required by in secondary and higher education. Many of these functions are currently available through web-based applications such as Moodle, which is an open-source LMS that can be modified by schools to add or delete functions such as wikis, chat, grading, collaboration tools, podcasts or database management (Anderson, 2008).

Anderson (2008) describes that throughout this evolution; each generation follows its predecessor more quickly than did the previous generation. Although the shift in instructional delivery is profound, the new models of instruction have not completely displaced previous

modes of interaction and delivery, creating a complex method of online learning that incorporate many earlier approaches to teaching and learning (Anderson, 2004). Anderson (2008) concludes that the field of online learning can accurately be described as complex, diverse, and rapidly evolving. The acknowledgement of this complexity does not excuse inaction by educational organizations (Anderson, 2008); rather, the growth and implementation of online learning in public schools must be addressed by educational leaders through vision, concern and solutions.

Online Learning

The rapid growth in technologies and the changing context of instructional delivery presents a problem for educational organizations that need to adapt to this different model of instructional delivery (USDOE-WBEC, 2000). Online education is evolving from previous face-to-face conceptions of education to online learning enabled by computer and Internet technologies (Larreamendy-Joerns & Leinhardt, 2006). Technology can provide information and communication methods to facilitate teacher and student interaction in a new model of pedagogy (Anderson, 2008). Anderson (2008) continues "Distance education (of which online learning is a major subset) is a discipline that subsumes the knowledge and practice of pedagogy, of psychology and sociology, of economics and business, of production and technology." (p. 2). The rapid growth of online learning provides options for students to attending classes in a physical environment (Zandberg & Lewis, 2008).

Secondary schools offer students an alternative to physically attending school by providing online learning opportunities through approved educational organizations (Zandberg & Lewis, 2008). Clark (2001) identifies sanctioning bodies of online learning or "virtual schools" and examples of the organizations that deliver the instruction:

Table 2

Sanctioning Organizations of Virtual Schools

Sanctioning organization	Example
State-sanctioned, state-level	Florida Virtual School (Established in 1997)
College and university-based	The University of Nebraska-Lincoln Independent Study High School CLASS online diploma program (Distance Learning Established 1929, Online Learning Established 1997)
Consortium and regionally-based	Massachusetts Nonprofit VHS Inc. (Virtual High School) (Established 2001)
Local education agency-based	The Houston Independent School District (HISD) Virtual School (Established 2000)
Virtual charter schools	Basehor-Linwood Virtual Charter School in Kansas (Established 1998)
Private virtual schools	Christa McAuliffe Academy in Washington (Established 1995)
For-profit providers of curricula, content, tool and infrastructure	Apex Learning (Established in 1997)

The growth of K-12 online learning programs is estimated at 25% per year with 42 states offering supplemental and online learning programs (Watson & Ryan, 2006). The U.S. Department of Education estimates that during the 2002–2003 academic year, one-third (36%) of public school districts and nine percent of public schools had students enrolled in distance

education courses (Setzer & Lewis, 2005). During the past ten years a significant number of secondary students have enrolled in online courses (Picciano & Seaman, 2008). In 1995, no course offerings were available via the Internet for middle or high schools in the United States (SREB, 2007). Data suggests within six years, 10% of secondary courses will be computer based and 50% of courses will be delivered online by 2019 (Christensen & Horn, 2008). U.S. public schools are rapidly migrating from a brick and mortar environment to an online setting for staff, students and administration (Zandberg & Lewis, 2008).

Students enroll in online courses various reasons. Online course offerings can adapt to schedule conflicts, provide classes unavailable at local institutions, can accelerate or decelerate content for course completion, and offer convenience to learners with other obligations (Smith et al., 2006). Online learning offers students anytime, anywhere access to course materials and learning opportunities (Lorenzo & Moore, 2002). Online learning provide students in rural school districts with course offerings that would otherwise be unavailable because of geographical limitations and staffing (Picciano & Seaman, 2008). Bogden (2003) suggests that many cyber charter schools focus on homeschoolers for their student recruitment efforts. In Pennsylvania, providers of online learning target homeschooled students for supplementary or fully online programs (Clark, 2001; Bogden, 2003). During the 2004–05 school year, 21 percent of districts offering technology-based distance education courses delivered courses to students who were not regularly enrolled in the district (Zandberg & Lewis, 2008). This percentage represents students from other school districts, private school students, or homeschooled students.

Online learning in schools is divided into three different categories. North Central Regional Education Laboratory (NCREL), in the 2005 report Keeping Pace with K-12 Online

Learning (Watson & Ryan, 2006) defines the categories of online learning based on physical seat time, or the amount of time a student spends in an actual classroom. Online delivery and presentation of content replaces student seat time in the three categories of online learning. NCREL (2005) defines these three categories of online learning as:

- 1%-29% or less of its content and material presented online - ***web-facilitated course***
- 30%-79% of its content and material presented online - ***blended or hybrid course***
- 80% or more of its content and material presented online –***online learning course***

The Changing Landscape of Education in the 21st Century

The current model of instruction in schools requires students to attend a school for instruction in a physical classroom. A teacher instructs students in a classroom utilizing face-to-face teaching strategies to deliver instruction. Teachers and supervisors are facing a vastly different role in the delivery and evaluation of K-12 instruction in an online environment (Picciano & Seaman, 2007). The current availability of technologies provides teachers and students the capability of interaction in synchronous and asynchronous modes similar to face-to-face classrooms (Anderson, 2008). Anderson (2008) explains the real-time delivery of instruction through video and audio conferencing, chat, and threaded discussion groups simulate a traditional face-to-face classroom in early 21st Century online learning classrooms.

Online learning in the early 21st Century uses many of the traditional modes of instructional delivery for the presenting materials and student and teacher interaction (Anderson, 2008). These modes include direct instruction via lecture, audio, video, and chat. Teachers can formally or informally assess students by administering tests or asking questions during the lesson. Web-based LMSs integrate course materials and interactions through Web 2.0

technologies to offer web-facilitated and hybrid/blended, and online learning opportunities (Lane, 2008).

Clark (2001) estimates the K–12 online learning population at 40,000 to 50,000 students during in 2000. Picciano and Seaman (2007) estimate that 700,000 K–12 students were enrolled in either online or hybrid/blended learning courses in 2006. Julie Young, founder and president of the Florida Virtual School, in an interview by Picciano and Seaman (2007) explains her vision for the future of her school and online learning as:

> Within five years, there will be lots of blended models such as students going to school two days a week, and working at home three days a week. Another blended model … is where a student takes five [face-to-face] courses at school and two virtual courses. (p. 19).

Allen & Seaman (2008) conclude that online and blended/hybrid learning grew by 47% between 2005-06 and 2007-08 and will continue to follow the pattern of significant growth and become a substantial component of learning in secondary education.

The radical transformation of corporations and organizations through technology is evident in social networking and LMSs as a means to work and communicate in the 21st century. Employees can work from home through web-based applications and businesses provide an array of technologies to facilitate collaboration and communication previously available only through face-to-face meetings at a physical location. The music and video industry is now available through Internet sites and has nearly eliminated the need for brick and mortar retail stores. Throughout the last twenty years, the rapid growth of the Internet and computer technologies has transformed the delivery of education (Collins, 2004; Anderson, 2008). Online learning is more

than just a delivery system for students; the Internet is enabling structural changes in education as online enrollment multiplies (Tucker, 2007).

Distance learning has evolved from correspondence courses and drill and practice programs on individual computers to web-based LMSs that offer educational organizations a different means of delivering instruction to students (Anderson, 2008). These means include synchronous communication, voice and video conferencing and document collaboration (Zandberg & Lewis, 2008). Documents, information, grading and communication options are available via LMS technologies and are examples of fifth generation distance learning (Anderson, 2008). These capabilities include the use of Web 2.0 and database assisted learning to create a virtual classroom that allows teaching and learning to be conducted through current technologies (Anderson, 2008). Several of the current web-based LMSs use social networking and Web 2.0 technologies to deliver instruction (Lorenzetti, 2009).

Early generations of e-learning are characterized as one-dimensional activities with drill and practice, computer aided instruction and static Web 1.0 technology to access information (Anderson, 2008). Current open source web-based applications such as Moodle are creating online learning communities with tools such as journals, forums, testing modules, blogs and class resource pages and provide synchronous communication via voice, online chat, video, in a collaborative environment (Lane, 2008). Other LMSs such as WebCT and Blackboard and other systems provide similar features as an interface for online learning (Lane, 2008). Added capabilities of LMSs created virtual communities of online learners and provide numerous means and modes of communication and information retrieval for teachers and students (Anderson, 2008). The availability and access to web-based virtual communities is resulting in an

emergence of distance learning through online technologies as an alternative to traditional teaching and learning (Tallent-Runnels, Thomas, Lan, Cooper, Ahern, Shaw & Liu, 2006).

Collins (2004) reported obstacles associated with e-Learning citing lack of policy and ensuring quality programs as two of the categories complicating the process of secondary online learning. Guidelines for successful online course development are available from Southern Regional Education Board (2007), International Association for K-12 Online Learning, Sloan Consortium (Sloan-C), and the National Education Association and other organizations offer a variety of methods to provide students with materials and instruction (Allen & Seaman, 2007). States and organizations offering online learning face the task of organizing, maintaining and supervising online programs for school districts that operate in face-to-face environment (Watson et al., 2004). These tasks include; teacher qualifications, curriculum, funding, accountability, equity, and access. Many states are enacting legislation to address statewide, district-level, cyberschools, cyber charter schools and various supplemental organizations that offer online learning (Watson et al., 2004).

Online learning is a relatively new phenomenon with little research available concerning its supervision in K-12 schools. Many organizations have developed standards and conducted descriptive studies; however, this research may not be generalizable to online programs in different states or schools (Clark, 2008). The USDOE-OII (2008) suggests a multi-method approach to evaluating online programs to provide information to practitioners to improve the courses. This includes modifying surveys and rubrics and adapting current practices to the new model of delivery. Online learning models may enhance the supervisory process as student data and information is warehoused and available in LMS systems and complies with NCLB regulations (USDOE-OIT, 2004).

The Pedagogy of Online Learning

The term pedagogy generally refers to the strategies of instruction and includes practices educators use to teach children. These practices have been identified by many theorists and offer the methods teachers use to conduct their instruction. Pedagogy was limited to strategies in a physical classroom describing what a teacher did regarding methods and content to facilitate the learning process. Many of these practices are identified in the four Domains outlined in Charlotte Danielson's work, *Enhancing Professional Practice: A framework for teaching* (Danielson, 2007). Danielson's rubric identifies strategies for effective instruction and has been used by school districts in Pennsylvania as a rubric to observe and evaluate teachers.

Danielson's rubric has been modified by numerous school districts in Pennsylvania and around the country as the instrument to evaluate teachers through classroom observation. The four domains in the rubric are; Planning and Preparation, The Classroom Environment, Instruction and Professional Responsibilities. There are sub categories under each domain that specify areas such as content knowledge, classroom management, questioning, and professionalism. These areas can be structured in a rubric for ratings by administrators that observe teachers in a classroom. Table 3 shows the areas addressed in Danielson's model available on danielsongroup.org:

Table 3

Charlotte Danielson's Enhancing Professional Practice Rubric

Domain 1: Planning and Preparation	Domain 2: The Classroom Environment	Domain 3: Instruction	Domain 4: Professional Responsibilities
Demonstrating Knowledge of Content and Pedagogy	Creating an Environment of Respect and Rapport	Communicating with Students	Reflecting on Teaching
Knowledge of Students	Establishing a Culture for Learning	Using Questioning and Discussion Techniques	Maintaining Accurate Records
Setting Instructional Outcomes	Managing Classroom Procedures		Communicating with Families
Demonstrating Knowledge of Resources	Managing Student Behavior	Engaging Students in Learning	Participating in a Professional
Designing Coherent Instruction	Organizing Physical Space	Using Assessment in Instruction	Community
Designing Student Assessments		Demonstrating Flexibility and Responsiveness	Growing and Developing Professionally
			Showing Professionalism

Local districts agree upon rubric language and ratings and can range from needs improvement, unsatisfactory or partially proficient up the scale to proficient, satisfactory, or distinguished. These scales provide teachers with specific criteria to work toward in their

instruction and a rating scale that measures the instruction as observed by an administrator. Danielson's rubric was developed in 1997 for evaluating face-to-face instruction. Teachers of online learning need to modify the methods and techniques used in face-to-face learning to an online environment (Tallent-Runnels et al., 2006).

Many of the practices of face-to-face pedagogy are available in an online environment in the form of communication and information technologies (Anderson, 2008). However, implementing these components into an online setting requires cyber teachers to shift from their prior practices and experiences in a face-to-face setting (Coppa, 2004). Teaching in an online environment requires a new set of skills that combines technology, pedagogy, and content and this can be difficult for teachers new to delivering instruction virtually (Savery, 2005). This requires cyber teachers to integrate telecommunication tools that support pedagogical techniques that support knowledge acquisition and collaboration (Swan, Shea, Frederickson, Pickett, Pelz & Maher, 2000). A study by Jaffe (1997) suggests that specific pedagogies need to be evident in practice to promote and enhance online learning. These pedagogies are (a) interactivity, (b) active learning, (c) mediation) and (d) collaboration. These pedagogies are defined by Jaffe in Table 4:

Table 4

Specific Pedagogies of Online Learning

	Pedagogy	Practice
a.	Interactivity	Communication between people, technologies and educational content and processes
b.	Active learning	Students interact with content through problems, exercises, and projects providing for knowledge construction and reconstruction
c.	Mediation	Teachers and students interact through course clarification and queries
d.	Collaboration	Interaction among students through information and perspective sharing, support and questioning

These pedagogies can enhance the practices of online learning creating an effective model for learning in an online environment (Jaffe, 1997).

As the growth of online learning environments accelerates and expands, the quality of e-learning pedagogies will continue to develop and improve (Anderson, 2008). Research to date has already highlighted a variety of instructional techniques, curriculum design elements and teacher qualities that are found to positively impact learner outcomes (Ukpokodu, 2008). Many organization such as SREB and NJEA have introduced handbooks and guidelines for successful course design, however, there is little research to identify specific skills and criteria for successful online teaching (Cavanaugh, Gillian, Kromrey, Hess & Blomeyer, 2004). Online learning can replicate instructional strategies that are successful in a brick and mortar setting,

however, further research is needed identify and understand instructional practices of cyber teachers in virtual school settings (DiPietro, Ferdig, Black & Preston, 2008). These instructional practices must be observed and evaluated by administrators skilled in supervising online instruction.

Online Instructor Supervision

Collins (2004), in an NCLB white paper describes the process of supervising online courses as, "To evaluate materials and instruction, educators apply existing evaluation tools and processes in a new arena." (p. 3). The paper claims that the instructional supervision of online instruction should facilitate the same purpose of accountability and improvement whether in online or brick and mortar environments and Collins (2004) asserts that although the materials and teachers may be off-site, current supervisory processes can still work. Collins (2004) concludes by explaining the standards of accountability and improvement for teacher supervision must be in compliance to local, state and federal guidelines regardless of delivery method.

The increase in technology and online learning requires the strengthening of leadership development programs to develop tech-savvy administrators possessing the skills to facilitate organizational change in local school districts (USDOE-OIT, 2004). As online learning continues to grow in school districts across the country, supervisors will still need to evaluate materials, instruction and implementation for accountability and improvement of classroom instruction regardless of the delivery method (Collins, 2004).

The rapid growth of online learning is requiring K-12 school administrators to examine issues associated with the nature, policies and learning of this new delivery of instruction (Picciano & Seaman, 2008). Picciano & Seaman also explain that:

> With almost 4 million students or 22 percent of the higher education population presently enrolled in fully online courses, it would be appropriate to consider that online instruction is maturing in postsecondary education. However, the same cannot be said about online learning in primary and secondary education where online instruction is still considered to be in its nascent stages. There is also a growing need to examine issues related to online instruction in K-12 schools in order to inform policymakers at federal, state, and local governing agencies who are considering how to use this technology to expand and maybe to improve instruction (pg. 2).

The issues facing online learning in K-12 environments include funding, addressing special needs students and "Assuring the quality of online learning experiences" (Watson et al., 2004). Watson et al. (2004) conclude that the rapid expansion of online learning is threatening to outpace state-level policies to guide these new educational opportunities.

As the current landscape of education changes around the country, administrators are required to supervise vastly different learning environments (Picciano & Seaman, 2007). The physical classroom observation and evaluation procedure may not provide proper supervision practices in school districts offering online courses. The growing trend of online learning will impact most school districts and necessitate technical skills as well as supervisory processes and procedures to supervise a new delivery of education (Anderson, 2008). Federal, state and local policies mandate the supervision of teachers regardless of delivery methods (Collins, 2004). The role of instructional supervisors is rapidly changing and must address the needs of teachers of online courses (Picciano & Seaman, 2007). The rapid growth of online learning is creating a gap in the literature as to how supervision is conducted in this new delivery of instruction.

Chapter Summary

Instructional supervision seeks to improve teachers' performance in the classroom (Glickman et al., 2001). The purposes of supervision are evident in the literature, and call for teacher improvement, accountability, and achieving school goals. The practices of supervision vary, but generally include observation and evaluation of teacher behaviors and are recorded by checklists, rubrics or narratives (Glickman et al., 2001). Traditional education takes place in physical buildings with teachers and students together in the same classroom as instruction is delivered and students learn. The assessment of online learning is currently based upon traditional pedagogies and further research needs to identify specific criteria for assessing the delivery of instruction in a virtual environment. Face-to-face instruction is the accepted model of education; however, technology is enabling students to enroll in online courses that provide instruction through computer and Internet technologies (Anderson, 2004).

The rapid growth of online technologies and the advent of LMSs are creating an online community of learners to have grown to nearly four million K-12 students in just over a decade (Allen & Seaman, 2008). Although this is a fraction of the student population in the United States, online enrollment is expected to grow at this alarming rate and may outpace education policy, procedures, and protocol (Zandberg, & Lewis, 2008). Administrator's currently supervising traditional face-to-face instruction must address the constantly changing world of online learning (Picciano & Seaman, 2007). K-12 schools are quickly migrating to an online environment, and supervisory practices must adapt to the changing landscape of education (Smith et al., 2006).

Research was conducted that described the practices, criteria, and tools used in the supervision of an online learning environment. Models of instructional supervision are generally

structured for a face-to-face environment and researching the practice of supervising teachers of online learning added to the literature base describing current models of instructional supervision and rated its effectiveness. Anderson (2008) wrote that although online learning is a complex evolving system that does not excuse inaction on the part of educators and instructional leaders. This study conducted on supervision of online learning provides practitioners with a description of current practices, criteria, and tools employed by supervisors of online instruction. A methodology for this descriptive study of the online learning phenomenon was presented in Chapter 3.

CHAPTER 3

PROCEDURES

Chapter 3 presented the methodology used to address the research questions posed by this study. An overview and purpose of this study was followed by a discussion of the design of the study. The study's participants and sampling methods are describes and the instruments and protocols used in the study were presented. This was followed by methods to be used in the collection of the data and the data analysis. A discussion of ethical and confidentiality concerns were presented and the chapter closed with a summary. The three research questions addressed the practices, criteria, and tools of instructional supervision of teachers of online learning in three high schools.

The three research questions are as follows:

Research Question 1: What criteria do administrators use to observe and evaluate online instructors?

Research Question 2: What practices do administrators use to supervise online instructors?

Research Question 3: To what extent do supervisory practices impact instruction?

Study Design

The study is a descriptive research design and utilized both quantitative and qualitative approaches to examine the instructional supervision of teachers of secondary online courses. Johnson and Onwuegbuzie (2004) described this design where the researcher combines quantitative and qualitative methods, approaches, concepts, or language into a single study. This study design builds on the strengths of quantitative and qualitative research more fully than is possible using either method alone (Gay, Mills & Airasian, 2006). The deliberate use of multiple

data collection methods allowed the researcher to clarify and enrich information and provide multiple perceptions of a process (Denzin, 1978).

There are three research questions best answered through the use of both qualitative and quantitative methods. These methods added insight and understanding that might be missed if only a single research method was used. This descriptive research study involved gathering data that described events and then organized, tabulated, depicted, and described the data collection (Glass & Hopkins, 1984). The event in this particular study was the supervision of teachers of online learning. The combination of qualitative and quantitative methods provided a more thorough description of the supervisory process that informed theory and practice. Problems with utilizing quantitative and qualitative methods included: more time consuming to conduct, requires the researcher to be skilled in both research paradigms, was be more expensive, and there are details of mixed research yet to be worked out such as how to interpret conflicting results (Johnson & Onwuegbuzie, 2004).

The study was implemented in four phases. In phase one, school administrators from a defined area of Pennsylvania and New Jersey were researched and a school administrator was contacted via telephone and email to determine if students were enrolled in full-time online learning. When that criterion was met, the researcher determined that the administrator directly observed, evaluated, and supervised the teachers. This allowed the researcher to identify potential schools and enlist a non-random purposive sample for the study. The researcher identified three schools as potential participants for the study, and contacted the district superintendent's to request their participation in the study. The researcher obtained consent from the three school superintendent's and continued to the next phase of the study.

In phase two, the researcher emailed a survey to the school administrators directly responsible for supervising online instructors and followed up via telephone to answer any questions related to the study. A request for teacher contact information was in the email and telephone conversation. After obtaining the teacher contact information, a survey was emailed to teachers of online learning. The survey questions how teachers were supervised in their school district and included demographic questions. After all survey data was collected, the researcher began phase three. In phase three, the researcher gathered and reviewed supervisory policy and observation and evaluation documents. After survey data and documentary evidence was analyzed, phase four began. In phase four, the researcher interviewed one administrator and one teacher from each participating district. Data was analyzed during each phase and culminated in a rich description of the tools, criteria and practices of supervising teachers in an online learning environment.

Selection of a Sample Population

Many school districts across the country offer online learning opportunities to students as full-time, part-time, or supplementary programs (Allen & Seaman, 2007). There are variations in the type of courses/programs offered as online learning. Course types are presented by Allen and Seaman (2007) as web-enhanced (1-29% of the content delivered online), hybrid/blended learning (30-79% of the content is delivered online) and online learning (80% of content delivered online). Delivery models are also a consideration as courses can be offered via LMSs, asynchronous, synchronous, self-paced, or as independent courses. This study will describe the supervision of teachers of full-time online learning to students and requires a sample that reflects this environment. The criteria for participation in the study are high schools offering fully online learning (80% of content delivered online) to full-time students. These criteria were chosen by

the researcher because online learning does not require physical attendance in a school building and differs from models of traditional instruction and supervision. Three schools meeting these criteria in a non-random purposive sample will be invited to participate in the study.

This study began by choosing two school districts in Pennsylvania and one in New Jersey that provided online learning (80% or more instruction delivered online) to secondary students. The teachers of online learning were supervised as per state and local policy. Although there has been significant growth in online learning, schools are not required to report or document local online learning programs (Picciano & Seaman, 2007). Rosendale (2009) concluded that no clear methods or mechanism exists for identifying and contacting cyberschools. This required the researcher to identify a non-random purposive sample of schools that provided online learning to students. The two Pennsylvania sample schools were chosen from Delaware County (25) and Carbon-Lehigh (21) Intermediate Units and one school district in New Jersey. This identification process was conducted through researching school districts and contacting school administrators to determine if a school met the criteria for participation in the study.

School administrators from potential sample schools were contacted via email and telephone and informed that an East Stroudsburg University doctoral student was conducting a study on instructional supervision of teachers of online learning. The researcher then determined if criteria existed for participation in the study. After determining three schools that met the criteria, the researcher contacted each superintendent of the schools and provided an outline of the study and requested the school district's participation in the study. The superintendents then completed a consent form prior to the beginning the study (Appendix A). After obtaining consent from the district superintendents, the researcher sent a survey to the district school administrators directly responsible for supervising online instructors. Contact information for

the online teachers was also requested. A total of three schools were chosen for participation in the study using this method.

This non-random purposive sample represented fully online programs and provided the researcher with sample schools in which administrators observed, evaluated, and supervised teachers that do not teach in a traditional face-to-face environment. A description of the participating schools included size, area, and socio-economic status designation.

Instruments

A survey developed by Rosendale (2009) at the University of Pittsburgh was used in the study. The Rosendale (2009) survey was used in a dissertation that described instructional supervision in cyberschools. Dr. Eric G. Rosendale provided consent to the researcher via email use the survey on October 25, 2009 for the study and to modify it if necessary. The researcher modified the survey to quantify the practices, criteria, and tools administrators used to supervise teachers of online learning (Appendix B). A similar version of the survey was administered to online teachers (Appendix C). The modified survey identified supervisory practices, criteria, and tools by using the Rosendale (2009) instrument that was validated and supported by the literature. The survey included common technologies available to administrators that supervised teachers of online learning.

The modified survey was piloted by the researcher with a group of doctoral students and an instructional technology specialist from the New Jersey Department of Education to ensure the instruments' validity. Content validity is determined by expert judgment (Gay et al., 2006). The expert judgment for the survey was a pilot group that included principals and administrators directly responsible for the instructional supervision of teachers. The administrator survey (Appendix B) was administered to the pilot group through SchoolWires, and a copy of the

document was sent to group members to provide feedback regarding the clarity and content of each item in the survey. All members of the pilot group responded with feedback and the researcher revised the survey implementing the expert feedback prior to the study.

The survey initially indentified supervisory practices and tools present in the sample school districts. After an item was identified as present in supervisory practice, the item was rated on a five point Likert type scale to determine if the item is useful. The scale will rate the supervisory item in a 1-5 scale with (1), Not useful (2), Somewhat useful (3), Somewhat useful and (4), Very useful. This rating scale allowed the researcher to identify and rate supervisory practices in sample schools. The modified instrument identified and rated supervisory practices, criteria, and tools in an online learning environment. After the survey data was compiled and analyzed, sample school district policies and documents were gathered and telephone interviews were scheduled with administrators and teachers.

An interview template for administrators based on survey data enabled the researcher to collect additional data on the practices, criteria, and tools utilized in the supervision of online instructors (Appendix D). The interview template for teachers specifically asked questions about supervisory practices, criteria, and tools in their local school district (Appendix E). Both interview templates contained questions regarding the rated usefulness of current supervisory practices. The semi-structured interview consisted of nine questions with appropriate probes addressing instructional supervision and the procedures for observing and evaluating teachers in an online environment. Questions were added after survey data was analyzed to allow respondents to expand upon survey responses. The questions were open-ended to allow for elaboration to create rich discussions. The interview data complemented the quantitative data to

provided rich detail for the study. The purpose of the interviews was to gain multiple insights of supervisory practices from various viewpoints.

Prior to conducting the study, the administrator interview questions were piloted with a group of doctoral students to ensure the validity of interview questions. The expert panel included principals and administrators directly responsible for the instructional supervision of teachers. The teacher interview questions were piloted with four teachers in the Woodbridge Township School District and three doctoral students to ensure the validity of interview questions. A copy of the interview templates were emailed to the two pilot groups to comment on the clarity and content of the questions. Phone calls were made to three of the panel members to explain comments made in reply emails for clarification. The pilot groups answered the questions similarly and had suggested revisions that were incorporated into the final interview template. The process of validating the interview questions was conducted from December 19, 2009 until January 6, 2010.

Administrator and Teacher Surveys

The researcher used a three part 42 question survey to gather data on the supervision of online instruction from administrators and teachers. The first part of the survey asks questions to gather demographic information on sample administrators and teachers. Section (2) asks questions regarding the practices and criteria used to supervise teachers of online learning. Section (3) will identify and rate tools used in the practice of instructional supervision. The surveys for administrators and teachers contain similar questions regarding instructional supervision. The similarity of survey questions allowed the researcher to compare responses from teachers and administrators regarding instructional supervision. This survey provided data from administrators and teachers from 42 items in three categories to describe the practices,

criteria, and tools of local instructional supervision. The survey included a rating scale that described if the supervisory items were useful. Open ended responses were included and allowed participants to elaborate on challenges and strengths of supervision in their schools. Interview questions were added from these open ended responses.

Survey of Administrators

The researcher collected survey data via online methods administered through the Indiana University of Pennsylvania's Applied Research Lab. Qualtrics survey software was used to gather data from participating administrators and teachers. Preliminary contact was made with administrators by telephone and the researcher explained the study and provided the survey link to the respondent via email. Non-responding administrators were sent a reminder five working days after the initial emailing requesting their participation and one non-responding administrator was contacted several times via telephone. A consent form was included with each electronic survey that required the participant to provide consent prior to completing the survey. All survey data was collected from Qualtrics by the researcher for analysis. The researcher requested email contact information of teachers of online learning from each sample school administrator.

Survey of Online Teachers

The researcher collected survey data via online methods from teachers regarding local processes of instructional supervision. A survey link was prepared and sent via email from the Applied Research Lab in Indiana University of Pennsylvania. Online teachers were accustomed to functioning in an online environment and the teacher survey was administered through Qualtrics Survey Software. A brief explanation of the study accompanied the survey and requested the participation of the teachers. A consent form was included with each electronic

survey and required the participant to provide consent prior to completing the survey. Non-responding teachers were sent an email reminder five working days after the initial emailing requesting their participation. All survey data was collected from Qulatrics by the researcher for analysis and each cyberschool administrator and one teacher from each school district was contacted via email for an interview. The teachers were chosen randomly from each school grouped by survey responses indicating they would participate in an interview. Three teachers were emailed to participate in an interview, and the researcher reviewed each individual teacher's survey data prior to the interview to add questions to allow teachers to elaborate on survey responses.

Interview Protocol

Interviews of Administrators

A brief synopsis of the study was shared with the interviewees prior to each interview. The researcher scheduled an interview with the administrator at a date and time convenient for a thirty minute interview via telephone. Two telephone interviews took place at a time convenient for two administrators in their office with a telephone. One in-person interview took place at the district administration building in the administrator's office. The researcher emailed and telephoned the administrator's to schedule an appointment for a thirty minute interview. Administrator interviews were recorded and transcribed within one week of each interview.

Each interview was recorded for later transcription and analysis. Each administrator was asked to sign a consent form prior to commencing the interview (Appendix F). The interview consisted of descriptive information about instructional supervision and local online learning courses as well as semi-structured interview questions. Additional questions were added after analysis of the survey data.

Interviews of Online Teachers

A brief synopsis of the study was shared with the interviewees prior to the interview. The researcher scheduled an interview with teachers at a date and time convenient for a thirty-minute interview via telephone. Each telephone interview took place at a time convenient for the teacher in an office or at home with telephone. The researcher emailed and telephoned the teachers to schedule appointments for a thirty minute interview. The interview was recorded and transcribed within one week of the interview for analysis.

Each online teacher signed a consent form prior to commencing the interview (Appendix F). The interview consisted of questions regarding instructional supervision practices, criteria, and tools and included semi-structured interview questions. Additional questions were added after analysis of the survey data.

Survey Data Analysis

The data collected by Qulatrics Survey Software was downloaded and entered into Microsoft Excel for analysis. The data was edited to ensure there are no errors and the analysis proceeded. Section 1, Demographic data, Section 2, Local supervisory practices, and Section 3, Supervisory tools (questions 1-42) were analyzed in a frequency distribution table which listed the values for a variable and the number of times they appear in the data (Shavelson, 1996). This analysis of teacher and administrator survey data identified and rated the usefulness of the practices and tools instructional supervisors utilized in an online environment. Open ended survey questions were analyzed using qualitative analysis techniques. Each sample school's data was recorded and downloaded into Microsoft Excel for comparison to other schools in the study.

This analysis enabled the researcher to describe supervisory practices in sample schools that provided online learning. Descriptive studies allow for comparisons of groups, and the

administrator and teacher groups will be compared to identify similarities and differences in instructional supervision practices. A qualitative component of the study was included in the analysis of survey data to add richness to the study.

Interview data complemented the survey data through narrative, tables and figures to describe the supervisory criteria, practices and the impact on instruction. Demographic information from the respondents added depth to the findings and help the researcher better understand the participants in the study. These data were analyzed and reported on to provide a rich description of the phenomenon of instructional supervision of teachers of online learning.

Interview Data Analysis

The qualitative interview data were analyzed using a phenomenological approach to identify the experiences of people regarding the phenomena (Patton, 2002). The analysis involved coding, categorizing, and identifying overall themes present in the data with no preconceptions of what was contained in the data. The analysis described the phenomena of supervision from the eyes and thoughts of the study's participants.

The first step in the analysis was reading the transcripts several times prior to any analysis. Reading the transcripts served to acquaint the researcher with the content of the transcripts and what seemed to be emerging from the data. The second step in the analysis was coding the data. Codes are phrases, sentences and even paragraphs. A constant comparison method (Patton, 2002) was used and as other pieces of data are coded, they were labeled with an existing code or a new code was developed. Qualitative analysis is flexible and fluid.

During the course of the analysis, the codes were changed, dropped from the analysis, or combined with other codes, and new codes were added as the data was analyzed. Once codes were identified, the codes were grouped together to form categories. Categories explained and

grouped together codes with a central meaning. Themes were developed from the data from the depth of the data and themes were developed. The themes were analyzed from interview data and compared to the research questions to give a descriptive and detailed account of the supervisory processes in the sample schools.

Documentary Data Analysis

The researcher gathered and reviewed school policies, observation and evaluation forms, and other district supervisory documents and described the criteria and practices used by administrators to supervise teachers. Categories, patterns and themes were identified from district supervisory documents and compared to the themes in the literature.

Ethics and Confidentiality

Every participant in a research study had the right to privacy and the expectation that the data was kept confidential at all times. The right to privacy and confidentiality was disclosed to research participants prior to the start of a study. Research participants had the right to expect respect trust, scientific integrity, fidelity, and expected they will not identified by name at any time, before, during, or after the study. Each survey form provided a randomly selected identification number and a cover letter explaining privacy and ethical issues to participants as well as explaining their participation was voluntary. The completed surveys were accessible by the researcher and not accessible to district personnel.

A fundamental role for ethical research was to do no harm, including physical, psychological, social, economic, or legal harm. At the completion of the study any paper data was shredded, encrypted, and kept in a secure electronic format. Participants were informed they have the option not to complete the survey; however, their participation would be appreciated as an addition to the study. The electronic files from the interviews were transcribed after checking

the transcription for validity and were secured by the researcher. The interview data was kept with the signed consent forms in an electronic and paper format. Consent forms were kept by the researcher for confidentiality.

Chapter Summary

This study employed a combination of qualitative and quantitative measures and described the instructional supervision of teachers of online courses. A preliminary screening identified participating schools and a survey was administered to school administrators to determine the practices, criteria, and tools utilized by administrators for supervising teachers of online learning. Teachers completed a similar survey and compared data regarding supervisory practices in an online environment. Survey data was analyzed in a frequency table to identify, rank, and rate supervisory processes in the sample schools. A review of district policies and documents added to the description of supervisory tools, criteria, and practices. Interviews of teachers and administrators complemented the quantitative data and described the practices of supervision from the study's participants. This descriptive research involved gathering data that described events and then organized, tabulated, depicted, and described the data collection (Glass & Hopkins, 1984). The study culminated in a rich description of instructional supervision of teachers in three schools that enroll full time students in online learning.

CHAPTER 4

DATA & ANALYSIS

This study describes the instructional supervision of teachers of online learning in two schools in Pennsylvania and one school in New Jersey that offer full time online learning to students in grades 6-12. Specifically, the process of observation and evaluation is described and the study examines the performance criteria for online teachers, supervisory practices utilized by administrators, and the impact of these practices as perceived by teachers and administrators. Glickman (1990) describes supervision as the link between teacher needs and organizational goals so individuals can work together toward the vision of the school. This study examines that link by describing current practices of observation and evaluation in the sample schools. Rather than examine supervision in a traditional environment, the study describes the process and procedures of supervision in an online environment which is threatening to outpace state-level policies to guide these new educational opportunities (Watson et al., 2004).

Student enrollment in K-12 online learning is increasing at an exponential rate (Allen & Seaman, 2007). The migration of students from brick and mortar schools to online environments is shifting the delivery of instruction in the early 21st century (Zandberg & Lewis, 2008). This shift from a physical to a virtual learning environment will require administrators to supervise online learning that utilizes computers and Internet technologies to meet instructional objectives and facilitate communication between teachers and students. Instructional supervision is required in schools to comply with state and local policies requiring observation and evaluation of teachers regardless of the delivery model (Collins, 2004).

Purpose

This descriptive study implemented both qualitative and quantitative methods to examine the instructional supervision of online learning. The rapid growth of online learning and policies to observe and evaluate instruction require research to describe current practices and the perceived impact these practices have on instruction. This study has contributed empirical research by exploring instructional supervision in cyberschools. The research has implications for current and future administrators as online learning continues to grow at a rapid pace which will require that supervisory practices adapt to a virtual environment.

The three research questions are as follows:

Research Question 1: What criteria do administrators use to observe and evaluate online instructors?

Research Question 2: What practices do administrators use to supervise online instructors?

Research Question 3: To what extent do supervisory practices impact instruction?

Table 5 provides a matrix to identify survey questions and match them to the research questions:

Table 5

Survey Questions/Research Questions Matrix

Survey Questions	Research Questions
1-9	Demographic information
10, 13, 14, 15	What criteria do administrators use to observe and evaluate online instructors?
10, 11, 12, 17-42	What practices do administrators use to supervise online instructors?
17-42	To what extent do supervisory practices impact instruction?

Chapter 4 presents an analysis of data to answer the study's three research questions. The purpose of this study is to describe what practices school administrators use to observe and evaluate teachers of online learning and the impact these practices have on instruction. The chapter begins with the process used to gather and analyze data from three schools in New Jersey and Pennsylvania. The schools chosen for participation in the study enrolled students in full time online learning and employed administrators who observed and evaluated the teachers in a virtual environment. This study consisted of four phases: 1) the identification of sample schools; 2) the collection and analysis of survey data; 3) the collection and analysis of documentary evidence; 4) the collection and analysis of interview data. The three data sets were analyzed to describe the performance criteria and the practices of observing and evaluating teachers of online learning. Finally, the data analysis reported the impact of supervisory practices on instruction.

This chapter offers an analysis of the data which answers the three research questions and concludes with a summary analysis.

The Four Phases of the Study

The researcher implemented the four phases of the study and gathered data for analysis as described in Chapter 3. Analysis of the three data sets describes instructional supervision of online teachers in sample schools in Pennsylvania and New Jersey. In Phase One, the researcher conducted Internet searches and identified schools that enrolled K-12 students in full time online learning. The researcher also contacted East Stroudsburg faculty and doctoral students for information on cyber academies or school districts offering programs that met the study's criteria. After gathering the contact information from potential sample schools, the researcher contacted administrators from seventeen school districts to determine whether they met the criteria for participation in the study. One criterion for participation in the study was school districts that offered fully online learning (80% of content delivered online) to full-time students. The vital criterion was whether administrators from the potential sample schools had to supervise online teachers via observation and evaluation. The researcher investigated seventeen school districts, contacting school administrators via email and telephone and identified three sample schools for the study.

The researcher contacted school administrators through email and telephone leaving voicemails as needed. Through conversations the researcher learned whether students were enrolled full time and if supervision was conducted by the district. Districts that did not meet these two criteria were excluded from the study. Four potential school districts were eliminated from participation in the study when the researcher discovered the district's online teachers were not supervised by district administrators, but through private companies contracted by the school

districts. This was determined by telephone conversations. School administrators were advised via phone and email that their schools did not meet the criteria for participation in the study. The researcher continued to contact other school administrators via email and telephone to identify possible sample schools.

In email and telephone conversations with three other school districts in Pennsylvania the researcher determined that full-time students were not enrolled in the full time cyber programs but were taking courses in a hybrid/blended learning model that was equal to 50% online and 50% face-to-face classroom time. The researcher explained to the school administrators that they did not meet the criteria for participation in the study and were thanked for their time. School administrators in seven school districts did not respond to email or voicemail messages from the researcher and were eliminated as potential sample schools after not responding to follow up email and voicemail messages after one week. After investigating seventeen schools the researcher identified three school districts that met the study's criteria. The researcher emailed the district superintendents all necessary consent forms for participation in the study.

The researcher then contacted each of the three district superintendents and provided the background and purpose of the study via email to outline the district responsibilities for participation. The researcher formally requested participation in the study from each district Superintendent. The researcher obtained informed consent (Appendix A) from two Pennsylvania Superintendents via a scanned document to a .pdf file, emailing the form to each Superintendent. The Pennsylvania sample schools provided the consent forms to the researcher within a day of sending the documents; however, the New Jersey sample school's Assistant Superintendent requested more information regarding the study and to fully explain the purpose of the study. The School A Assistant Superintendent asked the researcher for clarification of the study's intent

to ensure the safety of her staff and students. The researcher met with the Assistant Superintendent (for 60 minutes) at the school district's administrative offices to describe the study. After the meeting the researcher obtained the signed informed consent form from the Superintendent. All three sample schools were identified and agreed to participate in the study. All informed consent forms were signed and the researcher began Phase Two of the study.

The researcher implemented Phase Two of the study and emailed a survey to each sample school administrator that supervised online teachers. The surveys were administered via Qualtrics survey software through the Indiana University of Pennsylvania's Applied Research Lab. A telephone conversation with each administrator confirmed their responsibilities in the supervision process and was validated by Question 6 in the survey which asked if each respondent was directly responsible for supervising teachers. The administrators completed the survey after an email reminder and follow up telephone calls. The researcher requested teacher email addresses from each administrator to distribute similar surveys and explained that one teacher from each school district would be contacted for an interview after the surveys were completed and analyzed.

The researcher forwarded the teacher surveys using an anonymous survey link via Qualtrics Survey Software and inputted all teacher email addresses provided by sample school administrators. The teachers in each school district completed the surveys after a reminder email was sent out one week after the surveys were distributed. In School A, all seven teachers contacted completed the survey (Appendix C). In School B, four out of the five teachers contacted completed the survey (Appendix C). In School C, both teachers contacted completed the survey (Appendix C). After all the survey data were collected and analyzed, the researcher implemented Phase Three of the research study.

In Phase Three, the researcher accessed each sample school district's web site and obtained school policies for instructional supervision. Two of the schools had Board of Education policies on district websites, however, School B did not have a supervisory policy in the Board of Education section of their web site. Administrator B explained the policy was in revision and was not available via the district web site. Each school administrator provided copies of the observation forms they used to evaluate teacher performance. After this documentary evidence was gathered and indexed, the researcher began Phase Four of the study.

In Phase Four of the study the researcher analyzed the survey data from administrators and teachers for the purpose of adding interview questions and probes to allow for clarification and elaboration of responses to survey items. An individual interview template was developed for each administrator and teacher from each school district. Teachers chosen for interviews were identified to ensure that appropriate follow-up questions matched teacher survey data. The researcher emailed and telephoned each administrator and teacher to request an interview. An interview was scheduled at a time that was convenient for each teacher and administrator via telephone. Each participant signed an informed consent form prior to the interview and was informed that they could stop at any time. Five of the six interviews were conducted via telephone in April and May of 2010 and were recorded on a Sony Digital Voice Recorder. The researcher asked permission of each interviewee prior to recording the sessions. Administrator A emailed the researcher and requested the interview be conducted in person. The Administrator A interview was conducted at the administrative office of School A as requested by Administrator A. Each interview was recorded on a Sony Digital Voice recorder, transferred from the digital recorder to the researcher's computer as an MP3 file, and transcribed within seven days.

The data sets were analyzed to describe the criteria used to supervise teachers, the practices implemented by administrators via observation and evaluation, and the extent to which these practices impacted instruction. The researcher used quantitative data, qualitative data, and documentary evidence collectively which best described the supervisory criteria and practices administrators used to evaluate teacher performance.

The criteria for teacher performance were analyzed from the data sets and ranked in frequency distribution tables. The administrator and teacher data are illustrated in tables as shown in the List of Tables, and narratives to describe what was observed and evaluated to determine teacher performance. The teacher and administrator data sets were compared to illustrate differences in perceptions and identify gaps in practices and expectations. These findings are displayed in charts and graphs and described in narrative to paint the picture of current practices of observation and evaluation in an online environment. The practices implemented by administrators to evaluate criteria were also identified by survey and interview data.

Practices of instructional supervision were identified and ranked by survey and interview data to explain how observation and evaluation were conducted in an online environment. This analysis identified practices used by administrators and is displayed in frequency distribution tables, figures, and narratives to show the current practices in sample schools with teachers delivering online learning to students in grades 6-12. These practices were identified in the data sets from both teachers and administrators and ranked to determine the impact that each practice has on instruction.

Each practice was ranked in a Likert-type scale from surveys (Appendix B, administrators) and (Appendix C, teachers) to determine the impact observation and evaluation

and supervision has on instruction. The results are presented in frequency distribution tables and perceptions of administrator and teacher groups are compared. The perceptions of administrators and teachers are examined and analyzed to determine the impact of specific supervisory practices on instruction. This analysis and comparison yielded data to describe the observation and evaluation practices in cyberschools and perceptions of administrators and teachers regarding traditional practices in a non-traditional environment. The next section outlines the organization of data for the description of instructional supervision in an online environment.

Organization of Data

Schools A, B, and C were chosen as participants in the study because the districts enrolled students in online courses and the administrators supervised the teachers that delivered the instruction. A brief overview in the description of each school included the Learning Management System/s, socioeconomic status, and student population. This was done through a synthesis of the data sets acquired by the researcher and included accessing the sample school websites and www.schoolmatters.com for socioeconomic data. The practices administrators used to evaluate these criteria were described through an analysis of documentary evidence, survey data, and interview data. The survey data included a Likert-type scale that ranked the impact of supervisory practices, and interview data verified and complemented survey responses. Appendix B is a survey containing 42 questions to gather data on instructional supervision from administrators. Appendix C is a similar 42 question survey that gathers information on instructional supervision from teachers. The research questions were answered by combining data sets that best described the supervisory criteria, practices, and the impact these practices had on instruction.

The researcher interlaced the data sets and described instructional supervision in an online environment. Information from the three data sets were analyzed and organized to answer Research Question 1 which asked what criteria administrators used to observe and evaluate online instructors. Data obtained from local policies, observation forms, and surveys of administrators and teachers identified criteria used in the observation and evaluation process. Information from the survey data required the researcher to add questions to individual interview templates for administrators and teachers to fully describe the criteria evaluated via supervisory practices. Research Question 1 asked what criteria were observed and evaluated by administrators and Research Question 2 asked how administrators observed and evaluated these criteria.

Research Question 2 asked what practices were used by administrators to supervise online instructors. Supervisory practices were identified using documentary evidence, survey data and interview data. The analysis identified items from the data sets and described tools, strategies, and information gathered from school Learning Management Systems (LMSs) as a part of supervisory practice. These items were verified and explained thoroughly through interview data and painted a rich picture of supervision in the sample schools. Themes emerged from the data sets and complemented the analyses to tell the story of instructional supervision from the viewpoints of administrators and teachers in cyber schools. The final research question asked the extent to which identified supervisory practices impacted instruction. The impact supervisory practices had on instruction was described through analysis of the survey and interview data.

Research Question 3 asked to what extent identified supervisory practices impacted instruction. This question was answered by survey data that identified practices and ranked each

item's usefulness in a Likert-type scale in the administrator survey (Appendix B) and the teacher survey (Appendix C). The surveys were similar to allow the researcher to compare results from the two groups. The researcher used a mean score in a 1-4 scale of 1) not useful, 2) not very useful, 3) somewhat useful, and 4) very useful to describe the impact of supervisory items rated by administrator and teacher groups. A mean score of 3 would indicate a sample group reported a practice was "somewhat useful" as ranked by the Likert scale. The surveys included two open ended questions that allowed respondents to elaborate on strengths and challenges of instructional supervision in each sample school's online environment. Interview data provided insights into the impact of supervisory practices and complemented survey data with detail and examples of the usefulness of specific practices. The two data sets were analyzed and described the impact identified supervisory items had on instruction. The three research questions were answered by blending information from all the data sets and included some practices unique to an online environment.

The survey data, interview data, and documentary evidence from sample schools were analyzed and organized to describe the instructional supervision of online teachers. The researcher used the analysis of the three data sets to paint a picture of instructional supervision in three sample schools as reported by teachers and administrators and mandated by state (NJDOE-AC, 2005; PDE 426 427 and 428, 2003) and local policies (Appendices H, K). Glickman et al. (2001) and Firth & Pajak (1998) suggest these policies and documents used for observation and evaluation for accountability and the improvement of instruction. The blended data sets provided a rich description of the criteria for performance evaluation, practices of teacher observation and evaluation, and the impact these practices had on instruction. Descriptive

statistics are presented in the next section and provide specific program and demographic features of the sample schools.

Descriptive Statistics

The study gathered data from two school districts in Pennsylvania and one in New Jersey. School A is an educational organization that provided a virtual program for students as well as additional programs that met various educational needs for school districts in New Jersey. The online learning program began in 2002 and used UCompass Educator as its Learning Management System. The cyber school offered 70 classes to 6th to 12th grade students in the Spring of 2010 and employed a principal who supervised seven full-time teachers. Teachers in School A had other responsibilities in the school, however, the study focused on the specific supervision of teachers in the cyberschool. Administrator A had worked as the principal with the online school since the program began in 2002. The cyber school courses were open for students in the state of New Jersey and enrolled students throughout the school year in comprehensive (full year) or makeup (credit recovery) courses. The online courses were offered to all students in New Jersey. Actual enrollment could not be determined and was not provided to the researcher. Students from other programs offered by School A had enrolled in cyberschool courses which is why exact enrollment could not be determined. The socioeconomic status of the school and students could not be determined because students were enrolled from numerous New Jersey school districts.

School B began operation in the 2009-2010 school year and serviced students in one school district in Pennsylvania. The Learning Management Systems used by the school was Blackboard with Compass Learning. Apex and A+ systems were used as supplementary guided applications for students who required remediation in a course. The cyber academy offered 93

courses to students in grades 7^{th} – 12^{th} in the 2009-2010 school year and employed seven full-time teachers. An assistant principal served as the supervising administrator of the online program and prior to the completion of data collection his title was changed to Director of the cyber academy. The cyber academy began the 2009-2010 school year with 23 students and as of May 8, 2010 enrollment totaled 141 students. In School B, 13.4% of the students qualified for free and reduced lunch. The third sample school was also located in Pennsylvania and offered courses to students within the school district.

School C began offering online courses in 2006 and enrolled students from one school district in Pennsylvania. The Learning Management System used by the school was Blackboard through Blended Schools and was supplemented with Compass Learning. The school offered 126 online courses to students in the 6^{th} – 12^{th} grade. The school employed a Director of Instructional Technology as the administrator who supervised two online teachers and one part-time teacher. Cyber school enrollment was estimated at between 55 and 60 students. The Director of Instructional Technology was the administrator of the program since it began in 2006. In School A, 78.5% of the students qualified for free and reduced lunch.

Each school offered a large number of courses (School A - 70, School B - 93 and School C - 126) and one teacher was able to teach several different courses on different platforms. Below are the courses taught as reported by teachers through survey data from Schools A, B, and C

- Life Skills and personal fitness
- English I, II, III, IV
- History, U.S. History I, U.S. History II(Grades 9-12)

- Grade 8 Math / Algebra I (grade 9 and 10) / Algebra II (grade 10 and 11) / Geometry (grade 10) / Pre-Calculus (grade 11 and 12) / Calculus (grade 11 and 12) / AP Calculus (grade 11 and 12)
- Marine Science, Earth Science (both high school level), GED
- English Grades 9-12, Creative Writing
- English 7 / English 8 / English 9 / English 10 / English 11 / Advance Placement Language / English 12
- Professional Development Courses for Cyber Teachers

One teacher reported that s/he didn't teach any classes, but monitored courses across all subjects and grade levels. Another teacher noted "I teach grades 9-12. The courses I teach include English 9-12, algebra I and II, geometry, elective math courses, American history I and II, world history, cultural studies, biology, chemistry, environmental science, physics, health, computer technology, art history, life skills, business basics, etc..."

The majority of courses taught in the cyber schools were core courses, however, some teachers taught elective courses. Teachers did not specify if these were all full courses or credit recovery. The teacher that reported she taught several courses in different discipline areas was not interviewed to determine how s/he could teach all of the different courses. The teachers had varying degrees of experience teaching both face-to-face and online environments.

Of the 13 teachers surveyed, two were not certified by their state to teach and are not included in Table 6. Only one teacher had previous online teaching experience prior to working in one of the sample schools. Survey results showed different degrees of experience for teachers, although one teacher had no experience teaching in a face-to-face educational environment prior

to teaching in the cyberschool. Table 6 lists teachers' experience in the physical and virtual classroom.

Table 6

Cyberschool Teacher Experience

Online	Face to Face
2 years	19 years
9 years	19 years
4 years	10 years
7 years	12 years
2 years	3 years
< 1 year	6 years
< 1 year	9 years
< 1 year	11 years
3 years	0 years
6 years	20 years
4 years	2 years

The origin of online learning in its current format can be traced back to 1996 when Internet and the capacity of communications technologies facilitated the contemporary online learning environment (Anderson, 2004). The varying degrees of experience of the sample teachers impacted the differentiation of supervision as administrators were dealing with varying ability levels and skill sets in their teachers.

Administrators had varying degrees of experience supervising teachers, ranging from three years (Administrator B), and Administrator A with ten years and Administrator C with fifteen years. None of the three sample administrators supervised online instruction prior to their current positions. School A has been offering online course for eight years, School B less than one year, and School C for four years. Previously, online learning had not been offered in the sample school districts. The sample schools provided three data sets which enabled the researcher to describe performance criteria and how instructional supervision was conducted in relatively new online learning environments. Schools A, B, and C provided survey, documentary evidence, and interview data that were analyzed to describe the practices and criteria used to observe and evaluate teachers of online learning.

Data Analysis

The data sets described the criteria and practices for instructional supervision and also determined the impact these practices had on instruction through the eyes of teachers and administrators in the sample school districts. A description of the criteria used to observe and evaluate teachers is presented in this section through graphs, tables, figures, and narrative. The three data sets were blended to describe criteria used to determine teacher performance in the sample school's instructional supervision models. The supervisory practices used by administrators described how identified performance criteria were observed and evaluated to determine teacher effectiveness. These identified practices were ranked by respondents to determine the impact each practice had on instruction.

The surveys included items related to the procedures, strategies, and tools used by administrators to observe instruction and collect evaluation data from lessons conducted by online teachers. Supervisory items were identified and ranked through surveys and interviews to

answer the three research questions presented by the researcher. The data are presented in tables, figures, and narrative to describe teaching criteria and supervisory practices identified in sample schools. As criteria and practices are identified by respondents, each item was ranked to determine its impact on instruction. This allows the researcher to identify supervisory criteria and practices and rank the impact of each item as reported by the sample groups in cyberschools. The groups are also compared as the administrator survey (Appendix B) and the teacher survey (Appendix C) contain similar items. The three research questions were answered through a blended presentation of analyzed data sets and are reported in the next three sections.

Research Questions

Research Question 1

Criteria administrators used to observe and evaluate online teachers. The researcher found mixed results from teacher and administrator survey data regarding performance criteria for teacher evaluation. Administrators and teachers were asked if teacher performance was based on clearly articulated standards. On the 1-5 Likert-type scale two of three administrators strongly agreed and one administrator somewhat disagreed. Administrator B described his disagreement with the item by stating "The standards are seen by many teachers as being imposed upon them… but many of the teachers are not navigating away from what they have traditionally done (in a face-to-face classroom)." Administrator B added that the teacher union sees the standards as "in a state of flux" and must be addressed through Professional Development to have all teachers understand what is expected of them. The teacher survey data revealed of the ten responding teachers, five teachers strongly agreed, three somewhat agreed and one teacher neither agreed nor disagreed and one somewhat disagreed. This showed teachers lacked clarity regarding their own instructional performance standards. Seventy seven

percent of teacher respondents agreed that teacher performance is based on clearly articulated standards although the strength of their response was less then the administrators.

The next series of questions defined performance criteria that each schools teacher evaluations were based upon. All administrators identified planning and preparation, learning environment, instruction, and professional responsibilities as components of the evaluation systems to measure teacher performance. The survey indicated 11 of 13 responding teachers identified learning environment and instruction were evident in evaluation while 9 of 13 checked professional responsibilities and 10 of 13 checked planning and preparation. Nearly all teachers agreed with school administrators that these supervisory categories were evident in the practice of evaluation. The broad categories of criteria were identified as evident and the observation and evaluation documents provided specific rubric items for performance assessment.

Documentary evidence. Each district provided the researcher with documents used to assess teacher performance through observations. School A provided two documents which included a student survey for online teachers (Appendix G) and the teacher observation rubric that was used for both online teachers and face-to-face teachers (Appendix H). Although all of these documents were available, when Teacher A was asked about specific criteria for her evaluation she replied "I don't know, it is more what we discuss with her (Administrator A) and she can see what we are doing and how much we know and all that through the lessons, it's more through the surveys she gets from parents and through guidance." The vague response from Teacher A confirmed the lack of clearly defined standards in her survey response. The criteria defined by School A were compared to the policy for teacher supervision in the Teacher A contract.

Supervisory policies. The researcher obtained the teacher contract from School A's district website (Appendix I) that identified supervisory policies for teachers. The supervision policy stated classroom observation and evaluation and follow up conferences were "…for the purpose of identifying any deficiencies, extending assistance for their correction, and improving instruction." This policy was verified via interview data from Administrator A as the policy for both online and face-to-face teachers. Administrator A described the evaluation criteria as "…if the criteria doesn't exactly match one of the boxes we add an attachment to the evaluation." Specific criteria for teacher evaluation were evident in the evaluation rubric (Appendix H) used by School A with areas that indicated if teacher performance was Excellent, Good, Unsatisfactory or N/A in each identified standard and an area for comments in a column after the ratings. Similar criteria were evident in the documents obtained from Schools B and C.

The supervisory policy for School C was obtained from the district website and stated that teacher evaluation "…stresses a cooperative sharing of ideas and focuses on the assessment of the employee's performance and the improvement of instruction." School B's policy was not available on the district website. When Administrator B was asked why the policy was unavailable, he replied "That was deleted, and it (supervision) is now based on the superintendent's interpretation of the state eval *(sic)* requirement." All three sample schools used the same criteria and policies for observing and evaluating teachers of both face-to-face and online learning. Coppa (2004) suggests teaching in an online setting requires cyber teachers to shift from their prior practices and experiences in a face-to-face setting. The current teacher requirements are based upon PDE 426 (semi-annual) and 428 (annual) and New Jersey, Chapter 32 of School District Operations, section 6A:32-4.4 and 4.5 evaluation forms that were developed for face-to-face instruction.

Observation and evaluation documents. The observation and evaluation documents provided to the researcher by school districts B and C were modified from PDE 426 and 428 evaluation forms with categories that rated teacher performance in four Domains. These criteria and rubrics were developed from the Danielson model of Enhancing Professional Practice (Danielson, 2007). Administrator B stated "The first piece we use Danielson's rubric. We give the teachers the opportunity to take it (the rubric) and reflect upon how they did (teaching an online lesson)." The identified Domains that assess performance were Planning and Preparation, Classroom Environment, Instruction, and Professional Responsibilities. Each document also included an open-ended reflective section for teachers to elaborate on their instruction.
The rubric used in School B (Appendix I) offered four ratings; Unsatisfactory, Partially Proficient, Proficient, and Distinguished. Administrator B reported that he did not use the Distinguished rating for teachers due to issues with the teacher's union. "The Distinguished rating carries with it a pay increase, and although the union approved it, they are currently grieving the document.", Administrator B added. In School B's rubric (Appendix I) there is also a section after each item for Reflection, Evidence, and Data.

The rubric for School C (Appendix J) also provided specific criteria and area for comments after the Satisfactory, Needs Improvement and Unsatisfactory rating areas for each item. School C's rubric is also based on Danielson's "Framework for Teaching" model (Danielson, 2007). Teacher C was asked about the rubric and she explained "The criteria are very similar to what you would find in a traditional class with the exception of classroom management." Teacher C also described self-evaluation as assisting her in identifying criteria for her own improvement and added "It's a process and just being in it day to day, you figure out what works and what doesn't work and I self evaluate and we (teacher and administrator) use

that as a big component as well, the self-evaluation process as opposed to specific criteria. It (online teaching) is evolving and we do work together to try and make it work for the students as well as for the teacher and be manageable, etc *(sic)*." Both Teacher C and Administrator C confirmed additional items added to the comment sections that were specific to an online environment.

School A's observation document provided an area for comments under each of the evaluation sections. There are four possible rating areas in School A's observation document. The ratings are Excellent, Good, Unsatisfactory, and N/A (Not Applicable). The criteria for teachers in the School A rubric were short descriptions and provided examples as shown in Appendix G. These criteria used ranking checkboxes and an area for comments on the bottom of each of the three sections. Both Administrator A and Teacher A seemed unclear about the specific criteria in the observation document yet both cited a student "pass/fail rate" as a major criterion although that was not a component of the observation document. The School A observation document had not been updated in the past ten years as reported by Administrator A.

All three school observation documents were used for both online teacher evaluation and face-to-face teacher evaluation within all three sample districts verifying research by DiPietro et al. (2008) that successful principles of online teaching had addressed many "best practices" from instruction in a face-to-face setting.

The themes were evident in evaluation rubrics and were verified by interview data as strong indicators of teacher performance. These themes were consistent with Danielson's (1997) model and the items are: 1) communication, 2) interaction, 3) differentiation (of instruction), 4) lesson design, 5) engagement/motivation, 6) culture, 7) understanding curriculum, 8) questioning, and 9) organization. These criteria were identified throughout the interview data

and items mentioned most often were communication, questioning, and differentiation. These three items appeared the most times from both teachers and administrators as criteria for teacher evaluation in an online environment.

The School C rubric (Appendix J) had a brief description of each criterion in a column labeled "Element". The second column is labeled "Explanation" and describes each criterion in more detail. This provides a clear description of each criterion in the observation/evaluation document. This section was followed by a comment section for optional elaboration on each of the assessed criteria. One comment option was not applicable (N/A). School C provided more detail about teacher performance criteria with a description to specify criteria and rate a teacher's effectiveness for each instructional item on a three point scale. School B; however, provided teachers with criteria and expectations on a four point scale.

School B provided the observation and evaluation rubric (Appendix I). School B's evaluation rubric provided four categories for ranking each criteria item which included Unsatisfactory, Partially Proficient, Proficient, and Distinguished, although Administrator B reported not using the Distinguished rating. The final column allowed administrators to add reflections, evidence, or data in an open ended format. School B's rubric provided teachers with specific evaluation criteria; however, teachers' responses varied to survey item 10 which asked if teacher performance is assessed on clearly articulated performance standards. One teacher strongly agreed, one teacher somewhat agreed, and one teacher was neutral. Administrator B somewhat disagreed with the same question in the administrator survey indicating that evaluation criteria were not clearly articulated. The teachers and Administrator B did not identify the criteria clearly even though the observation rubric provided specific items in the observation and evaluation documents.

Administrator B stated "the majority of the standards charts were developed by "…a small group of teachers and the perception is that they were imposed upon them (the rest of the teachers)…" Administrator B added that "the district has spent a tremendous amount of money and teacher time in the last year to get them (the teaching staff) on board but it is still in a state of flux." Teacher B explained that the cyber program was still new and explained that it was a "learning process" for administrators and teachers and admitted "I don't think there is a set criteria (for teacher performance). We are also looking at a new contract for teachers and there is nothing in our contract about cyber! So I think we are still making it up." Administrator B concluded "…there is a bit of combative relations when it comes to the union, even though they (the union) agreed to it (the standards)." The teacher bargaining unit could resolve disputes regarding supervisory practice and criteria for observing and evaluating teachers (Hazi, 1980). The newly operational cyberschool and the newly created teacher standards seemed disconnected from administrator expectations and teacher performance criteria in both face-to-face and online classrooms. This disconnect was evident in the perceptions of respondents regarding the criteria in School B's observation and evaluation document.

All of the administrators and two of the three teachers agreed that the school LMSs provided the capability for teachers to use tools to communicate and interact with students in a comparable manner online as in face-to-face instruction. This was predicted by Anderson (2004) and is consistent with the capacities of LMSs such as Blackboard and Blended Schools currently used in the sample schools. Many of the criteria were developed for a face-to-face classroom and were used for teacher evaluation in both face-to-face and an online environment. The online delivery of instruction requires cyber teachers to shift from their prior practices and experiences from a face-to-face setting to a virtual medium (Coppa, 2004). The two delivery methods may

not be comparable when considering instructional techniques in a physical setting as opposed to a virtual setting.

Criteria may not be specifically designed for online teachers but were the current performance criteria upon which that instruction was evaluated in the three sample schools. An example was the development of a "culture" and how it is evaluated differently than in a physical classroom. The criteria for good instruction was observed and evaluated differently in an online environment. Teacher B reported "…some of it is hard, like creating a classroom culture, that's a difficult thing to manage or measure, when you are really working one-on-one with that culture." Many of the other criteria could have translated to an online environment dependent upon individual perceptions of the standards. Administrator A confirmed that "They're (teachers) actually running their course like they're running their classrooms." Administrator B concluded that "…we can create whatever we have in our live classroom and we can move it to a digital learning platform." Each sample school's criteria and observation forms were used for both face-to-face and online teachers rather than having a separate forms or processes for the different delivery models of instruction. Administrators could add comments to the observations that did not directly address the identified areas in the rubrics, however, the evaluation policies and documents were the same in all three sample schools.

The criteria in the sample schools' evaluation documents were constructed to identify instructional criteria specifically in lessons conducted in a physical classroom. This was verified by all three administrators and all three teachers through interview data and specifically by Administrator C when she said "Our teacher performance standards are the same as our regular performance standards so I want to see standards based curriculum aligned lesson that are designed to have our students achieve and I want to see rigor and creativity." This was

complemented by Teacher C who added "The criteria is very similar to what you would find in a traditional class with the exception of classroom management." Teacher B said that because the online program was new, there was no time for stakeholders to develop new criteria for online teacher performance. Teacher B added "I think the reason there are no straight-forward guidelines is because all of the union ramifications that go along with that, because if they (administration) are going to base our evaluation on something else, it has to be approved by them… (the union)". Administrator B added that a future goal for the cyberschool was to develop separate performance criteria to address the online environment and create a new rubric to evaluate these criteria. The USDOE-WBEC (2000) called for outdated policies to be revised so not to impede innovation in online learning. This was also a goal of Administrator A and C. Administrators reported these documents would include other criteria teachers of online learning needed to deliver instruction successfully.

Online teaching criteria. Teachers and administrators reported other instructional criteria that were effective for online teaching. These criteria were not identified in the supervisory policies or rubrics, but respondents explained that they were vital to instructional delivery in an online environment. Table 7 is comprised of assessment criteria identified from survey and interview data that were not included in evaluation rubrics.

Table 7

Identified Online Teaching Criteria

Criteria	Schools identifying criteria
Multitasking	A, B, C
Technical ability	A, B, C
Logon hours	A, B
Animation and catchy websites	A
Pass/Fail rate	

The delivery of online instruction has created a need for teachers to be able to multi-task using LMS technologies. These technologies required technical and communication skills and structured digital content to develop an appropriate online learning environment. Other criteria have emerged from the use of online learning tools that require additional skills from teachers. When asked about skills online teachers needed to have, Teacher C stated "…you have to have the technical ability to maneuver through courseware and to multi-task and have multiple screens open depending on how many coursewares you are using and how things are handed in."

The ability to multitask developed as a result of an LMSs capabilities for communication and web-based instructional design (Anderson, 2004). By providing several means of synchronous and asynchronous communication, respondents claimed teachers needed to be proficient in multitasking to manage their instructional delivery in an online environment. Teacher B stated, "I was teaching grades 7-12 on 4 different platforms and it was overwhelming." Teacher C, added "…It's not like a classroom where you have kids raising their hands before they ask questions but there is an IMing feature (chat) and what will happen is you

will get multiple kids IMing you at the same time while we're doing an activity." Teacher C concluded "…you have to be able to think on your feet, answer a lot of things and be doing a lot of things at the same time. That needs to be a part of the evaluation process." This was not evident in supervisory policies nor in evaluation rubrics, however, respondents explained that online learning required a technological proficiency for teachers to successfully manage multiple windows and respond to numerous requests simultaneously. This resulted in the need for teachers to be able to multi-task using technology and provide feedback for students in a virtual classroom.

Collins (2004) described that although online learning offered teachers a delivery model of instruction that differed from the traditional classroom setting, administrators will still be required to observe and evaluate instruction in a virtual environment. Professional development and training was attended by teachers and administrators in the sample schools to support instruction and supervision in an online environment. Teacher A was asked about the training for online instruction and replied "I would say more how to use our LMS…" Teacher A added "…it was an all day eight hour training in the beginning and they gave us information how to go about putting on announcements on assignments and grading." This was confirmed by all teachers and administrators who attended professional development workshops, and each explained that the training focused almost exclusively on the functions and use of courseware in the LMSs rather than online instruction or the evaluation of online instruction.

All of the respondents agreed that "on the job learning" was how they learned and implemented techniques of online instruction and online teacher supervision. Administrator C said "My formal training came through grad *(sic)* school and on the job learning, watching teachers, watching what makes students tick and talking to parents…along with principal

workshops I attend here at our district." Administrator C attended the International Society for Technology in Education (ISTE) workshops, the National Educational Computing Conference (NECC) international conference and conferences and workshops with the International Association for K-12 Online Learning (iNACOL) and explained that the district was a member of iNACOL. Administrator C explained how she evaluated teacher performance and concluded, "That has all been seat of my pants, make it up as I go, and figure out what works for our children." Other administrators and teachers expressed similar feelings of how online evaluation and online instruction had been implemented in their schools through interview data.

Administrator B explained that there was no formal training for supervision in an online environment, but that he had studied Marzano's work on foundational issues of pedagogical practices and the art and science of teaching (Marzano, 2007) and adapted the concepts to an online environment. Administrator B explained the districts' involvement with iNACOL and described the work as "…the most purposeful of the bunch" in reference to resources for online learning and supervision. Administrator A described her training as having "…attended professional seminars on effective teacher evaluations, researched online and read books..." A teacher from School B criticized administrators for not having a full understanding of observation and evaluation in an online environment in an open ended survey item. A follow up interview question with Teacher B revealed that the principal of the school did not understand online learning, but stipulated that she (Teacher B) was directly supervised by the assistant principal. When asked if any of the training was specifically for online learning Administrator A stated "no." All the administrators in the sample schools reported they had very little training in the evaluation of teaching in an online environment. Online learning has outpaced other educational initiatives (Watson et al., 2004) and could have contributed to the lack of

professional development for teachers and administrators. As administrators learned to supervise online teachers via actually supervising and learning on the job, teachers expressed similar struggles learning to teach in an online environment.

Teacher C explained that graduate school coursework had not offered online pedagogy as an option but she had attended several trainings on the use of LMSs and online instruction. Teacher C elaborated and stated "I'm trained on designing courseware but I've never really had a specific course (on online learning) because for the most part, anytime I walk into a classroom, I know more than the instructor when it comes to online learning and computer usage in the classroom." Teacher B attended courses in a graduate program in the past two years that included courses on cyber education and explained "…that really helped me." Teacher B was the only teacher who attended a graduate course on how to teach in an online environment. Teacher B concluded that training provided through the school district was for the four LMSs available in the school but explained "…as far as cyber techniques and things like that, there was not a ton of training on that." Teachers expressed their training as online instructors were based upon experiences in a face-to-face classroom verifying research by DiPietro et al. (2008) and all three respondents explained they learned through trial and error teaching in an online environment.

The teachers in the three sample schools reported that online learning was a new venture in their districts and their administrators did not have the same experience in the delivery of online instruction or an understanding of the criteria for effective online learning. Teacher B stated "it's a new venture here, even in public education it's still somewhat a new venture." Teachers B and C stated explicitly that their administrators did not teach online prior to becoming directly responsible for observing and evaluating teachers of online learning. Teacher

C explained "'I've *(sic)* had more on-line time than she (Administrator A) and what I take from her and what I see from her is the traditional setting and the traditional expectations and all those core things that still apply in the virtual realm. Those are the kinds of things that she brings to the table." Administrator A was the principal of the school when it began offering online courses but did not have any experience teaching in an online environment. Administrator B explained he was given the mandate in March 2009 that online instruction would begin in September 2009. He also explained that the short time period between the decision to open a cyber program and the enrollment of students provided little time for preparation of all aspects of a program opening.

Teacher B said the superintendent showed a video clip of an airplane being built while it was in flight as a metaphor for opening the cyber program in a presentation prior to school starting, and described "…that's pretty much how we started the year." Cyber programs are a relatively new phenomenon and technologies have changed so rapidly that the three data sets showed a lack of appropriate training and for teachers and administrators.

Section Summary

The criteria for evaluating teacher performance were identified through survey and interview data. Additionally, survey results were verified by documentary evidence which were the same for face-to-face and online teacher's evaluations. These included instructional areas developed from Danielson's rubric (Danielson, 2007) in School B and C modified from PDE 426 and 428. School A had many similar criteria that matched the other sample schools. Some of these areas included communication, interaction, creating a culture. Other areas such as multitasking and logon hours emerged from the data as important skills for online learning but were not included on the evaluation rubrics. These additional criteria reported a shift in teaching

practices and experiences for instructional effectiveness as suggested by Coppa (2004). Open-ended sections of the evaluation documents allowed for administrator input on items not specifically identified in the rubric or for a lesson narrative.

Teachers of online learning were evaluated based upon policies and criteria in evaluation documents developed for face-to-face teachers. This validates Sergiovanni & Starratt's (1993) contention that supervision is a quantifiable measure designed for bureaucratic accountability rather than the improvement of instruction. Similar criteria and instruments were used to observe and evaluate two vastly different instructional models. The practices of observing and evaluating these criteria were conducted in an online environment and these practices were identified from data gathered and analyzed to answer Research Question 2 in the next section.

The previous section described what was evaluated by administrators in the sample schools. The next section describes how administrators observed and evaluated these criteria in an online environment. This included the amount of formal and informal observations conducted and the theoretical bases administrators implemented that determined if teachers met district approved criteria described in the previous section by the researcher. These practices were identified by survey data, interview data, and documentary evidence and compared to supervisory models in the literature review. Administrators used several supervisory practices to evaluate teacher performance in the three sample schools.

Research Question 2

Practices administrators used to supervise online instructors. The perceptions of administrators in the three sample schools indicated that their supervisory practices provided accountability for instruction, improved the quality of instruction, and raised student achievement. The practice of instructional supervision was conducted through direct assistance

from administrators who observed and evaluated lessons and provided feedback to improve instruction to meet local district goals as identified by Glickman et al., (2001). Direct assistance was facilitated by classroom visits by school administrators in this study as mandated by federal, state, and local policies regarding teacher supervision. This section describes the practices administrators implemented to observe and evaluate an online delivery of instruction. The sample schools LMSs provided a similar means of communication and observing lesson delivery in a face-to-face classroom through technologies, however, the process of observing lessons by the administrators were not always conducted as a physical visit. Many traditional teaching practices were replicated in virtual settings and administrators evaluated effective teaching criteria as per district policy and ranked them through narratives and rubrics. The researcher described these supervisory practices and answered Research Question 2 through analysis of the survey data, interview data, and documentary evidence.

Each administrator answered that their school had written procedures for supervision and ten of the thirteen teachers responded yes to the same question. Nearly all teachers responded that written procedures were used in schools and each school's evaluation documents as well as the district policies for teacher observations verified these responses. The policies for both Pennsylvania schools were modified locally from the State of Pennsylvania Professional Employees Section 413. This policy states that "There shall be a plan for regular evaluation…: and the "Superintendent shall establish a district staff evaluation plan which is in addition to the state rating plan." The policy also states that "The number and length of classroom observations and meetings shall vary in accordance with the needs and status of the employee." School C's policy in the teacher contract (Appendix K) stated "Non-tenured employees shall be observed through classroom visitation at least three (3) times in each school year. Tenured employees

shall be observed through classroom observation at least once in each school year." This was consistent with federal, state and local policy that requires the observation and evaluation of teaching staff regardless of the delivery of instruction (Collins, 2004) and confirmed that online teachers were subjected to the same policies as face-to-face teachers.

Administrator and teacher survey data identified practices evident in the instructional supervision of teachers in an online environment. Table 8 displays supervisory practices as identified by administrators in the three sample schools.

Table 8

Supervisory Practices Identified by Administrators

Question Number		Yes	No
1	Frequent observation	3	0
2	Regularly scheduled meetings with supervisor	1	2
3	Pre and post observation conferences	2	1
4	Timely, constructive and specific feedback	3	0
5	Differentiated supervision based on ability and developmental levels	3	0
6	Analysis of multiple sources of data	3	0
7	Data collected over time	3	0
8	Flexible professional development opportunities	2	1
9	As needed/on demand training and support	3	0
10	Personalized emails	3	0
11	Peer mentoring/coaching	2	1
12	Learning communities	1	2
13	Action research	1	2
14	Individual teacher self reflection	3	0

Many of the supervisory practices identified are evident in traditional supervisory model in a physical classroom as reported by administrators and teachers. These items were discussed during interviews with the administrators and clarified how these practices were conducted in an online environment. Frequent observation in a physical environment could mean a classroom observation once a week. Online learning data were warehoused on servers and could be accessed anytime and anywhere by teachers, students, and administrators. Technology provided these storage capabilities and these practices were not conducted typically as in a physical classroom. Several of these practices were confirmed in teacher survey data as shown in Figure 1.

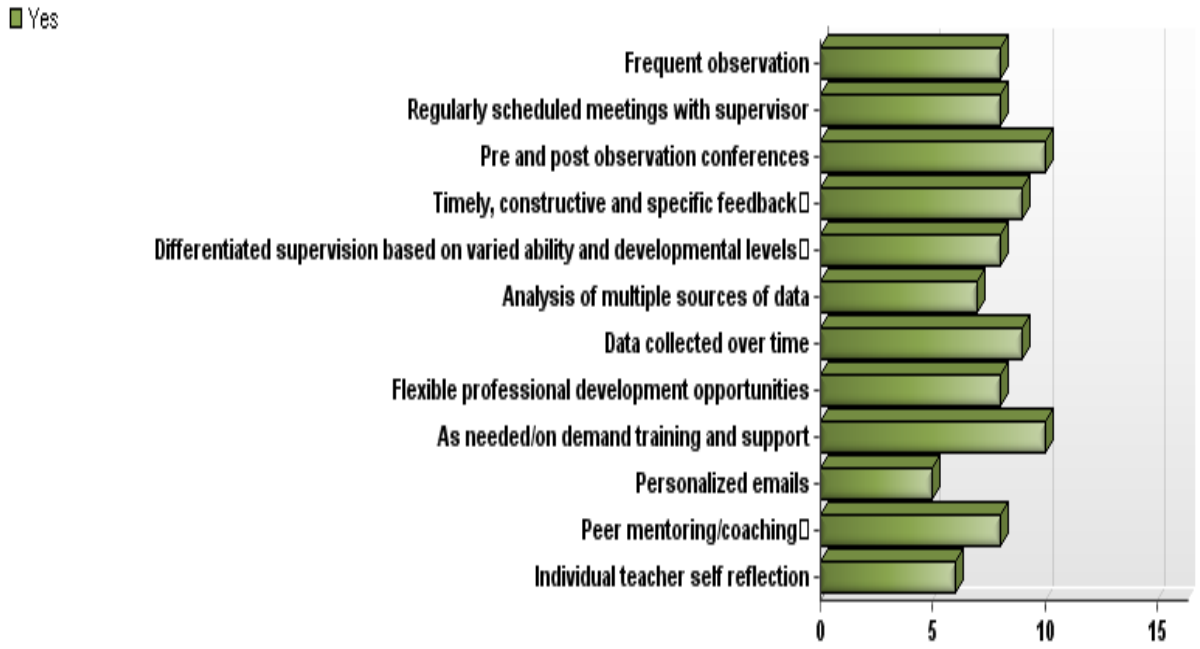

Figure 1. Supervisory practices identified and confirmed by teachers.

The data from the surveys required the researcher to add questions to the interview templates that clarified these practices to illustrate the observation and evaluation of teachers in an online environment.

"Classroom" observations. Classroom visits were conducted both formally and informally in each school with the administrator logging in and "observing" lessons within the district LMSs. Frequent observation was identified by all administrators as evident in supervisory practice. Interview data showed that the frequency of observations ranged from "every day" in School C, to regularly (once a week) at School B, and monthly or annually at School A. The lessons observed were either synchronous or asynchronous and observed when an administrator logged into the LMS. In a synchronous observation, an administrator would logon and viewed a group chat with the teacher who directed students in a virtual classroom to projects, assignments, or resources on the LMS. An asynchronous observation was conducted by an administrator logged on and viewing saved projects, presentations, and communications between teacher and students through chats or threaded discussions. These observations were conducted both formally and informally.

Informal observations were called a "drive by" in School C and a "walkthough" in School B. Administrator C said a "driveby" was "5-20 minutes," however, a formal observation required her to be online for the full lesson that lasted from 45-60 minutes. Teacher B indicated a "walkthrough" was approximately 10 minutes and her administrator "…watched the kind of questioning going on, seeing what kind of interaction is happening with the students, and looking at what feedback I'm giving the students." Teacher C added "she (Administrator C) has to adjust how she is going to monitor, what she is going to be looking for…so she has to change out expectations and then depending on the class, depending on the day, depending on connection…

there are a lot of factors that go into seeing if it was a successful lesson or not." Administrator A indicated that she would logon and "…see their communication log to see their ongoing communication with the parent…and see how often they (the teacher) grade the student's work and the constructive feedback they are giving to the student." The communication log was verified as a table to input the amount of telephone calls a teacher made to parents. The observation techniques were consistent with performance criteria, and district LMSs provided administrators with all classroom data from daily lessons and projects from teachers and students.

All respondents identified an element unique to teacher observation and evaluation in an online environment, the gathering of data from a school LMS. All data, communication, chats, threaded discussions, information, lessons, feedback, and resources were archived and available to administrators, teachers, and students at all times. Administrator A responded in the survey that "It (data in the LMS) is always available." Administrators were able to access all data from every lesson conducted throughout the school year. This was confirmed by survey data that indicated all administrators used "Data collected over time" as a supervisory practice. The data gathered over time were particularly useful as teachers from School C reported that the administrator allowed teachers to work autonomously, and observed and evaluated data on days that may not have been formally observed and provided useful positive and constructive feedback. The observation did not need to occur on a particular day or time, because it could be accessed at any time via warehoused course data.

Administrator B indicated that each lesson and student assessment could be "drilled down" to evaluate the rigor and "differentiated nature" of the lesson conducted by the teacher from any time during the school year. In an open-ended survey response, Administrator B stated

that he could "drill down" information and see exactly how long a teacher spent online in an area or activity. Teacher B confirmed this and added the LMS kept "…our Skype conversations with students" and concluded "Yes, they (the administrator) have access to everything." As the capabilities of LMSs grew, avenues for interactions, communication, and information became ubiquitously accessible for administrators (Anderson, 2008). The acquisitions of this data were relevant because every lesson, each student interaction, and all student projects were available to be observed and evaluated. This is the equivalent of recording every minute a face-to-face teacher is in a physical school building. These examples verified survey data and interview data regarding what information was collected for teacher evaluation.

Administrators in all three sample schools evaluated teacher performance from LMS data sources. Administrator B described portions of his collection of observation data as "…a level of response from the student. You can actually look at anything submitted by each student back to the teacher and by doing so can see the level of rigor that is expected by the teacher." Administrator B continued by expressing how valuable this was for teachers to reflect on student artifacts. Criteria can be observed from the entire school year by logging onto the LMS and accessing classroom data. This offered data that quantified communication, feedback, flexibility, differentiation, questioning and other aspects of district performance criteria. This differed from a snapshot observation observed in a physical classroom which generally lasts for one lesson or a class period. Lesson data were available anytime for evaluation by administrators, however, when a formal observation was performed administrators reported it was scheduled and generally involved a pre and post observation conference as a clinical model of supervision.

All three administrators indicated they used pre-conferences and post-conferences when a formal observation was conducted. This practice of Clinical Supervision required a pre-

conference between the teacher and administrator, an observed a classroom lesson, then a post-conference to discuss possible areas of improvement (Goldhammer, 1969; Cogan, 1973). This model was adapted to an online setting as administrators reported they held a conference and discussed a certain project or specific component of online instruction. Administrator B stated "The pre post gives me what kind of reflectivity do we have to move toward in the discussion and the post enlightens the evaluator as to 'is this the avenue I have to go as far as PD *(sic)* for the teacher for next year?'" Teacher B confirmed this practice and added her supervisor provided information on "…current trends and giving examples of what is good instruction by showing us other cyber classes…and looking at tools that are online that we can borrow from." Administrator C described a similar process in which a lesson was discussed prior to an observation and then shared thoughts on performance to improve instruction. The delivery of instruction as conducted via computer allowed the teacher and administrator to combine pre-conferences and post-conferences to discuss instruction as it occurred in School C.

Online teachers taught lessons from their computers and utilized LMS tools which facilitated interaction with their students. Administrator C described her ability to interact with her teacher and communicate during a lesson without disrupting the class. This allowed for Teacher C to speak via phone, chat, or in person about the lesson currently being taught and the teacher immediately implemented feedback provided by the administrator and this created a real time post conference which improved instruction while the lesson was in progress. Teacher C described this as "…kind of a combined observation slash post-conference." Teacher C continued ""It's a little different than the traditional setting. We can actually have a conversation while I am still in the process of teaching…and immediately following, because I can still be in the presence of kids, still answering questions, and discussing things with her at the same time if

she's (Administrator C) physically in the room with me." This practice required the multitasking ability described by respondents as a criterion necessary for online teachers. This form of direct assistance used a modified pre post conference in the non-traditional delivery of online instruction. Administrators needed to address the new delivery of instruction through understanding different skill levels evident in teachers of online learning.

Differentiated supervision. All three administrators and eight of ten teachers responded that differentiation of supervision was evident in supervisory practice. The goals of differentiated supervision were to enable growth in teachers with varying levels of experience who required varying degrees of professional development (Glickman, 1990). Table 6 illustrated the varying degrees of teaching experience both online and face-to-face as the rapid implementation of online learning in the sample school districts required administrators to differentiate supervisory practices for their teachers.

Administrator C illustrated how she supervised her teachers and said "I have one teacher with 20 years' experience and another teacher who has 10 years of experience and she needs a little more support than the other so I provide her with information, connect her with other people and I use a softer approach." Administrator A also described meeting and communicating with newer teachers much more often than "veteran teachers". Teacher B described her feelings this year as an online teacher "I felt this year, almost like a new teacher again." Administrator B indicated that differentiation should be a component of supervisory practice but said incorporating differentiation has been met with resistance by the union.

Administrator B "wholeheartedly believes" that differentiated supervision is a necessary process for improvement. "The number of grievances I have had to deal with this year based on what we are creating here and the fact that I do believe each teacher should be treated equally but

differently, equally in terms of the expectations and outcomes should be the same, differently as this teacher may be stronger in this area as opposed to that area and the union is not a fan of that. The union is a fan of 'what is good for one is good for all', and when you try and differentiate the support it is often met by a discussion or a grievance." Koppich (2005) suggests collective bargaining units should focus on improving instruction rather than other issues such as working conditions and hours. Administrator B also said that he did not hire any teachers for the cyber academy through an application process. Administrator B reported he was assigned teachers with various backgrounds, none with strong online teaching abilities, who were transferred to the online program and given new responsibilities. Teachers from all three sample schools described similar circumstances with teachers who had little or no online experience. Many teachers reported their reliance on peers for support and guidance as a resource.

Peer coaching was identified by two of three administrators and eight of eleven teachers as evident in practice. However, interview findings indicated no formalized peer coaching programs existed in the sample schools. Administrators and teachers reported that teachers worked together to support each other via in-person and virtual meetings. All three administrators reported facilitating a "loose" form of peer coaching that provided support for teachers that shared the experiences of teaching in an online environment. Schools B and C reported that formal peer coaching programs were available for traditional teachers but that practice had not been implemented in the online programs. Many practices were adapted from traditional observation and evaluation and others evolved from technologies and innovation.

Supervisory tools. The tools used in the supervisory practices were reported by teachers in surveys and are displayed in Figure 2:

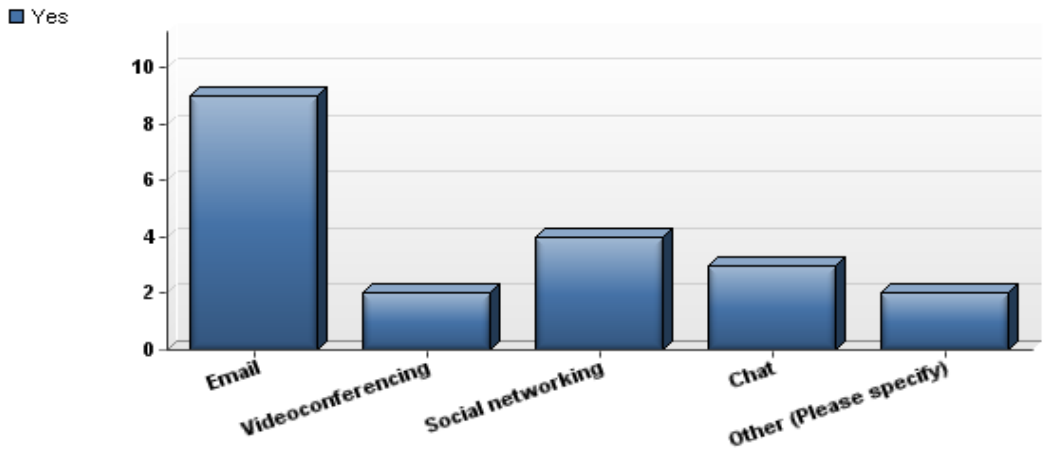

Figure 2. Supervisory tools identified by teachers.

Email was used most as a tool in the supervisory process and this was verified by interview data and another survey question that asked if personalized emails were used in supervision. Nine teachers responded that personalized emails were used in supervisory practice. Administrators responded to a similar question regarding technology tools and confirmed via interview data that it was a primary means of communication with teachers.

Figure 3 displays the tools administrators reported in the practice of instructional supervision.

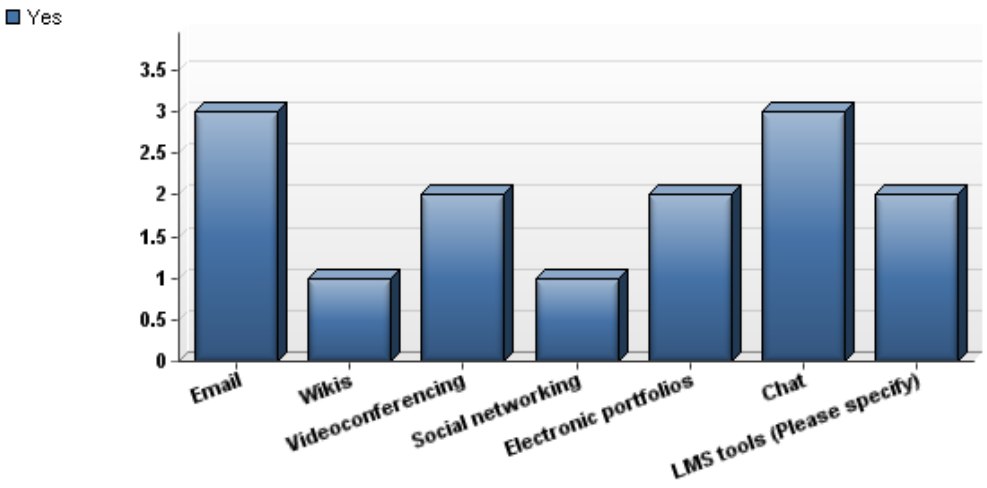

Figure 3. Supervisory tools reported by administrators.

Chat and email were used most by administrators for communication. The "LMS tool" identified by both groups was Wimba Live classroom. This tool was a synchronous "live classroom" feature in Blackboard that allowed teachers to communicate with students in a chat room and administrators could "visit" the classroom during lessons and meet with teachers virtually. Wimba is also a collaborative tool that can display documents and presentations with classroom participants synchronously and included Instant Messaging and video conferencing that was used in the classroom.

Section Summary

Supervisory practices used by administrators to evaluate teacher performance in an online environment were similar to practices used in traditional classrooms. Administrators used forms of clinical supervision for frequent observation both formally and informally and data were collected from various sources but, specifically, from observation. The observations were conducted both synchronously and asynchronously and enabled administrators to provide direct assistance based upon data gathered from these observations. Various technology tools assisted in the practice of supervision; however, some of the tools available in district LMSs such as wikis and blogs, were not used consistently for the practice of supervision. Observation practices were used to identify and rank performance criteria and administrators were able to access that data at any time from any online lesson. Teachers were able to benefit from real time feedback provided by administrators as lessons were being conducted as a variation on the clinical model of supervision. The final section of this chapter reports the impact of supervisory practices on instruction as perceived by administrators and teachers.

Research Question 3

The reported impact that supervisory practices on instruction. Question 12 on the administrator's survey asked administrators to state their agreement to the statements regarding the purpose of their supervisory practices. The options were "provide accountability for instruction," "improve the quality of instruction," and "raise student achievement." All three administrators strongly agreed to each statement regarding the purpose of their supervisory practices. The teachers surveyed, however, had mixed responses regarding the purpose of supervisory practices. A similar purpose for supervision was not reflected in the teacher surveys; although the majority of teachers strongly agreed or somewhat agreed to the statements regarding supervisory practice, nearly half of the teachers surveyed showed neutrality or disagreed. Table 9 below shows how teachers responded to this survey question.

Table 9

Teacher responses to survey question three.

	Question #3 Purpose of Supervision	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewh at Agree	Strongly Agree	Responses
1	Provide accountability for instruction	2	1	1	2	5	11
2	Improve the quality of instruction	2	1	2	1	5	11
3	Raise student achievement	1	2	1	1	6	11

The teacher and administrator groups did not agree on the purpose of instructional supervision. This finding is consistent with the lack of agreement regarding performance criteria for teachers as highlighted in the previous section.

Technological tools used by administrators for observing online instruction substituted for live classroom visits and provided evaluation data regarding a teacher's effectiveness. The impact of observation and evaluation practices by administrators was determined by survey data that ranked supervisory practices. These data were verified and complemented interview data and described in more detail effective supervisory practices administrators used in an online environment. Practices were identified as a component of instructional supervision and then ranked with a 4 point Likert-type scale (Appendix B) to determine each practice's usefulness. Data from the Likert scale were used to determine the impact of identified practices as described in the next section of the chapter. Survey Question 13 asked "Indicate in the table below whether your school is currently using the following strategies in the supervision process." The three administrators surveyed unanimously agreed that the following practices were evident in the supervisory practice.

- Personalized emails (All 3 administrators responding)
- Timely, constructive and specific feedback (All 3 administrators responding)
- Pre and post observation conferences (2 of 3 administrators responding)
- Regularly scheduled meetings with supervisor (2 of 3 administrators responding)

Although the item "Learning communities" was ranked unanimously as very useful by administrators, the researcher eliminated the item from the data analysis due to the many interpretations that respondents identified in the interviews. All administrators agreed that personal emails were very useful and explained in interviews that the quick communication

allowed them to provide teachers with direction, answers to questions, and resolutions to issues. This was compatible with the timely and constructive feedback that was also considered very useful and correlated with the instantaneous nature of email communication.

Table 10 shows the supervisory practices as ranked by administrators and teachers.

Table 10

Ranking of Supervisory Practices

#	Question	Administrators		Teachers	
		Somewhat Useful	Very Useful	Somewhat Useful	Very Useful
4	Timely, constructive and specific feedback	0	3	3	7
10	Personalized emails	0	3	2	8
2	Regularly scheduled meetings with supervisor	0	2	3	6
3	Pre and post observation conferences	0	2	5	2
11	Peer mentoring/coaching	1	2	2	6
12	Learning Communities	0	2	2	3
1	Frequent observation	1	2	4	3
7	Data collected over time	1	2	3	4
9	As needed/on demand training and support	1	2	3	6
14	Individual teacher self reflection	2	1	3	5
8	Flexible professional development opportunities	1	1	3	4
5	Differentiated supervision based on varied ability and developmental levels	2	1	3	5
6	Analysis of multiple sources of data	2	1	4	5

Pre and post observations conferences positively impacted instruction according to survey and interview data and Administrator B stated that this clinical model of supervision "…provides good strong data as far as what we need to do and how we have to do it." Teacher A explained "In a pre-conference I discuss things and projects I want to do with my class…and we (administrator and teacher) will go through the positives and negatives of the things I have done." Teacher A discussed her regularly scheduled meetings with her supervisor and found it to have a positive impact on her instruction. Teacher C used chat for pre-conference and post-conferences and found it helpful to use the feature during actual lessons. "…it's is almost like someone is whispering in your ear…" explained Teacher C and this practice reinforced the usefulness of the chat feature if the administrator was not in the room during instruction. Administrators found the pre and post observation conferences to be very useful: however, teacher results were mixed in the survey data with only five teachers identifying the item in practice and those ranked it as somewhat useful. The researcher did not find the reason why this disconnect occurred since interview data obtained from teachers found the practice had positively impacted their instruction.

Administrator A reported how she used the observation and evaluation process to dismiss teachers after poor performance teaching online during the 2009-2010 school year. Acheson and Gall (1997) described the summative evaluation as a practice administrators used to make decisions regarding tenure, promotion, or dismissal. Administrator A stated that a teacher "…was not keeping up with the course," and was not rehired after poor performance evaluations. The evaluation identified the teacher as not performing well and Administrator A was able to dismiss the teacher for not meeting the instructional criteria and found this to be an extremely helpful method of supervision because it helped identify an ineffective teacher and removed the

teacher from the school. Other practices were not found to be as effective in supervisory practice.

Some practices of instructional supervision were found to be rated in the somewhat/very useful category by administrators. These included:

- Peer mentoring/coaching
- Frequent observation
- Data collected over time
- As needed/on demand training and support

Each of these items was ranked very useful by two administrators and somewhat useful by one administrator.

Peer mentoring and coaching was also regarded as highly useful by administrators even though the practice was not formalized in the three schools. All teachers and administrators reported instances of collegiality and working together as a team to share best practices and resources without a district model that promoted peer coaching. Two teachers stated that peer coaching was "the most useful" practice in their supervision without the benefit of common planning time or a supervisor who facilitated the model.

During interviews with two teachers, the researcher had to consistently refocus the conversation on the guided discussion questions. Two of the three teachers described problems and issues they had with the program and with their students, and engaged in a dialogue with the researcher when the purpose of the interview was to gather information on instructional supervision. This could indicate a lack of official mentoring for teachers. Teacher C is an expert in the field and stated "I'm trained on designing courseware…I've had all of that, but no, I've never really had a specific course because for the most part anytime I walk into a classroom, I

know more than the instructor when it comes to on-line and computer usage in the classroom." Teacher C also asked the researcher about his experience with online teaching prior to conducting the interview.

Frequent observation was ranked in the useful category by teachers and cited the continuous communication and feedback as useful for improving their instruction and resolving conflicts and issues. These data correlate with email and chat used for immediate communication and feedback. One teacher cited in survey data that the "easy accessibility to supervisors" was a strength of the school's supervisory system.

Administrators ranked the last five items as somewhat useful/very useful:

- Individual self reflection (3 administrators responding)
- Flexible professional development opportunities (2 administrators responding)
- Differentiated supervision based on varied ability and developmental levels (2 administrators responding)
- Analysis of multiple sources of data (3 administrators responding)
- Action research (2 administrators responding)

Administrator B found that individual self reflection was very useful and used the practice in many aspects of his supervision and indicated in the survey that the item was very useful and followed up with "… the depth of reflection is purposeful in how we move forward." Differentiated supervision was also ranked as somewhat useful as administrators agreed that the recent implementation of online learning required them to adapt their supervisory style to address diverse teacher skill sets. Administrators found usefulness in nearly all of the practices presented in the survey. This was not as evident in the survey and interview data collected from teachers.

Figure 4 shows the impact of supervisory practices as indicated by teachers in survey data. The top four practices were personalized emails, peer coaching, analysis of multiple sources of data and on demand training and support.

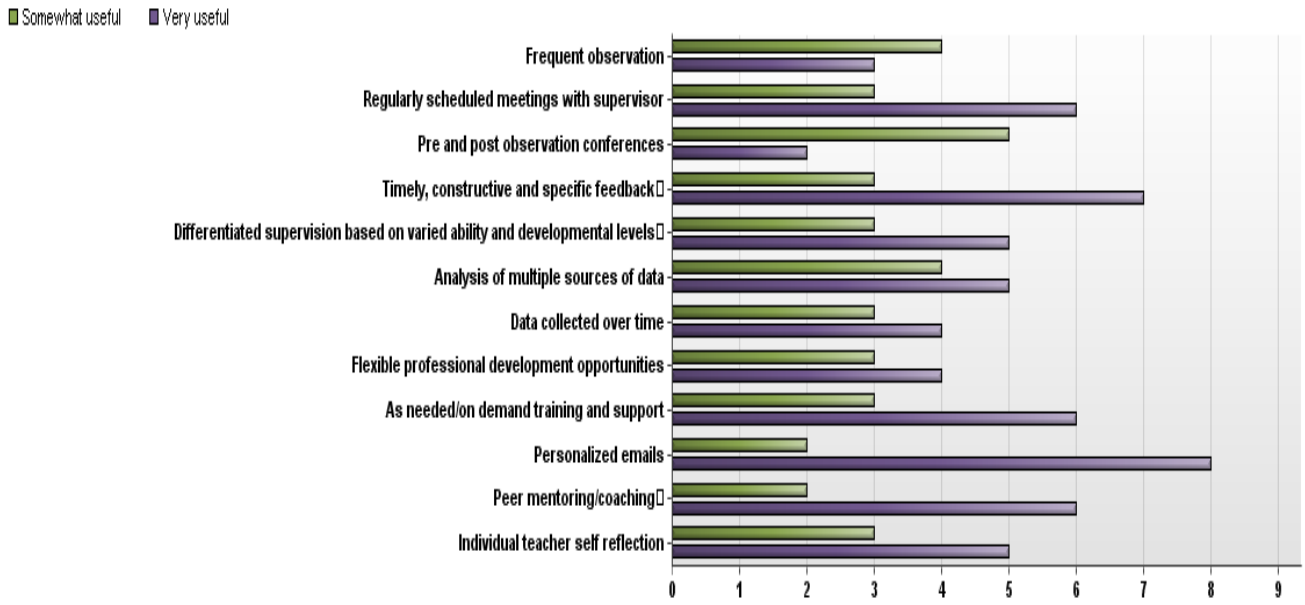

Figure 4. The impact supervision had on instruction as reported by teachers.

The teachers agreed with administrators regarding practice in the highest ranked items two items, timely, constructive and specific feedback and personalized emails. Differences emerged as teachers ranked the impact of training and support questions much higher than administrators and reported the pre and post conferences were not as useful as most of the other practices. Sergiovanni & Starratt (1993) view supervision as a focus for improving teacher's knowledge, skills, and abilities and problem solve effectively. This is evident in teacher responses that identified practices that supported individual teacher performance (feedback, emails, training and support). Peer coaching was ranked as very useful by most teachers, yet it is not a formal practice implemented by sample school administrators.

Teachers identified supervisory practices within their schools as conducted by their administrators and ranked them on a 4 point Likert scale. The top five identified and rated practices were:

1. Personalized emails (ten respondents)
2. Peer mentoring/coaching (eight respondents)
3. Timely, constructive and specific feedback (ten respondents)
4. As needed/on demand training and support (eight respondents)
5. Regularly scheduled meetings with supervisor (nine respondents)

The next 3 items were also identified as somewhat to very useful as identified by teachers.

6. Differentiated supervision based on varied ability and developmental levels (eight respondents)
7. Individual teacher self reflection (eight respondents)
8. Analysis of multiple sources of data (nine respondents)

One final item, Action Research, was identified by three teachers and unanimously ranked as very useful, however, none of the interviewed teachers used Action Research as a practice and could not describe the practice in greater depth.

The two items that were not ranked as useful in practice were pre and post observation conferences and frequent observation. These items were both identified by seven respondents as evident in practice. Both frequent observation and pre and post observation conferences were ranked lower in usefulness. These items were in the bottom three of practices identified and ranked for usefulness in supervisory practices by teachers. Data from items that were on both administrator and teacher surveys (Appendix B and C) provided conflicting results.

When teacher survey responses regarding strategies in supervisory practices were compared to administrator's responses, many of the survey items matched up in usefulness. The top items identified and matched are identified in Table 11:

Table 11

Comparison of Survey Responses Ranking Supervisory Practices

Supervisory Practice	Teacher Responses	Ranking	Administrators
Personalized emails	10	8 very useful 2 somewhat useful	All reported very useful
Timely, constructive and specific feedback	10	7 very useful 3 somewhat useful	All reported very useful
Peer mentoring/coaching	8	6 very useful 2 somewhat useful	All reported very useful
Regular scheduled meetings with supervisor	9	6 very useful 3 somewhat useful	2 reported very useful

The four items listed in Table 10 were the most identified in practice and ranked as most useful as measured by the survey. Teachers and administrators found commonality regarding the usefulness of these items as supervisory practices. Other data analyzed from the survey showed conflicting perceptions between teachers and administrators regarding other identified supervisory practices.

Teacher survey data showed that nine respondents identified analysis of multiple sources of data were evident in practice and was ranked as very useful by five teachers and somewhat useful by four teachers. Administrators, however, all identified analysis of multiple sources of

data present in their supervisory practice, but with two administrators ranking the practice somewhat useful and one ranking the practice very useful. This is significantly lower for administrators showing that teacher's perception of this item was more useful than administrators. Survey data did not reveal reasons why teachers would find this practice more useful than administrators. A similar conflict was evident in the differentiated supervision based on varied ability and developmental levels.

Eight teachers identified differentiated supervision as evident in practice with three teachers ranking the practice somewhat useful and six ranking it very useful. All administrators identified differentiated supervision as evident in practice with two administrators ranking it somewhat useful and one ranking the practice very useful. Differentiated supervision is evident in practice in the three sample schools and is useful to improve instruction as indicated by survey results. Administrator B explained that he did not find the practice as useful in his supervisory practices due to union issues and grievances filed when he was implementing this new practice. Administrator B believed the practice should be implemented, but found it only somewhat useful in practice. The practice of frequent observation also revealed some conflicting perceptions regarding its usefulness in the survey responses.

Survey responses indicated that two items were clearly identified in practice and found to be useful, however, teachers found it to be statistically less useful than administrators. Frequent observation, which was unanimously identified by administrators as present in practice was only identified by six of thirteen teachers as a practice in supervision. All three administrators identified frequent observation in practice with two ranking it very useful and one ranking it somewhat useful. Four teachers ranked frequent observation as somewhat useful and three

teachers ranked it very useful. In this study, administrators find the practice more useful than teachers in instructional supervision.

Another survey item, pre and post observation conferences, were identified by only seven of thirteen teachers as evident in supervision. Five teachers ranked the usefulness of pre and post observation conferences as somewhat useful with two teachers ranking it very useful. Two of three administrators, however, indicated the practice was evident and both rated it as very useful. Interview data could not confirm the discrepancies of these data. This practice was the most divergent of views of supervisory practices in the study, indicating administrators find pre and post observation conferences evident in practice and very useful as opposed to teachers who mostly felt the practice was somewhat useful.

Other items in the survey were identified by administrators as evident in supervisory practice although not rated as useful. Figure 6 below details survey items administrators reported as useful practices in the supervisory process.

Table 12 shows the usefulness of supervisory practices by administrators and shows the majority of identified items had some use in the practice of instructional supervision.

Table 12

Usefulness of Supervisory Practices Reported by Administrators

Question Number		Somewhat Useful	Very Useful
1	Frequent observation	1	2
2	Regularly scheduled meetings with supervisor	0	2
3	Pre and post observation conferences	0	2
4	Timely, constructive and specific feedback	0	3
5	Differentiated supervision based on ability and developmental levels	2	1
6	Analysis of multiple sources of data	2	1
7	Data collected over time	1	2
8	Flexible professional development opportunities	1	1
9	As needed/on demand training and support	1	2
10	Personalized emails	0	3
11	Peer mentoring/coaching	1	2
12	Learning communities	0	2
13	Action research	1	1
14	Individual teacher self reflection	2	1

Table 12 details the useful and somewhat useful supervisory practices identified by administrators. Timely constructive feedback and personalized emails were unanimously rated very useful in the supervisory practice. Frequent observation, data collected over time, on demand and as needed training, and support and peer coaching received very useful and somewhat useful ratings consistently in the three sample schools. The administrators also rated

teacher reflection, analysis of multiple sources of data, and differentiated supervision and somewhat useful to very useful.

Administrators ranked these practices' usefulness in the survey and were then asked which tools were used in the supervisory process. Of the remaining constructs used in the practice of supervision, these elements were identified by two of three administrators:

- Flexible professional development opportunities
- Peer mentoring/coaching

These items were rated highly for usefulness and were evident in practice. Other items in the survey were identified by administrators as evident in supervisory practice although not rated as useful.

The surveys identified practices used by supervisors to observe and evaluate teachers of online learning. The next section identifies tools used by administrators who observed and evaluated teachers and described how the practices were conducted. The communication tools are not exclusive to supervising teachers of online learning; however, these tools were available to administrators and teachers using web applications and LMSs. These tools were identified and ranked by teachers and administrators as evident in practice and usefulness using the same 4 point Likert scale as the previous section in Appendix C.

The impact technology tools had on instruction. Technology tools for communication for instructional supervision were identified and ranked by teachers and administrators. Technology tools are used for information gathering and communication purposes in the supervisory practices. Table 13 identifies and ranks the usefulness of technology tools in supervisory practices as reported by administrators.

Table 13

Usefulness of Technology Tools Reported by Administrators

Question Number		Somewhat useful	Very useful
1	Email	0	3
3	Wikis	1	0
4	Videoconferencing	1	1
5	Social networking	1	0
6	Electronic portfolios	2	0
7	Chat	2	1
8	LMS tools (Please specify)	0	2

All three administrators identified that email and chat were used in the supervisory process. Email was rated as very useful by all three administrators; however, chat was rated as somewhat useful by two administrators and very useful by one administrator. Administrator C revealed that frequent communication via email and updates allowed for constructive feedback and the opportunity for frequent observations. These combined tools and practices were found to be very useful by administrators. Other areas identified as useful by two administrators were video conferencing and electronic portfolios. Electronic portfolios were rated as somewhat useful, while videoconferencing was rated very useful and somewhat useful. These areas were used as a component of district LMSs and an item was identified by administrators and teachers in an open ended question.

The tool identified as “other” is Wimba classroom. Wimba classroom is a collaborative learning application that allows users to meet online via multi-way audio and voice through

Internet. The two administrators and two teachers that identified Wimba classroom as evident in practice rated the item as very useful in the supervisory process. Teachers reported the usefulness of technology tools in supervisory practices as shown in Table 14.

Table 14

Usefulness of Technology Tools Reported by Teachers

Question Number		Somewhat useful	Very useful
1	Email	1	8
4	Videoconferencing	3	1
5	Social networking	1	3
6	Electronic portfolios	0	2
7	Chat	4	1
9	Other (Please specify)	0	2

The teacher survey data indicated that email was the most identified and used tools of all the electronic tools. Of the thirteen teachers who responded, nine identified email as present in the supervision system and eight of the nine rated the practice as very useful. Chat was identified by five teachers as evident in practice and four of those teachers ranked it as somewhat useful with one teacher finding chat very useful. Chat and email were described as very useful and somewhat useful by participants and was explained in interview data were the main communication tools used by both teachers and administrators. Other identified tools in practice are evident in survey and interview data although the researcher found that teachers did not identify many technology tools reported to be evident in supervisory practice.

Social networking was identified by four teachers as a supervisory practice and three of four respondents found social networking very useful. Social networking was misunderstood by Teacher A and Administrator A and this was discovered during interviews and the researcher disregarded their data. Teacher B explained she was active in SpringBoard AP discussion board, English Companion Ning with Kim Berks (social network for educators) and interaction with other educators teaching at cyber schools. Social networks such as Facebook and Twitter were not permitted in Acceptable Use Policies for the other two schools. Another resource used in School B and C was videoconferencing in various forms.

Videoconferencing was identified by three of four respondents as somewhat useful in practice. Two respondents identified an additional tool not offered as a response item and identified that tool as "live meeting" and "gotomeeting." These options are also known as Wimba. Administrator B used videoconferencing and assisted a teacher to better understand the concept of videoconferencing in the classroom. Administrator B stated he was coaching a teacher via videoconferencing stating she was "very matter of fact and rather abrupt" when presenting lessons to her classes. The teacher in School B is now communicating and working more effectively with the tool after practicing with videoconferencing and meeting via videoconferencing with Administrator B. Teachers and administrators did not use many of the technology tools listed in the survey to facilitate their supervisory process. There was more face-to-face contact between administrators and teachers, and this could have impacted the use of technology tools for information and communication in the supervisory process. The final section of the survey asked administrators and teachers about strengths and challenges in their current supervisory practices.

In the final section of both surveys, administrators and teachers identified strengths and challenges within their supervisory system. This was an open ended item that allowed respondents to elaborate on the question and inform the researcher as to successful and challenging aspects components of their current supervisory practices. A challenge Administrator B had regarding the teachers changing their delivery of instruction was addressed in meetings with teachers who continually used traditional teaching methods. Administrator B specified "we have a teacher who scans his textbook and all his worksheets and sends them out to students in a .pdf file. The student is expected to print them out, respond on the handout, and scan them back to the teacher. This is obviously not virtual teaching; it is simply doing what you did in the classroom but doing it in a different mode of technology." Administrator B described the practice as "a great illustration of 20th century methods meeting 21st century struggles." Administrator B had access to all lessons and communication and assisted the teacher to adapt his teaching strategies to an online environment. Although this was identified as a challenge in the supervision of online instruction, the ability to access all classroom and lesson data were very useful to Administrator B in supervising a teacher with this teaching practice. This challenge was redefined in the interview data as a strength due to the ability to identify a traditional approach to education. These challenges presented current issues in instructional supervision both in face-to-face and online delivery of instruction. Teachers were asked in the survey to identify strengths in the supervisory system.

Teachers in the sample schools reported strengths in the supervisory process in the final section of the survey. This is displayed in Table 15:

Table 15

Reported Strengths in the Supervisory Process

Strengths in the Supervisory Process
Easy accessibility to supervisors
The online communication and student management and Educator systems with details
Constant improvement and ideas for a better online learning environment
Constant contact and communication with supervisors
Supervisor works closely with you so they know your quality of work
Openness to hear issues and concerns and offer potential solutions
Allowing us to work autonomously
Provides teachers with the opportunity to provide evidence of their teaching skills on days when ideas/techniques aren't demonstrated for a formal/informal observation
Expectations are clearly delineated and the director gives useful positive and negative feedback
Flexibility

The comments were a combination of flexibility and accessibility as well as the feedback for improved teaching in an online environment. These responses verify survey and interview data regarding the usefulness of supervisory practices. Teachers from School C reported that the administrator allowed teachers to work autonomously, observed and evaluated data on days that may not have been formally observed, and gave useful positive and negative feedback from clearly delineated expectations. Perceptions are mixed as analyzed by the survey and interview

data and documentary evidence regarding several of the supervisory practices with positive and negative data.

Chapter Summary

Results from the three data sets revealed trends regarding performance criteria, supervisory practices and the impact observation and evaluation had on teachers of online learning. The data sets verified that criteria for online instructional delivery were identical for face-to-face teachers. This is evident in all three data sets and throughout the chapter and reported that the policies and rubrics were the same for all teachers regardless of delivery method. Respondents reported they were in the process of revising and adapting policies and documents to reflect an online environment but were currently working under the same criteria and implementing the same practices as traditional face-to-face teachers. Administrator A described the evaluation criteria as "…if the criteria doesn't (sic) exactly match one of the boxes we add an attachment to the evaluation." Teachers reported that their online delivery of instruction was much different from face-to-face and being an effective online teacher required additional skill sets not included on evaluation rubrics.

Technical skills and multitasking were identified by teachers and administrators as necessary skills for teachers and administrators working in an online environment. Effective observation and evaluation techniques adapted for an online environment in a clinical supervision model allowed conferences to occur as instruction was being delivered and positively impacted instruction. Improvement strategies were implemented immediately and without disruption as lessons were being conducted. Many teachers and administrators lacked the experience of teaching and supervising online learning and learned "on the job." Administrator C said she adapted to the online environment "by the seat of my pants," and other

teachers and administrators reported the same type of introduction to working in an online environment.

Supervisory tools and practices were identified and ranked to determine the perceived impact on instruction. Email and chat for communication emerged as an effective practice as nearly all respondents used the tool and practice. On-demand training and support impacted instruction as self-directed trainings and webinars emerged as options for professional development. Peer coaching, although not formalized in any of the sample schools, positively impacted instruction as reported by both teachers and administrators. Flexibility in the supervisory practices and the analysis of multiple sources of data allowed administrators to observe different data from LMSs to evaluate teachers and was found by both administrators and teachers to impact instruction. The impact of these practices on instruction was evident and may impact future practitioners as K-12 online learning continued to grow at a rapid rate throughout the 2009-2010 school year. Chapter 5 addresses and discusses the implications of findings in Chapter 4 and provides insight into the criteria, practices and impact of instructional supervision of online learning for future research.

CHAPTER 5

CONCLUSIONS, SUMMARY & RECOMMENDATIONS

Throughout the history of education, instruction has typically been evaluated in a face-to-face environment; however, the enormous growth of online learning in K-12 schools necessitates supervising a vastly different delivery of instruction. Early in the twenty-first century, school administrators face the complicated task of supervising teachers working in cyberschools where instruction is not conducted in a physical school building. The changing landscape of education challenges administrators to evaluate instruction conducted via computers and Internet technologies. Administrators must evaluate instructional delivery in a virtual environment which is unlike a traditional classroom observation where the teacher, students, and administrator are physically present in a classroom. The purpose of this study is to describe performance criteria, supervisory practices, and the perceived impact those practices have on teachers of online learning. Findings of the study can be used to develop and improve practices of instructional supervision in an online environment.

Rosendale (2009) suggested the identification of cyberschools was difficult and thus prevented researchers from reaching school districts that provide online learning to K-12 students. This difficult process became evident early in this study as Internet searches and networking with New Jersey and Pennsylvania public schools administrators and university faculty yielded few results. The search for potential schools required extensive searches in order to identify cyberschools that qualified for participation in this study. Several schools outsource online learning to various providers rather than develop an in-district cyberschool. Eventually, the three sample schools were identified. These schools provided valuable data to answer the research questions. The three research questions are as follows:

Research Question 1 : What criteria do administrators use to observe and evaluate online instructors?

Research Question 2: What practices do administrators use to supervise online instructors?

Research Question 3: To what extent do supervisory practices impact instruction?

The results and a discussion of the research questions are presented in Chapter 5. This is followed by final conclusions, limitations, implications for practice, and concludes with recommendations for further research and a summary of the chapter.

Summary of Results

This study focused on three schools, one in New Jersey and two in Pennsylvania and described the performance criteria, supervisory practices, and impact of instructional supervision in an online learning environment. Collectively, three administrators and 13 teachers participated in the study providing survey data, interview data, and documentary evidence to describe instructional supervision as follows:

- Most respondents did not have undergraduate or graduate courses in the pedagogy of online learning or observing and evaluating online instruction
- None of the administrators in cyberschools had experience teaching online
- The same criteria were used to evaluate online and traditional teachers in all three sample schools
- Observation forms for online teachers were the same for traditional teachers in all three sample schools
- Supervisory practices were based upon face-to-face strategies of observation and evaluation in the sample schools

- Administrator's and teacher's perceptions of performance standards differed
- Supervisory practices were based upon face-to-face strategies of observation and evaluation in the sample schools
- The majority of supervisory practices were reported as very useful by administrators in cyberschools
- Teachers and administrators disagreed on the usefulness of pre and post observations and frequent observations
- Constructive feedback and personalized emails were reported as having positive impact and was useful to online teachers
- An administrator observing and providing feedback to a teacher during online instruction in School C (a variant of clinical supervision, (Goldhammer, 1969; Cogan, 1973) was identified as a practice unique to an online environment and ranked as very useful
- Without specific standards for online teacher performance the perceptions of respondents determined what was useful in direct assistance (Glickman et al., 2001).
- Peer coaching (Zepeda, 2003; Sullivan & Glanz, 2000; Nolan, 1997) was not formally structured in cyberschools but was found to be very useful to teachers and administrators
- Additional criteria identified in successful online teaching practices were added to evaluations in narratives or addendums when necessary

- All three sample schools were in the process of revising criteria and observation documents to reflect the online delivery of instruction

The results suggest areas for consideration. First, the documentary evidence revealed that performance criteria for online teachers and face-to-face teachers were similar. Research suggests that the direct transfer of good instructional practice in face-to-face settings does not necessarily translate to good teaching in an online environment (Davis & Roblyer, 2005). The observation forms were the same and, contractually, the evaluations of these criteria were the same regardless of the delivery of instruction. This caused concern and grievances by teacher unions in School B, and all respondents noted discrepancies between delivering instruction in a physical classroom and an online environment. However, survey and interview data provided additional criteria for successful online teaching performance not included in the current forms and policies, such as multitasking and technological skills. All three sample schools reported the need for an online model of teaching criteria and supervisory practices rather than operating under current policies and observing using traditional evaluation forms. However, each of the schools reported that the current development of specific criteria and observation forms for online teaching was underway in each district.

The researcher postulated that sample schools were operating under traditional supervisory policies which raised concern regarding how administrators discerned online teaching performance when they used face-to-face supervisory criteria and practices. To determine the supervisory practices used by administrators, survey items (Appendix B, C) were developed based upon theories and practices of supervision in a physical environment (Glickman et al., 2001). The surveys were administered to gather data to describe supervisory practices in an online environment. Interviews were conducted to gather data regarding the practices

administrators used to evaluate teachers of online learning and provided insight into how criteria were evaluated as seen through the eyes of the practitioners, both teachers and administrators. The administrators used many traditional practices of supervision; however, supervisory emerged from interview data that were unique to an online environment. Administrators reported they learned "on the job" while supervising online teachers, and Administrator C described learning to evaluate online teacher performance as "by the seat of my pants…"

The impact of supervisory practices was determined by a Likert- type scale that rated usefulness. Survey and interview data provided insight into what practices teachers and administrators found useful in observing and evaluating teacher performance. Items identified as useful were a result of "direct assistance" that Glickman (1990) determined was the link between teacher needs and organizational goals. The results identified the usefulness of certain items, however, these items were based upon newly implemented practices, by administrators with little experience in an online environment that evaluated performance criteria designed to evaluate a distinctly different delivery of instruction. An argument can be made that good instruction can be evaluated by a skilled administrator; however, there are critical differences between teaching in a physical classroom and teaching in a virtual environment. Results from this study show a need for online teaching performance standards and matching supervisory practices administrators can utilize to improve teaching and meet school goals.

Discussion

Research Question 1

What criteria do administrators use to observe and evaluate online instructors?

Criteria for evaluating teachers of online learning were similar to criteria for evaluating teachers in a traditional environment. The criteria for traditional face-to-face teachers were adapted to an

online environment. Therefore, evaluation of online teachers was dependent upon administrators interpreting traditional standards in an online environment. An example of this is "using a variety of teaching techniques" as a criterion for evaluation. This criterion can be interpreted as using multimedia, Internet sources, chat, threaded discussions, Skype, or other techniques available in the LMS. However, without specific descriptions of the standards, interpretation can cause an atmosphere of speculation regarding the definition of successful online instruction.

In the sample schools, some instructional activities were embedded in Compass Learning, APEX, or A+ assignment which are self-guided learning applications for students. The definition of "teaching techniques" needs to be clarified by administrators and teachers in cyberschools to provide a common understanding of criteria and expectations. Such clarification will benefit both groups and define performance standards for online instruction, and therefore can be accurately observed and evaluated. All three sample schools reported a need for separate policies and forms for online teaching evaluations. All sample schools described the development of specific criteria and rubrics for online teaching as currently occurring in the districts.

Each district has criteria and polices for instructional supervision as well as forms and documents for evaluation. Local rubrics and criteria were used in all three sample schools for both online and face-to-face teachers regardless of the delivery model. Administrators reported that if an online instructional technique did not match the evaluation criteria, an attachment or comment was added to the evaluation. This was evident in the identification by both administrators and teachers of "multi-tasking," which requires teachers to have simultaneous applications open while communicating and "teaching" in an online environment. Although the development of separate evaluation criteria is underway in the sample schools, online teaching

and evaluation were occurring without clear explanations or expectations. Although administrators and teachers seemed to have a similar understanding of online learning, the evaluation process was unclear regarding what definitively was being evaluated by administrators.

School districts have specific policies for observation and evaluation; however, these policies have not been modified to address teachers delivering instruction in an online environment. These policies were developed by local school districts operating in a face-to-face instructional model that has been in place for over 160 years. The change in instructional delivery migrated from a physical environment to an online environment, however, the evaluation criteria were not modified to reflect the change in instructional delivery. This oversight caused union concerns in the sample schools and resulted in several grievances being filed regarding the process of supervising online teachers.

Many of the teacher union concerns sought clarity in what was evaluated during teacher observations by administrators. The National Education Association published a guide to online courses (Fulton, 2002a) and International Association for K-12 Online Learning (iNACOL) developed standards that address specific skills and criteria for effective online teaching (International Council for K–12 Online Learning, 2008). This research is generalizable to cyberschools in New Jersey, Pennsylvania and across the country, yet was not put into policy or practice by the sample schools prior to enrolling students. Ferdig, Cavanaugh, DiPietro, Black & Dawson (2009) confirmed the lack of research and synthesized standards from virtual school settings. Prior to beginning instruction in a cyberschool, school districts need to define the performance standards of online teachers that will be evaluated by an administrator. This would alleviate grievances associated with observing and evaluating online teachers.

The sample school districts enrolled students to meet a growing demand for online learning that eliminates geographical and scheduling limitations (Smith et al., 2006). As the sample schools opened, the observation and evaluation of online instructional delivery was overlooked, causing administrators to supervise online learning without the benefit of defined standards and practices to meet the goals of instructional supervision. Instead, as Administrator C explained, instructional supervision is reduced to "That has all been seat of my pants, make it up as I go, and figure out what works for our children." The performance criteria and supervisory practices are implemented in real time as the process of online teaching was occurring. Another implication of "learning on the job" is that the criteria and practices are being developed by educators and administrators inexperienced in the practices of online learning.

A recommendation for teacher unions and school districts is to collaboratively develop specific criteria for teachers of online learning based upon current research. This would create a "shared vision" for the cyberschool, regarding the goals of instructional supervision. Senge, Cambron-McCabe, Lucas, Smith, Dutton & Kleiner (2000) suggests that developing a shared vision can galvanize and reinforce organizational practices in an organization. This process would provide clarity to the goals of supervision developed by the stakeholders. The process of developing a shared vision will define the expectations and procedures to achieve the goals of the school. After policies are approved, the observation and evaluation rubrics could be developed to reflect the policies for the improvement of instruction. Another factor contributing to the need of specific online teaching criteria was the lack of training teachers received on teaching effectively in an online environment.

Training reportedly consisted of preparing teachers to use the LMS rather than focusing on online pedagogical practices. Teachers reported the training focused on the LMS and tools of teaching online rather than the practice of teaching online. Learning to use the applications in a cyberschool are vital to successful online teaching, however, these are merely the modalities of online instruction. In relation to a physical environment, this is similar to training a teacher to write on a whiteboard, create handouts, read the textbooks, and find their way to the Media Center. Training teachers how to use an LMS does not necessarily provide examples or a structure of good teaching, only how to use the equipment available in the school building. Meaningful professional development should train teachers on the pedagogy of online learning to enhance teaching strategies in an online environment. This training should be conducted prior to an online teaching assignment and continue as online learning research emerges. Administrator training was similar to teacher training focusing on use of the LMS and the technical aspects of online learning.

The lack of training was also evident in administrators who were providing improvement strategies for teachers via direct assistance. The primary objective of direct assistance is to improve teacher performance (Glickman et al., 2001), but a gap has developed between teachers and administrators regarding instructional practices. This is evident as administrators reported a lack of supervisory training in an online environment. Contributing to this gap, none of the three sample administrators taught in an online environment prior to working as a cyberschool administrator. Pennsylvania code requires a minimum of five years teaching experience prior to obtaining a principal or supervisor certificate, stating specifically the candidate "Have completed 5 years of satisfactory professional experience in the area in which the supervisory certificate is sought." (1 PA Code § 49.111). New Jersey requires a minimum of three years teaching prior to

meeting the requirements acquire a supervisory certification (New Jersey Department of Education Administrative Code, 2005).

However, this requirement does not transfer to an online environment. An administrator is not precluded from supervising online teachers without any online teaching experience. These data support the need for a standardization of criteria or certifications to support further training of teachers and administrators on effective teaching in an online environment. This speaks to teacher online instructional competencies and administrators ability to identify and evaluate effective online teaching strategies.

Currently, administrators in the sample schools are basing teacher observation and evaluation on the current criteria for traditional classrooms. The same rubric is used to record and assess lessons of both online and face-to-face teachers as per district and state policy. This requires the administrator to interpret face-to-face teaching criteria and adapt it to an online environment. This supervision was conducted by administrators with no experience in online teaching or online supervision, and interpretation of current criteria and could be speculative. Public education developed policies and procedures for teacher supervision throughout the past century and this structure remains relatively unchanged.

The virtual delivery of instruction is a radical change from teaching in a traditional classroom and will require school districts to change criteria and standards for effective online instruction. This shift in criteria will require a change in the practices and tools administrators use to observe and evaluate online teachers. Cyberschool administrators reported they learned about supervising online learning through past experience and independent study of online learning research and articles. As the criteria and tools change in the early 21st Century,

administrators' practices must be modified to address significant technological changes and the online delivery of instruction.

Research Question 2

What practices do administrators use to supervise online instructors?

Administrators have a variety of tools and data available to observe and evaluate online instruction. Because the criteria and rubrics were exactly the same for a traditional teacher and an online teacher, the practice of observing and evaluating online instruction was structured similarly with an administrator "observing" a lesson by logging into the cyberschool LMS and evaluating instruction using the observation form. Unlike a brick and mortar schools, cyberschools are available at any time for an administrator to view any and all classroom data from when the course began until the last student logged out. All resources, questions, assignments, artifacts, and communications are available to the administrator to be observed and evaluated. Several observational practices were identified by teachers and administrators currently taking place in sample cyberschools such as logging into the LMS or physically sitting next to the teacher as s/he is logged into the LMS.

Administrators conduct classroom visits in physical classrooms when observing and evaluating staff, and this process is generally done for a finite period of time that constitutes a lesson. This allows the administrator to observe a lesson from beginning to end and evaluate the design and delivery of the lesson. The evaluation of teachers is required by Pennsylvania and New Jersey law as three times per year for non-tenured teachers and once per year for tenured teachers (NJDOE-AC, 2005; PDE 426 427 and 428, 2003). In an online environment, an observed "lesson" is not as defined strictly as a lesson in a physical class setting. This organization of instruction can cause ambiguities in defining a classroom visit because

administrators have access to all components of online instruction from the time a student and teacher login on the first day of school until the last logout. Administrators and teachers identified frequent observation as evident in practice and administrators reported observing communications, lesson design, and student work. Data from the study suggest future research be conducted to define an online teacher observation "lesson" to determine a time frame or process to specify what the administrator is observing.

The enormity of classroom data available to administrators observing online instruction supports the need to define parameters or performance criteria for administrators to identify for an observation. No data from the study defined a classroom visit. Respondents reported the search for behaviors or criteria in synchronous and asynchronous online instruction occurred as a formal observation, walk-through, or "drive-by" in which administrators looked at student projects, communication, and instructional design. This supervisory practice could benefit from identifying the recorded lesson data and categorizing, organizing, and synthesizing these data through the LMS web-application.

Current applications allow administrators to record instructional data from face-to-face classroom instruction in hand held devices such as iTouchs and Blackberrys. Administrators conduct an observation and record data such as specific teaching criteria or "look-fors" in a handheld device. These data are then uploaded into a computer and compiled in a web-application that categorizes everything recorded by the administrator. After the data are organized in the web-based application, administrators have several options available to analyze the data and rate a teacher's performance. Teachers can be rated on specific criteria, compared to other teachers and other classes. These technologies are being used in the practice of

supervision in brick and mortar schools. The technological power within an LMS can digitize an observation rubric and an administrator can record it digitally through the LMS.

The technologies for categorizing, organizing, and synthesizing instructional data are available in web-applications and are currently used by administrators in traditional environments. Organizations such as the Mid-continent Research for Education and Learning (McREL) using Marzano, Pickering & Pollock's (2001) criteria for Power Walkthroughs gather data on classroom instruction. The data are then uploaded and used for teacher evaluation. This software-based observation records all observable data and can combine multiple data sets in teacher evaluations. A recommendation for further research is to identify cyberschools using these technologies and research the practice of data warehousing as a component of teacher observation and evaluation. These technology tools can be useful for evaluating teachers. Enlisting the protocol for categorizing and synthesizing multiple observation data sets can then be compared with research based methods and best practices to improve teacher performance. This requires the development of a web-application that would identify and record specific criteria in the LMS, another web-application. This communication between applications is currently in development and is known as the Semantic Web or Web 3.0.

A practice of clinical supervision was identified by respondents in the study as typical was incorporating pre and post conferences as a part of the observation process. This pre and post conference was modified into a "present" conference by School C with the administrator present while Teacher C was instructing a class. Feedback was provided during the lesson without disrupting the class and seemed to positively impact instruction with an immediacy of feedback that is not available in face-to-face supervisory models. This modified the work of Goldhammer (1969) and Cogan (1973) and adapted the clinical model to reflect a twenty-first

century learning environment. The potential of current technologies offers several means for administrators and teachers to work together in real time to improve teaching. This practice could be beneficial for peer coaching in formal and informal models. A recommendation for practitioners is to identify best practices as reported by School C to implement in supervisory practices in cyberschools around the country.

Administrators in the sample schools did not have any formal training in graduate programs in the supervision of online instruction; rather they participated in webinars or read current research regarding the practices of online observation and evaluation. As online instruction continues to grow at a rapid rate, a recommendation for colleges and universities is to provide courses or programs on effective strategies for evaluating online learning. Teacher preparation programs would include courses, degrees, or certificate programs in online instruction. Online learning is outpacing other initiatives (Watson et al., 2004) in education and provides students educational opportunities that transcend geography and course scheduling. If the enrollment trend continues, within six years, 10% of secondary courses will be computer based, and 50% of courses will be delivered online by 2019 (Christensen & Horn, 2008). Formal preparation from colleges and universities will enable administrators to provide effective supervision to online teachers to positively impact instruction.

Research Question 3

To what extent do supervisory practices impact instruction? The study suggests a disagreement between teachers and administrators in defining and understanding the articulated performance standards in local instructional supervision. The perceptions of all administrators were that instructional supervision provided accountability for instruction, improved the quality of instruction, and raised student achievement. This was contrary to teacher perceptions, as

(54%) of teachers strongly agreed or somewhat agreed to the three statements with nearly half of the teachers surveyed showing neutrality or disagreement. Figure 5 shows administrators responses and Table 16 show teachers' responses:

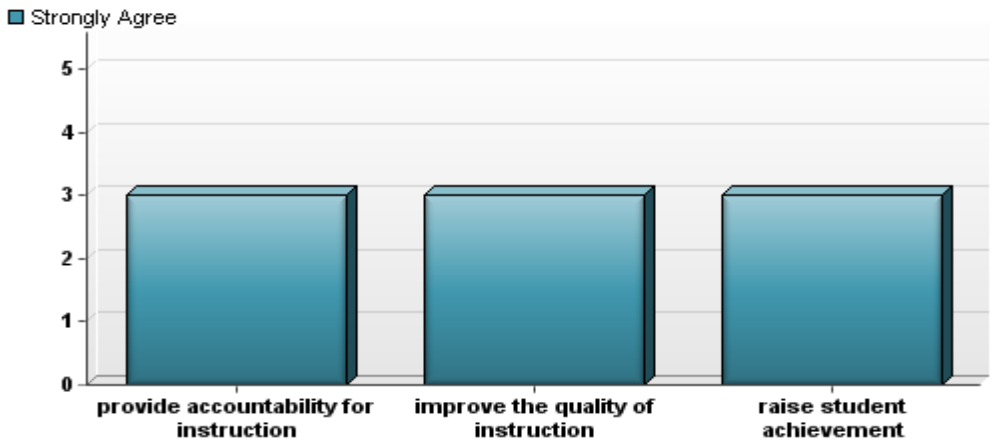

Figure 5. Administrator's responses to survey question 10.

Table 16

Teacher's Agreement to Statements Regarding Instructional Supervision

Question	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
Provide accountability for instruction	2	1	1	2	5
Improve the quality of instruction	2	1	2	1	5
Raise student achievement	1	2	1	1	6

This disagreement in the purpose of supervision for teachers is a cause for concern regarding the goal of instructional supervision. The conflicting perceptions do not provide a foundation for the administrator/teacher relationship and the function of supervisory practices. The impact of supervision is difficult to describe specifically because many teachers did not have a clear purpose as to why they were being supervised. When the groups do not understand "why" they are working together then attaining goals and improving performance will be misguided and confused.

Administrators and teachers work together in an employee/supervisor relationship for a variety of reasons. Data from the study indicates standards for instructional supervision were unclear as reported by teachers. This poses the question: why are observations and evaluations conducted? Glickman et al. (2001) suggest that direct assistance through observation and evaluation is to achieve local goals as a component of supervision. If these standards and goals are not defined, then measuring the impact of supervision becomes uncertain. Glickman (1990) stresses that supervision is the link between teacher needs and school goals, however, without a clear purpose, the observation and evaluation process is merely a summative compliance to school policies. The data from the study could not definitively conclude how this discrepancy in perceptions of instructional supervision occurred; however, one could glean from other data how teacher/administrator perceptions were disconnected.

Several factors could contribute to the disconnect between teachers and administrators regarding the purpose of instructional supervision. These factors include; 1) the newness of cyberschools, 2) minimal teacher and administrator experience in an online environment, 3) the lack of separate online teaching criteria and rubric for observation and evaluation designed to assess online teacher performance. Another factor is criteria not included in rubrics and face-to-

face policies that were reported to enhance teaching in an online environment such as multi-tasking and technical skills. These criteria may be necessary for success in an online environment, but may not be as beneficial in a physical classroom. This affirms the need for cyberschools to develop specific criteria and develop a vision and mission to achieve school goals. The implementation of instructional supervision in a cyberschool requires a vision and specific goals for the supervision of online instruction.

The study suggests administrators found most supervisory practices useful to observe and evaluate teachers. Administrators in this study found thirteen of the supervisory practices somewhat useful or very useful in supervising teachers of online learning. Teacher responses to the same survey items did not correspond with administrators perceptions. The three administrators were relatively new to supervising online learning and benefited from a variety of data to evaluate online teaching. Any method for obtaining data to observe and evaluate teachers seemed to prove useful to an administrator, whereas online teachers with little online teaching experience seemed to need something specific to their teaching to be ranked as useful. This is evident in the data as the top three supervisory practices were timely constructive feedback, regularly scheduled meetings with a supervisor, and personalized emails.

The three highest ranked practices by teachers suggest a means for teachers to solve problems or resolve issues with their teaching. Administrators ranked frequent observation and pre and post conferences high, but these items were ranked lowest by teachers in the surveys. The surveys consisted of paired questions for teachers and administrators to allow the researcher to compare data from the two groups. Parallel construction of the survey items framed the questions differently for administrators and teachers, however, certain items could have been clearer for the respondents. An example is frequent observation may benefit an administrator by

seeing more examples of instruction; however, frequent observation may be perceived differently by teachers. Frequent observation may provide timely constructive feedback but these were separate survey items and could have been presented differently or eliminated from the teacher survey (Appendix C).

Final Conclusions

Administrators and teachers in cyberschools were optimistic about their jobs and their performance. Although there was a lack of structure and a disconnect between online teacher criteria and school policy, the participants were eager to improve their practices and confident that more relevant policies and practices would be implemented to provide a foundation for instructional supervision in cyberschools.

Both groups of participants accepted their roles in the new venture of online learning and practiced and learned "on the job." With a trial and error methodology, teachers and administrators worked under the criteria and evaluation techniques of face-to-face teachers while delivering and evaluating instruction in an online environment. One could argue that a good instructional supervisor can observe and evaluate instruction in any grade level or discipline area, however, the advent of online instruction presents many challenges to teachers and administrators that they may not have experienced throughout their careers. This includes technical abilities and delivering and managing instruction in a vastly different environment. Communicating is conducted via email, chat, videoconferencing, and discussion boards rather than the personal interaction of a physical classroom environment.

The gaps in knowledge of technology were evident in the study showing evidence of teachers with more experience in online instruction than their supervisors who were certified, yet lacked practical experience in the practice they were evaluating. Many teachers reported that

administrators had not taught online and were responsible for supervising a practice in which experience was obtained by evaluating face-to-face teachers and reading research studies or articles. A lack of practical experience was reported; however, administrators seemed well versed in current practices and contemporary techniques of online instruction.

Overall, respondents showed enthusiasm for their jobs and a willingness to adapt and improve in an online environment. The field of online learning is new and has been implemented quickly and without policy and research based practices in place. However, the participants embrace their roles as educators and administrators on the changing landscape of education, and use prior experience in this new environment to work to the best of their abilities.

Implications for Practice

This study showed a definitive need for cyberschools to develop criteria and policies for supervision prior to enrolling students in online courses. Although this need is evident, the exponential growth of online learning seemed to require school leaders in this study to focus on other tasks rather than modify criteria and practices of instructional supervision. In this study, observation and evaluation, specific to an online environment was overlooked as a component of instructional supervision. An accreditation process implemented prior to opening a cyberschool should benefit the observation and evaluation system for teachers and administrators. Specific performance criteria for teachers and supervisory practices designed for online learning should impact instruction for both public schools and for-profit providers providing instruction in an online environment. The knowledge and background of the pedagogy of online learning and technological capacities can be leveraged to impact instruction in cyberschools.

Specific criteria shown to impact instruction in an online learning environment in this study should be included as performance measures for teachers in cyberschools. This study

identified “multi-tasking” and “technical skills” as additional criteria for cyberschool teachers and should be included in observation and evaluation rubrics for identification and assessment of online instruction. This can be conducted via a face-to-face visit or through data gathered in a cyberschool’s LMS.

Administrators in this study gathered data from LMSs as a supervisory practice to observe and evaluate teachers. Respondents in the study reported that all data regarding what teachers and students accessed in the LMS, as well as how long each individual spent in an activity area, were available to administrators and teachers. These data can be used to examine time on tasks and activities by both teachers and students. This practice can be used as an evaluative component in teacher observations and should be developed as an innovative practice unique to an online environment. Administrators and teachers both can benefit from these data regarding cyberschool supervision and instruction by determining what is accessed and how long teachers and students spent in LMS activities. These data are important for researchers to examine the impact of instructional design in a virtual learning environment.

A supervisory practice in this study, unique to an online environment, was identified as Administrator C provided improvement strategies to Teacher C as she delivered online instruction. This real-time conferencing is a variation of the clinical supervision model and allowed immediate feedback to be implemented during instruction without disrupting the lesson. This practice and other best practices possible in an online environment should be identified and implemented in cyberschools to enhance supervision and impact instruction.

Self-reflection, peer coaching, and differentiated supervision were reported as useful by teachers and administrators in the study, and these findings would provide direction as instructional supervision develops in cyberschools. Structuring these practices in schools can

impact instruction and presents options for administrators to observe and evaluate teachers delivering instruction in an online environment.

Most of the administrators and teachers in this study were not prepared to supervise or teach in an online environment. Specific courses for online instruction and supervision should be available in colleges and universities to prepare staff in cyberschools. Programs similar to undergraduate and graduate programs for teaching and supervision in physical school environments can provide research and theory of online learning and supervision to benefit teachers and supervisors in cyberschools.

Recommendations for Further Research

The first recommendation for further research is to determine criteria for successful online teaching and gather evidence of best practices to inform practitioners during this rapid implementation of K-12 online learning. Cyberschools would benefit from defined performance criteria to create a baseline on which to base teacher evaluations that enhance instruction. Researching methods and processes schools use to develop local goals of instructional supervision to define the practice and it impact would be beneficial to cyberschools prior to enrolling students. As technology advances and online learning theory emerges, teachers would benefit from a foundation of criteria and standards on which to base their instruction to meet school goals. Online learning theory would enhance the practices implemented by administrators to evaluate teachers working in an online environment.

Another option for researchers is to analyze how observation and evaluation practices are conducted in cyberschools in Pennsylvania and around the country. This will provide a foundation for how new or current administrators can work effectively to supervise online

instruction in an online environment. This would be beneficial to new administrators and current administrators moving to online environments.

Replicating this study with sample school districts in a traditional face-to-face environment may yield interesting results regarding the performance criteria, supervisory practices and impact these practices have on instruction in traditional environments. Determining if traditional teachers understand the purpose of instructional supervision and the impact of supervisory practices would be beneficial to practitioners as all teachers require observation and evaluation as per state and local policies. An additional comparison between online and traditional groups may provide practical data as schools adapt face-to-face criteria to an online environment.

Throughout the interviews respondents mentioned the characteristics of online students. Further research describing students enrolled in online programs would benefit teachers to address learning styles, and administrators on how to evaluate and assist online teachers teaching a specific student population. Students in the program were classified as special education students or had other characteristics that may require specific teaching strategies that would enhance learning. A study regarding what types of students were enrolling in online learning would benefit the practitioners and guide teacher criteria and administrator purpose.

In addition to describing the types of students enrolling in cyberschools, further research could describe the impact technology and media have upon learning. Evidence is emerging regarding the brain functioning in a world of ubiquitous media and the impact it is having on children who use these technologies (Carr, 2010). Carr also suggests that the Internet is the latest tool helping to mold the human mind and likens the Internet to other “intellectual technologies”

that are reshaping our activities and culture. In conclusion, Carr equates the global network with Guttenburg's printing press due to its impact on our society.

Summary

The purpose of this study was to describe the instructional supervision of online teachers in cyberschools. The rapid growth of online learning and the proliferation of cyberschools require researchers to examine observation and evaluation practices to inform practitioners of the current state of instructional supervision in a virtual environment. The research questions sought to illustrate the current performance criteria, supervisory practices, and the impact these practices had on instruction. The non-purposive random sample consisted of one school in New Jersey and two schools in Pennsylvania that offered full time online learning to students. The study yielded findings to inform practice and created a foundation for future research to fill a gap in the literature.

The criteria of instructional supervision are based upon our model of observation and evaluation currently occurring in traditional school settings. Although the delivery of instruction is unique in that communication and lesson design are presented via a computer, this instruction must be observed and evaluated to meet local and state policy regarding evaluation. The delivery of instruction resembles a face-to-face environment in theory, but takes place as an individual or personal act rather than as a typical teaching and learning experience in a classroom. The supervision criteria and practices reflected the traditional educational model, however, respondents acknowledged that online learning required a separate protocol regarding the direct assistance that observation and evaluation provides.

Practices identified in the observation and evaluations of online teachers were similar to the practices in an online classroom. Administrators had the opportunity to observe and evaluate

all instructional data recorded in the LMS from the first day of school, yet conducted formal and informal observations as per district policy. Administrators followed district procedures and although the respondents agreed that the variation of instructional delivery did not match current standards and practices, the traditional supervisory model was adapted to a virtual environment, and identified certain criteria unique to an online environment. These criteria were identified and recorded in evaluations as online teaching and evaluation were learned "on the job."

The advent of a virtual teaching model required learning by teachers and administrators as soon they began working in cyberschools. Specific practices and protocols need to be researched to indentify how to best supervise teachers of online learning rather than interpreting face-to-face standards in an online environment. A shared vision must accompany the implementation of criteria and practices in a virtual learning environment to develop goals and a purpose for teachers and administrators to improve performance and enhance student achievement.

The impact of instructional supervision was reported through survey data to describe administrator and teacher perceptions of useful supervisory practices that enhanced a teacher's performance. Particular practices providing training or solving problems ranked high on teacher surveys as a result of direct assistance. This was shown to be beneficial to teachers with little experience in an online environment. Administrators found most practices useful in their supervision and used similar tools and practices to observe an enormous amount of classroom data available to them to evaluate teacher performance. These data were useful for administrators to evaluate teachers working in an online environment. Migrating from a face-to-face educational environment can be an overwhelming task for teachers and administrators. Anderson (2008) acknowledges that delivering and supervising web-based instruction requires

the development of new and performance criteria and practices, however, that complexity does not excuse inaction. Findings indicate a need for the accreditation of cyberschools to standardize criteria and practices to facilitate educational innovation rather than emerge as a discipline subsuming the knowledge and practice of pedagogy in a traditional learning environment.

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APPENDICES

Appendix A

Administrator Informed Consent

You are invited to participate in this research study. The following information is provided in order to help you to make an informed decision whether or not to participate. If you have any questions please do not hesitate to ask. You are eligible to participate because you are an administrator who supervises online teachers at XXX School District.

The purpose of study is to describe how school administrators are supervising online learning with practical implications of overseeing online teachers, as well as provide a critical analysis that will contribute to future supervisory practices and add to what is known about supervision of online courses at the secondary level. Participation in this study will require approximately 10-15 minutes of your time to complete a survey and 30 minutes of your time for an interview. To complete the study, all documents, rubrics, checklists and any other evaluation tools used to supervise online teachers will need to be provided to the researcher. The information gained from this study may help better understand the future needs of online learning supervision initiatives.

Your participation in this study is voluntary. You are free to decide not to participate in this study or to withdraw at any time without adversely affecting your relationship with the investigators. Your decision will not result in any loss of benefits to which you are otherwise entitled. If you choose to participate, you may withdraw at any time by notifying the Project Director. Upon your request to withdraw, all information pertaining to you will be destroyed. If you choose to participate, all information will be held in strict confidence. Your responses will be considered only in combination with those from other participants. The information obtained in the study may be published in educational journals or presented at educational meetings, but your identity will be kept strictly confidential.

If you are willing to participate in this study, please sign the statement below and return to the Project Director in the enclosed envelope. Please keep the additional unsigned copy. If you choose not to participate, please return both unsigned copies in the enclosed envelope. Thank you for your consideration of and/or participation in this study.

Project Director:
Gregory C. Farley
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Leadership and Administration
59 Stewart Place
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Faculty Advisor:
Dr. Douglas Lare
Faculty Sponsor
Professional and Secondary Education
Stroud Hall
East Stroudsburg, PA
Phone: 570.422.3431

This project has been approved by the East Stroudsburg University Institutional Review Board on XXX for the Protection of Human Subjects (Phone: 570.422.3336).

VOLUNTARY CONSENT FORM:

I have read and understand the information on the form and I consent to volunteer to be a subject in this study. I understand that my responses are completely confidential and that I have the right to withdraw at any time. I have received an unsigned copy of this form to keep in my possession.

Name (PLEASE PRINT) _____

Signature_____ Date_____

I certify that I have explained to the above individual the nature and purpose, the potential benefits, and possible risks associated with participating in this research study, have answered any questions that have been raised, and have witnessed the above signature.

_____

Date Investigator's Signature

Appendix B

Online Supervisor Inventory

Please respond to the following items on your perceptions of supervising online teachers and how you feel about online teaching and supervision. There are no right or wrong answers and you opinions are very important. Thank you very much!

Demographic Data: Section 1.

Please tell us about yourself:

1. Your Age_____years
2. Your Gender Male □ Female □
3. Your completed educational level
4. □ Bachelor □ Bachelor + 30 □ Masters □ Masters + 30 □ Doctorate
5. How long have you been an instructional supervisor?

   _____
6. Do you directly supervise teachers of online learning? Yes □ No □

Program Information

7. What online Learning Management System do you use? _____
8. What year did you begin offering classes online? _____
9. Total number of online classes for the Spring 2010 semester _____

Local supervisory practices: Section 2

10. Does your school have written procedures for supervision? Yes □ No □
11. Do you collect information from your LMS for teacher evaluation? Yes □ No □
12. What information do you collect for teacher evaluation from your LMS?

Please rate the next statement on the scale below:

13. Teacher performance is assessed based upon clearly articulated performance standards.

Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
□	□	□	□	□

14. Teachers are evaluated in the areas of: (check all that apply)

□	planning and preparation (subject knowledge, materials, assessment, selecting instructional goals).
□	learning environment (maintain a purposeful and equitable online learning environment).
□	instruction (active teaching, clarity, delivery, principles of instruction and learning).
□	professional responsibilities (professional development, exhibiting professionalism).

Indicate your level of agreement with the three statement s below by choosing one option:

Our supervisory practices:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
	1	2	3	4	5
15. provide accountability for instruction	□	□	□	□	□
16. improve the quality of instruction	□	□	□	□	□
17. raise student achievement	□	□	□	□	□

Indicate in the table below whether your school is currently using the following strategies in the supervision process:

	Used Yes – No □ □	Not useful 1	Not very useful 2	Somewhat useful 4	Very useful 5
17. Frequent observation	□ □	□	□	□	□
18. Regularly scheduled meetings with supervisor	□ □	□	□	□	□
19. Pre and post observation conferences	□ □	□	□	□	□
20. Timely, constructive and specific feedback	□ □	□	□	□	□
21. Differentiated supervision based on varied ability and developmental levels	□ □	□	□	□	□
22. Analysis of multiple sources of data	□ □	□	□	□	□
23. Data collected over time	□ □	□	□	□	□
24. Flexible professional development opportunities	□ □	□	□	□	□
25. As needed/on demand training and support	□ □	□	□	□	□
26. Personalized emails	□ □	□	□	□	□
27. Peer mentoring/coaching	□ □	□	□	□	□
28. Learning communities	□ □	□	□	□	□
29. Action research	□ □	□	□	□	□
30. Individual teacher self reflection	□ □	□	□	□	□
31. Other (Specify)	□ □	□	□	□	□

Supervisory Tools: Section 3

Is your school currently using the following tools in the supervisory process?

	Used Yes - No	Not useful 1	Not very useful 2	Somewhat useful 3	Very useful 4
32. Email	□ □	□	□	□	□
33. Blogs	□ □	□	□	□	□
34. Wikis	□ □	□	□	□	□
35. Videoconferencing	□ □	□	□	□	□
36. Social networking	□ □	□	□	□	□
37. Electronic portfolios	□ □	□	□	□	□
38. Chat	□ □	□	□	□	□
39. LMS tools Please specify	□ □	□	□	□	□
40. Other Please specify	□ □	□	□	□	□

41. What challenges and struggles have you encountered in your school's current supervision system?

42. What are some of the greatest strengths of your teacher supervision system?

Appendix C

Online Teacher Inventory

Please respond to the following items on your perceptions of teaching online and how you feel about online teaching and supervision. There are no right or wrong answers and you opinions are very important. Thank you very much!

Demographic Data: Section 1.

Please tell us about yourself:

1. Your Age_____years
2. Your Gender Male □ Female □
3. Your completed educational level

□ Bachelor □ Bachelor + 30 □ Master's □ Master's + 30 □ Doctorate

4. Are you certified by this state to teach? Yes □ No □

Please tell use more about yourself and your experiences teaching online - Thank you!

	Course	Grade Level
What course(s) do you teach online	1_____	_____
	2_____	_____
	3_____	_____
	4_____	_____
	5_____	_____

5. Number of years teaching online_____
6. Number of years teaching face to face_____

Local supervisory practices: Section 2

7. Does your school have written procedures for supervision? Yes □ No □

Please rate the next statement on the scale below:

8. Teacher performance is assessed based upon clearly articulated performance standards.

Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
□	□	□	□	□

9. Teachers are evaluated in the areas of: (check all that apply)

□	planning and preparation (subject knowledge, materials, assessment, selecting instructional goals).
□	learning environment (maintain a purposeful and equitable online learning environment).
□	instruction (active teaching, clarity, delivery, principles of instruction and learning).
□	professional responsibilities (professional development, exhibiting professionalism).

Indicate your level of agreement with the three statements below by choosing one option:

Our supervisory practices:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
	1	2	3	4	5
10. ensure the accountability of instruction	□	□	□	□	□
11. improve the quality of instruction	□	□	□	□	□
12. raise student achievement	□	□	□	□	□

Indicate in the table below whether your school is currently using the following strategies in the supervision process:

	Used Yes-No □ □	Not useful 1	Not very useful 2	Somewhat useful 4	Very useful 5
17. Frequent observation	□ □	□	□	□	□
18. Regularly scheduled meetings with supervisor	□ □	□	□	□	□
19. Pre and post observation conferences	□ □	□	□	□	□
20. Timely, constructive and specific feedback	□ □	□	□	□	□
21. Differentiated supervision based on varied ability and developmental levels	□ □	□	□	□	□
22. Analysis of multiple sources of data	□ □	□	□	□	□
23. Data collected over time	□ □	□	□	□	□
24. Flexible professional development opportunities	□ □	□	□	□	□
25. As needed/on demand training and support	□ □	□	□	□	□
26. Personalized emails	□ □	□	□	□	□
27. Peer mentoring/coaching	□ □	□	□	□	□
28. Learning communities	□ □	□	□	□	□
29. Action research	□ □	□	□	□	□
30. Individual teacher self reflection	□ □	□	□	□	□
31. Other (Specify)	□ □	□	□	□	□

Supervisory tools: Section 3

Is your school currently using the following tools in the supervisory process?

	Used Yes - No	Not useful 1	Not very useful 2	Neutral	Somewhat useful 3	Very useful 4
32. Email	□ □	□	□	□	□	□
33. Blogs	□ □	□	□	□	□	□
34. Wikis	□ □	□	□	□	□	□
35. Videoconferencing	□ □	□	□	□	□	□
36. Social networking	□ □	□	□	□	□	□
37. Electronic portfolios	□ □	□	□	□	□	□
38. Chat	□ □	□	□	□	□	□
39. LMS tools Please specify	□ □	□	□	□	□	□
40. Other Please specify	□ □	□	□	□	□	□

41. What challenges and struggles have you encountered in your school's current supervision system?

42. What are some of the greatest strengths of your teacher supervision system?

Appendix D

Guided Discussion Template

Introduction

Thank you again for taking time out of your schedule to discuss this important topic. The purpose of the follow-up discussion is to ask questions to more fully address the emerging issues surrounding supervision of teachers of online learning. With your consent, I would like to record our session. The recordings will be used to facilitate the note taking process to ensure my account of the session is as accurate as possible. This interview will remain completely anonymous to everyone but me. Our conversation should take no more than about 30 minutes. Do I have your permission to record this session? Do you have any questions for me before we get started?

Questions

The questions asked during the personal interviews will be framed according to the results of the survey. The questions will be designed to clarify issues related to discrepancies in policy and perception of practice. Interview questions are/will be designed to help the participants tell their story.

Several questions will be similar in format to the interrogatory statements below:

- You indicated X on the survey. Could you give me an example of X?
- The survey analysis indicates X is a reoccurring theme across participating schools. Why do you believe this is a common experience?

1. Please tell me how you know a teacher is being effective working online with students. (probes: what do you look for in teacher skills, what criteria do you use, do you think online requires a different set of teaching skills, how do online teachers differ from in class teachers)

2. Please explain the criteria you use for determining whether teachers and classes are being effective working online with students. (how is curriculum/texts/etc. selected, who selects, how are choices for learning materials made)

3. How do you present teaching evaluations to teachers? (probes: written, if so what is included/non-included)

4. What do you discuss with teachers after an evaluation of their online teaching? (what sort of improvements do you suggest)

5. What supports do you offer to teachers if and when they have a problem with teaching online?

6. Please tell me about your own training in evaluating a teacher's performance. What is your philosophy in working with teachers to improve effectiveness (in class and online)
7. Did you consult any literature to construct your school district's supervisory process?
8. What are your next steps in maintaining/refining your supervision process?

Appendix E

Guided Discussion Template

Introduction

Thank you again for taking time out of your schedule to discuss this important topic. The purpose of the follow-up discussion is to ask questions to more fully address the emerging issues surrounding supervision of teachers of online learning. With your consent, I would like to record our session. The recordings will be used to facilitate the note taking process to ensure my account of the session is as accurate as possible. This interview will remain completely anonymous to everyone but me. Our conversation should take no more than about 30 minutes. Do I have your permission to record this session? Do you have any questions for me before we get started?

Questions

The questions asked during the personal interviews will be framed according to the results of the survey. The questions will be designed to clarify issues related to discrepancies in policy and perception of practice. Interview questions are/will be designed to help the participants tell their story.

Several questions will be similar in format to the interrogatory statements below:

- You indicated X on the survey. Could you give me an example of X?
- The survey analysis indicates X is a reoccurring theme across participating schools. Why do you believe this is a common experience?

1. Please tell me how you are supervised as an online instructor?
2. Please explain the criteria used to determine whether you are being an effective teacher?
3. How does your supervisor present evaluations to you?
4. What do you discuss with your supervisor after an evaluation of your online teaching?
5. Please tell me about your training as an online instructor.
6. What type of supports or professional development are you offered to improve your effectiveness?
7. How effective do you feel your online teaching is?
8. What are your next steps in maintaining/refining your online teaching?

Appendix F

Administrator Informed Consent

You are invited to participate in this research study. The following information is provided in order to help you to make an informed decision whether or not to participate. If you have any questions please do not hesitate to ask. You are eligible to participate because you are an administrator who supervises online teachers at XXX School District.

The purpose of study is to describe how school administrators are supervising online learning with practical implications of overseeing online teachers, as well as provide a critical analysis that will contribute to future supervisory practices and add to what is known about supervision of online courses at the secondary level. Participation in this study will require approximately 30 minutes of your time. You will be asked respond to a series of questions about your supervision as an online instructor. The information gained from this study may help better understand the future needs of online learning supervision initiatives.

Your participation in this study is voluntary. You are free to decide not to participate in this study or to withdraw at any time without adversely affecting your relationship with the investigators. Your decision will not result in any loss of benefits to which you are otherwise entitled. If you choose to participate, you may withdraw at any time by notifying the Project Director. Upon your request to withdraw, all information pertaining to you will be destroyed. If you choose to participate, all information will be held in strict confidence. Your responses will be considered only in combination with those from other participants. The information obtained in the study may be published in educational journals or presented at educational meetings, but your identity will be kept strictly confidential.

If you are willing to participate in this study, please sign the statement below and return to the Project Director in the enclosed envelope. Please keep the additional unsigned copy. If you choose not to participate, please return both unsigned copies in the enclosed envelope. Thank you for your consideration of and/or participation in this study.

Project Director:
Gregory C. Farley
Primary Researcher
Leadership and Administration
59 Stewart Place
Fanwood, NJ 07023
Phone: 908.342.4685

Faculty Advisor:
Dr. Douglas Lare
Faculty Sponsor
Professional and Secondary Education
Stroud Hall
East Stroudsburg, PA
Phone: 570.422.3431

This project has been approved by the East Stroudsburg University Institutional Review Board on XXX for the Protection of Human Subjects (Phone: 570.422.3336).

VOLUNTARY CONSENT FORM:

I have read and understand the information on the form and I consent to volunteer to be a subject in this study. I understand that my responses are completely confidential and that I have the right to withdraw at any time. I have received an unsigned copy of this form to keep in my possession.

Name (PLEASE PRINT) _____

Signature_____ Date_____

I certify that I have explained to the above individual the nature and purpose, the potential benefits, and possible risks associated with participating in this research study, have answered any questions that have been raised, and have witnessed the above signature.

_____

Date Investigator's Signature

Appendix G

School A Student Survey

TEACHER'S NAME: OBSERVER: DATE:

EXCELLENT – Does more than required; superior performance
GOOD – Standard performance; does required work
UNSATISFACTORY – Shows weakness; improvement required
N/A – Not Applicable

		E	G	U	N/A
1.	Maintains communication with all necessary parties reporting pupil behavior, needs and progress as often as circumstances warrant.				
2.	Demonstrates responsibility for self-growth, professional improvement and on-going self-evaluation.				
3.	Seeks to improve overall performance on the basis of professional recommendations.				
4.	Works cooperatively with colleagues and administrators.				
5.	Fulfills administrative requirements; carries out all non-teaching assignments promptly and accurately.				
6.	Is punctual in attendance to school and to classes.				
7.	Acts responsibly and discreetly with confidential information.				
8.	Follows the policies, procedures and curricula of the district.				
9.	Is appropriate role model.				

Comments:

_____ _____ _____

Observer's Signature Teacher's Signature Date

TEACHER'S NAME: OBSERVER: DATE:

PROGRAM: LESSON TOPIC: Mathematics - Geometry

EXCELLENT – Does more than required; superior performance
GOOD – Standard performance; does required work
UNSATISFACTORY – Shows weakness; improvement required
N/A – Not Applicable

A. MANAGEMENT CRITERIA

		E	G	U	N/A
1.	Establishes rapport with all students.				
2.	Creates a climate that encourages all students.				
3.	Communicates and reinforces appropriate standard of behavior.				
4.	Engages students in the activities of the lesson.				
5.	Manages transitions in learning and routines in the classroom.				
6.	Keeps displays and bulletin boards attractive showing current student work.				
7.	Supervises and monitors activities of classroom aide.				
8.	Keeps classroom area clean, neat and orderly.				

B. INSTRUCTIONAL AND ASSESSMENT CRITERIA

		E	G	U	N/A
1.	Shows evidence, through demonstrated teaching, of having prepared each lesson to fulfill predetermined objectives for IEP's, MOESC Curriculum and NJ Core Curriculum Standards.				
2.	Makes use of a variety of instructional materials.				
3.	Presents material, which is representative of current knowledge in the field.				
4.	Uses a variety of teaching techniques and learning activities appropriate to the abilities, interests and needs of students.				
5.	Monitors student understanding of lesson content and adjusts lesson content when necessary.				
6.	Provides students with additional help and support as needed.				
7.	Communicates and presents oral explanations in a precise and clear manner.				
8.	Monitors student overall progress.				

Comments:

_____ _____ _____

Observer's Signature Teacher's Signature Date

Appendix H

School A Evaluation Policy from the Teacher Contract

ARTICLE XII EVALUATION

A. Non-tenured employees shall be observed through classroom visitation at least three (3) times in each school year. Tenured employees shall be observed through classroom visitation at least once in each school year.

B. Each observation shall be followed by a written report and by a conference between the employee and the observer for the purpose of identifying any deficiencies, extending assistance for their correction, and improving instruction. Each observation shall consist of at least a full period or a complete lesson.

C. Employees shall be given a copy of any class visit report prepared by their evaluator before any conference to discuss it. No such report shall be submitted to the central office, placed in the employee's file or otherwise acted upon without prior conference with the employee. No employee shall be required to sign a blank or incomplete evaluation form. The employee's signature shall indicate that the report has been seen and shall not necessarily indicate agreement with the contents.

D. Conferences as described above shall occur within fifteen (15) work days of the observation. The conference shall be held within the school day without loss of benefit to the employee.

E. Employees shall have the right to submit a written response to all reports within five (5) work days of the conference. Said response shall be attached to all copies of the report.

Appendix I

School B School District
Professional Staff Evaluation Rubric

	Unsatisfactory	Partially Proficient	Proficient	Distinguished	Reflections, Evidence, Data
1a: Knowledge of Content, Pedagogy, and PA Academic Standards	☐Teacher displays inadequate understanding of the subject, PA Standards, and pedagogical issues involved in student learning.	☐Teacher displays minimal knowledge of subject, its relationship to other disciplines, PA Standards, and pedagogical issues involved in student learning.	☐Teacher demonstrates a clear understanding of the content and its relationships to other disciplines, PA Standards, and pedagogical issues involved in student learning.	☐Teacher demonstrates an extensive knowledge of the content and its relationship to other disciplines, PA Standards, and pedagogical issues involved in student learning.	
1b: Demonstrating Knowledge of Student Development	☐Teacher displays inadequate understanding of child development issues involved in student learning.	☐Teacher displays minimal understanding of child development issues involved in student learning.	☐Teacher displays knowledge of appropriate developmental and academic issues involved in student learning.	☐Teacher displays a thorough knowledge of appropriate developmental and academic issues involved in student learning and recognizes individual student differences.	
1c. Designs instructional goals that reflect PA standards and high expectations for students.	☐Teacher displays goals that are not aligned to curriculum, PA standards, and/or only reflect one type of learning, with low expectations for students.	☐Teacher displays goals that are moderately aligned to curriculum, PA standards, and/or only reflect one type of learning with minimal expectations for students.	☐Teacher displays goals that are aligned to curriculum, PA standards, and reflect several types of learning with high expectations for students.	☐Teacher displays clear goals that are aligned to curriculum, PA standards, written in the form of student learning, and reflect several types of learning for students of varying needs, with high expectations for students.	

	Unsatisfactory	Partially Proficient	Proficient	Distinguished	Reflections, Evidence, Data
1d: Demonstrating Knowledge of Resources	☐ Teacher is unaware of resources available for students and/or teachers.	☐ Teacher displays minimal knowledge of resources available for students and/or teachers.	☐ Teacher is aware of resources available for students and teachers.	☐ Teacher is knowledgeable of resources available for students and teachers and actively seeks out additional resources.	
1e: Designing Coherent Instruction aligned with instructional goals and differentiated for student needs.	☐ Teacher's instructional goals and plans do not support stated district instructional standards or meet the needs of students.	☐ Teacher's instructional goals and plans inconsistently support stated district instructional standards and meets the needs of some students.	☐ Teacher's instructional goals and plans support the district standards and differentiate to meet the needs of all students.	☐ Teacher's instructional goals and plans support district standards and consistently differentiate instruction to meet the needs of all students.	
1f: Assessing Student Learning aligned to instructional goals and adapted as needed for student needs.	☐ Teacher's approach to assessing student learning contains no clear criteria or standards, and lacks congruence with teacher's instructional goals.	☐ Teacher's plans for student assessment are inconsistently aligned with teacher's instructional goals and include criteria and standards that are not entirely clear or understood by students.	☐ Teacher's plans contain varied assessment formats aligned with the teacher's instructional goals. Clear assessment criteria and standards are communicated to the students. Teacher uses ongoing assessment data to plan for instruction of students.	☐ Teacher's plans contain varied assessment formats aligned with the teacher's instructional goals. Clear assessment criteria and standards are communicated to the students. Teacher uses ongoing assessment data to plan for instruction of students. Students monitor their own progress in setting and achieving the goals.	

	Unsatisfactory	Partially Proficient	Proficient	Distinguished	Reflections, Evidence, Data
2a: Creating an Environment of Respect and Rapport	☐Student and teacher interactions reflect a lack of respect and rapport.	☐Student and teacher interactions occasionally demonstrate a level of respect and rapport.	☐Student and teacher interactions consistently demonstrate a level of respect and rapport.	☐Student and teacher interactions consistently demonstrate a high level of respect and rapport.	
2b: Establishing a Culture for Learning	☐Teacher's classroom lacks a consistent culture for learning without clear expectations for student achievement.	☐Teacher's classroom represents a culture for learning with inconsistent expectations for student achievement.	☐Teacher's classroom represents a culture for learning with consistently clear expectations for student achievement.	☐Teacher's classroom represents a culture for learning with consistently high expectations for student achievement.	
2c: Managing Classroom Procedures	☐Teacher's classroom routines and procedures are inefficient, resulting in the frequent loss of instructional time.	☐Teacher has established inconsistent classroom routines and procedures that result in some loss of instructional time.	☐Teacher has established classroom routines and procedures that result in little loss of instructional time.	☐Teacher has established classroom routines and procedures that result in very little loss of instructional time due to planned transitions and students taking responsibility for their time.	
3a: Communicating Clearly and Accurately	☐Teacher's oral and written communication is unclear or inappropriate for students	☐Teacher's oral and written communication is not always clear and accurate for students.	☐Teacher's oral and written communication is consistently clear and accurate for students.	☐Teacher's oral and written communication is clear, accurate and anticipates student misconception.	
3b: Using Questioning and Discussion Techniques	☐Teacher's use of questioning and discussion techniques reflects low-level thinking and limited student participation.	☐Teacher use of questioning and discussion techniques reflects some high-level thinking, and moderate student participation.	☐Teacher's use of a variety of questioning and discussion techniques reflects some high-level thinking and moderate student participation.	☐Teacher uses of a variety of questioning techniques that enable students to formulate high-level questions and assume responsibility for the participation in the discussion.	

	Unsatisfactory	Partially Proficient	Proficient	Distinguished	Reflections, Evidence, Data
3c: Engaging Students in Learning	☐Teacher does not at all engage students in significant learning, resulting from inappropriate activities, materials, or lesson structure.	☐Teacher partially intellectually engages students resulting from activities or materials of inconsistent quality, uneven structuring or pacing.	☐Teacher intellectually engages students throughout the lesson with appropriate activities and materials.	☐Teacher intellectually engages students throughout the lesson and made contributions to the content, activities and materials. Teacher allows for student reflection.	
3d: Providing Feedback to Students	☐Teacher provides students with non-specific feedback that is given in an untimely manner.	☐Teacher is inconsistent in providing students with feedback that is specific and timely.	☐Teacher consistently provides students with feedback that is highly specific and timely.	☐Teacher consistently provides students with feedback that is highly specific and timely and provides opportunities for students to reflect on and evaluate their own learning	
3e: Informed and appropriate use of formal and informal assessments to meet goals and monitor student learning,	☐ Teacher does not monitor student learning formatively and/or allow for multiple opportunities.	☐ Teacher monitors the progress of the class as a whole, but not individual diagnostics. Limited opportunities to demonstrate proficiency are offered.	☐ Teacher provides individual diagnostics for students. Multiple opportunities to demonstrate proficiency are offered.	☐ Teacher provides individual diagnostics for students and students monitor their own success. Multiple opportunities to demonstrate proficiency are offered.	
3f: Demonstrating Flexibility and Responsiveness in meeting the learning needs of students.	☐Teacher adheres to instructional plan in spite of evidence of poor student understanding and assumes no responsibility for student's failure to understand.	☐Teacher demonstrates limited flexibility and responsiveness to students' needs and is inconsistent in efforts to ensure student success.	☐Teacher seeks ways to ensure successful learning for all students and differentiates instructional plans as needed and responds to students' needs and questions.	☐Teacher is responsive to students' needs and questions, differentiates lessons when needed, and persists in ensuring the success of all students.	

	Unsatisfactory	Partially Proficient	Proficient	Distinguished	Reflections, Evidence, Data
4a: Reflecting on Teaching	☐ Teacher does not reflect perceptively on the lesson or propose ideas on how it might be improved.	☐ Teacher reflects inconsistently on lessons and makes global suggestions on how it might be improved.	☐ Teacher reflects perceptively on the lesson, citing general characteristics, and makes some suggestions about how it might be improved.	☐ Teacher's reflection on the lesson is consistently highly perceptive, citing specific examples. Teacher suggests several alternate strategies.	
4b: Maintaining Accurate Records	☐ Teacher has no system for maintaining accurate records or the system is in disarray, resulting in errors.	☐ Teacher's system for maintaining accurate records is rudimentary and only partially effective.	☐ Teacher's system for maintaining accurate records is effective.	☐ Teacher's system for maintaining accurate records is effective and efficient.	
4c: Communicating with Families	☐ Teacher provides little or no information to families and makes no attempt to engage them in the instructional program.	☐ Teacher complies inconsistently with school procedures for communicating with families and makes an effort to engage families in the instructional program.	☐ Teacher complies consistently with school procedures for communicating with families and makes an effort to engage families in the instructional program.	☐ Teacher communicates extensively with families and employs strategies to engage families in the instructional program.	
4d: Contributing to the School and District	☐ Teacher avoids being involved in school and district projects and/or teacher relationships with colleagues are negative and contribute to a negative school environment.	☐ Teacher participates in school and district activities only when specifically asked. Teacher's professional relationships with colleagues are inconsistent and may contribute to a negative school environment.	☐ Teacher participates actively in school and district projects and maintains professional relationships with colleagues that contribute to a positive school environment.	☐ Teacher participates actively, makes a contribution to school and district activities, and assumes a leadership role with colleagues that contributes to a positive school environment.	

	Unsatisfactory	Partially Proficient	Proficient	Distinguished	Reflections, Evidence, Data
4e: Growing and Developing Professionally	☐ Teacher does not participate in professional development activities.	☐ Teacher's participation in professional development activities is minimal and limited to activities that are required.	☐ Teacher participates actively in professional development activities and applies new learning.	☐ Teacher actively pursues professional development and applies and shares new learning with colleagues.	
4f: Showing Professionalism	☐ Teacher does not attempt to employ practices that serve students effectively.	☐ Teacher makes inconsistent efforts to employ practices that serve students effectively	☐ Teacher makes consistent efforts to employ practices that serve students effectively.	☐ Teacher assumes a leadership position promoting school practices and procedures that will serve all students effectively.	

School B School District
Self-Evaluation Reflection

Name_____ _____School___ _____Date___5-6-2010_____

Areas of Strength – What *impact has this had on student learning?* **Passion for learning** –
Progress toward District/Building Goals - *What impact has this had on me as a teaching professional?* **Student Achievement - Result 3: *Implementation of*_____:**
Personal Teaching Goals - *What modifications need to be made?* **Continue to strengthen my skills and understanding of curriculum and instruction, grades K-12.**
Professional Development Needs - *How can my supervisors, colleagues, or district office help?*
I am most proud of….
Other:

Appendix J

School C Professional Development and Observation Form

Teacher _____ School _____

Subject/Grade _____ Date _____

Domain 1: Planning and Preparation						
	Element	Explanation	Satisfactory	Needs Improvement	Unsatisfactory	Comments (Comments may include n/a)
1-1	Knowledge of Content	Teacher displays solid knowledge and makes connections between content and other disciplines.				
1-2	Knowledge of Prerequisite Relationships	Teacher plans and practices reflect the understanding of prerequisite relationships among topics and concepts. The teacher is knowledgeable and uses the standards as described by the State of Pennsylvania and School C.				
1-3	Knowledge of Content Related Pedagogy	Teacher demonstrates best practice and anticipates student misconceptions.				
1-4	Knowledge of Characteristics of Age Group	Teacher demonstrates thorough understanding of typical developmental characteristics of age group as well as exceptions to general patterns.				

1-5	Knowledge of Students' Varied Approaches to Learning	Teacher demonstrates a solid understanding of the different approaches to learning and uses differentiated instruction according to the needs of the students.				
1-6	Clarity	Classroom objectives are clear, in the form of student learning, and permit viable methods of assessment.				
1-7	Learning Activities	The learning activities are suitable to the student's instructional objective and follow district curriculum.				
1-8	Instructional Materials and Resources	Materials and resources support the instructional objectives and engage students in meaningful learning.				
1-9	Criteria and Standards	Assessment criteria and standards are clear and have been communicated to the students.				
1-10	Use and Planning	Teacher uses informal and formal assessment results to plan for individuals and groups of students.				

Domain 2: The Classroom Environment						
2-1	Creating an Environment of Respect and Rapport	Teacher models warm and caring professional interaction with students. Students are encouraged to treat all persons with respect. Student interactions are generally polite and respectful of differences.				
2-2	Establishing a Culture for Learning	Teacher conveys genuine enthusiasm for the subject and encourages students to work to the best of their abilities. Students recognize the high expectation for academic achievement and this expectation is reflected in their work.				
2-3	Managing Classroom Procedures	Tasks for group work are organized and groups are managed so students are engaged in learning. Transitions occur smoothly with little loss of instructional time. Materials and supplies are appropriate to the lesson.				
2-4	Managing Student Behavior	Standards of conduct are clear to all students. Teacher is alert to student behavior. Teacher response to behavior is appropriate. Students are encouraged to follow school and classroom procedures and rules.				

2-5	Organizing Physical Space	The classroom is safe and conductive for learning.				
Domain 3: Instruction						
3-1	Communicating Clearly and Accurately	Teacher communicates the learning objective clearly to students. Teacher's directions and procedures are clear to students and contain an appropriate level of detail. Teacher's spoken and written language is clear and correct. Vocabulary is age appropriate.				
3-2	Using Questioning and Discussion Techniques	The teacher's questions are of high quality. Adequate time is available for students to respond. Teacher successfully engages students in discussion when appropriate.				

3-3	Engaging Students in Learning	Representation of content is appropriate and links well with students' knowledge and experience. All students are cognitively engaged in activities and assignments appropriate to their level and abilities. Instructional groups are productive, appropriate to the students, and to the instructional goals of the lesson. The lesson has clearly defined structure around which the activities are organized. Pacing of the lesson is appropriate.				
3-4	Providing Feedback to Students	Feedback is purposeful, meaningful and is useful to student learning.				
3-5	Demonstrating flexibility and Responsiveness	Teacher uses assessment data to make adjustments to lessons as needed. Teacher makes accommodations for students who have different learning needs.				
Domain 4: Professional Responsibilities (Not applicable to Classroom Observation)						
4-1	Maintaining Accurate Records	Teacher maintains accurate records of students' progress and completes required records.				

4-2	Communicating with Families	Teacher provides information to parents about the instructional program and student progress. The teacher is available as needed to respond to parental concerns.				
4-3	Contributing to the School and District	Teacher contributes to the school and district by exhibiting positive and professional behavior.				
4-4	Growing and Developing Professionally	Teacher participates in professional development activities to enhance content knowledge and pedagogical skills.				
4-5	Showing Professionalism	Teacher demonstrates knowledge of students' needs and makes appropriate accommodations and referrals to meet those needs. Teacher attends and participates in required meetings.				

Reflecting on Teaching:

(The teacher reflects on the lesson's effectiveness.)

_____

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Teacher Comments:

_____

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_____

_____

Observer Comments:

_____

_____

_____

_____

_____

_____

Teacher's Signature _____ Date _____
(Signature does not indicate Agreement)

Observer's Signature _____ Date _____

Appendix K

School C Policy: Evaluation of Professional/Temporary Professional Employees

No. 413

SECTION: PROFESSIONAL EMPLOYEES

TITLE: EVALUATION OF PROFESSIONAL/TEMPORARY PROFESSIONAL EMPLOYEES

ADOPTED: December 20, 1993

REVISED:

	413. EVALUATION OF PROFESSIONAL/TEMPORARY PROFESSIONAL EMPLOYEES
1. Purpose	There shall be a plan for regular evaluation of all professional employees of the district.
2. Authority SC 1123	The Superintendent shall establish a district staff evaluation plan which is in addition to the state rating plan. The plan shall be consistent with the law of Pennsylvania and consistent with contract language.
3. Delegation of Responsibility	The building principal shall have the responsibility for observing and evaluating personnel under his/her supervision. Other certified supervisory administrators may also be called upon to conduct formal classroom observation.
SC 1108	The Superintendent shall certify as to the evaluations of all temporary professional employees during the last four (4) months of the initial three (3) years of employment as required by law.
4. Guidelines	The number and length of classroom observations and conferences shall vary in accordance with the needs and status of the employee. The observer shall give consideration to the type of class, the intellectual level of the students, any students with special learning or behavior problems, and special circumstances which could affect classroom conditions. Each formal observation and evaluation shall be followed by a conference which stresses a cooperative sharing of ideas and focuses on the assessment of the employee's performance and the improvement of instruction.

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