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The influence of teacher attitude about professional development, master's degree training, and teacher certification on school performance scores in selected Louisiana parishes

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**THE INFLUENCE OF TEACHER ATTITUDE ABOUT PROFESSIONAL
DEVELOPMENT, MASTER'S DEGREE TRAINING, AND TEACHER
CERTIFICATION ON SCHOOL PERFORMANCE
SCORES IN SELECTED LOUISIANA PARISHES**

By

Kay Lynn Tettleton, B.S., M.S.

**A Dissertation Presented in Partial Fulfillment
Of the Requirements for the Degree
Doctor of Education**

**COLLEGE OF EDUCATION
LOUISIANA TECH UNIVERSITY**

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THE GRADUATE SCHOOL

May 24, 2003
Date

We hereby recommend that the dissertation prepared under our supervision by Kay Lynn Tettleton entitled The Influence of Teacher Attitude About Professional Development, Master's Degree Training, and Teacher Certification on School Performance Scores in Selected Louisiana Parishes be accepted in partial fulfillment of the requirements for the Degree of Doctor of Education.

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GS Form 13

ABSTRACT

The purpose of this study was to investigate the relationship among three independent variables: teacher attitudes about professional development, earning a master's degree, and teacher certification on School Performance Scores. Independent variables included teacher attitude about professional development, proportion of teachers with masters' degrees, and proportion of certified and uncertified teachers. The researcher used a correlational design to test the hypothesized relationships among these three independent variables and school and district School Performance Scores. A ten item self-report instrument was constructed to assess teacher attitudes about professional development in the school or district. This instrument, *Teacher Perception of Professional Development Survey*, generated ten item scores, a total score, and two factorially derived subscale scores. The dependent variable was the school or district School Performance Score. The research hypotheses were that each of the independent variables would show a direct positive relationship with School Performance Scores. The population for this study was a set of parishes in the Louisiana Mississippi River Delta. The sample for this study included all ten schools in the five school districts in selected rural delta parishes in Louisiana that included grades 9-12 and were socio-economically similar. Prior to gathering data, human use forms and participant consent forms were completed. Archival data were obtained from the schools concerning percentage of teachers with a master's degree and percentage of certified and uncertified teachers. Each research question was evaluated by either Chi-Square test of independence, Spearman rho, or by Pearson

product moment correlation coefficients as appropriate. In addition, multiple linear regression tests were conducted. None of the null hypotheses were rejected following the analysis of the data.

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Author Kay Lynn Jettleton
Date May 24, 2003

DEDICATION

This dissertation is the culminating project prepared during a journey into learning that began in the fall of 1998. Without a doubt, the faithful encouragement, patient support, cognitive creativity, and motivational challenges from my husband, Lt. Col. John R. Tettleton, and my son, Paul Stellman, this would not have been possible. To both of you, I express my loving appreciation and dedicate this journey and this dissertation.

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CHAPTER 1

Introduction

Purpose of the Study

The purpose of this study was to investigate the relationship among three independent variables. The researcher compared teacher attitudes about professional development, proportion of teachers with master's degrees, and proportion of certified and uncertified teachers to School Performance Scores.

The professional development component of most accountability programs occurred under the direction of the local school district (Gullatt & Ritter, 2000). Program funding was traditionally built into the state accountability package.

Student achievement was determined to be lower in poverty areas that have a high minority population than in areas of higher socioeconomic status (Solorzano & Yosso, 2001). Louisiana Educational Assessment Program for the 21st Century (LEAP 21) and Graduate Exit Examination (GEE 21) have been identified as primary indicators of student achievement and form one part of the school performance score. Lack of top quality teachers has been identified as a need in many parishes with high rates of poverty (Louisiana Department of Education, 2002).

Schools in the northeast section of the Mississippi River Delta have traditionally experienced poverty, declining population and tax base, high teacher turnover, and low School Performance Scores (Louisiana Department of Education, 2002). These districts have schools that received performance scores lower than schools in the majority of the

state. Teacher quality has remained a problem for these school districts and has been influenced by problems concerning teacher certification, teacher professional development, and teacher attitudes and behaviors in low performing schools. This study sought to investigate the relationship between the influence of teacher attitude about professional development and participation in professional development on School Performance Scores. This study has evaluated effects of three independent predictor variables: teacher attitudes about professional development, proportion of teachers with a master's degree, and proportion of certified and uncertified teachers on School Performance Scores.

Justification for the Study

According to Sparks and Hirsh (2000), professional development was shown to yield dramatic improvements in student learning. Teachers could not teach content that they had not learned, nor could they use methods that were unknown to them. Americans have needed to expand opportunities for teachers to develop new knowledge and skills, and thus have set priorities with education at the top. These skills promoted the highest levels of student learning. States that have significantly based school performance upon student achievement tests showed that they could not improve school scores unless they gave teachers the tools, support, and training to help them change their teaching.

The lack of meaningful professional development for teachers has been thought to explain part of the failure of past school reforms. Without motivation for professional development utilizing new techniques that could be readily implemented in the classroom, teachers reverted to the methods that they remembered from their years as students. Sparks and Hirsh (2000) further suggested that teacher expertise explained the

difference in student achievement and most of the performance gap between African-American and Caucasian students. Teacher effectiveness influenced behavior in students and thus affected learning.

In May 1997, the State Board of Elementary and Secondary Education (BESE) began using a set of standards of content for English Language Arts, mathematics, science, social studies, foreign languages, and the arts. Louisiana's Blue Ribbon Commission on Teacher Quality examined policy recommendations for Louisiana's teacher education programs (Louisiana Department of Education, 1999). The BESE has established use of a comprehensive criterion-reference testing program that aligns with these standards. This program is called the Louisiana Educational Assessment Program for the 21st Century, (LEAP 21).

Phase I addressed the formation of mathematics and English language arts tests for fourth and eighth grades. The second phase added the science and social studies components. The last phase required 10th graders to take a mathematics and English language arts test in the spring of 2001 and 11th graders were required to earn a passing score on either the science or social studies components of the Graduate Exit Examination 21 (GEE 21) in 2002 (Louisiana Department of Education, 1999).

Since the inception of LEAP 21 and GEE 21, students have been required to score at least *Approaching Basic* on the School Performance Score in order to pass to the next grade (Louisiana Department of Education, 1999). Students have been provided tutoring in an effort to compensate for deficiencies in accomplishment. The student achievement scores along with attendance and dropout rates have been identified as components of the School Accountability score given to each school.

School Performance Scores have been computed and range from 0 – 150 and above. The School Performance Score has been used to assign a label for each school as *Academically Unacceptable, Academically Below Average, Academically Above Average, School of Academic Achievement, School of Academic Distinction, or School of Academic Excellence* (Louisiana Department of Education, 1999).

In the selected Louisiana parishes the poverty rate was shown to be among the highest in the nation. These rural areas have high minority and at risk populations. Reports by Solorzano and Yosso (2001) have indicated that there is an academic achievement gap that separates the low-income and minority students from other students. Inequities among the parishes have been identified to include teacher quality, course offerings, and funding. School Performance Scores have been linked to funding from the state and federal levels. This study has been justified because of the need to identify a tool such as professional development for improving teacher quality and, therefore, student achievement, a major component of School Performance Scores. State departments of education and others involved in decision making regarding funding have acknowledged criteria for fund allocation.

Theoretical Framework

The theoretical framework for this study has primarily been related to Vygotsky's constructivist philosophy as described by Speaker (1999). Vygotsky's schematic thesis of complex processes, transformation and evolutionary change in concepts over time, and logical, sequential ordering have been respected by educators around the world (Speaker, 1999).

According to Chrenka (2001), quality teachers have taught and learned through a constructivist approach to learning and to teaching. The works of Piaget, Vygotsky, and Dewey have inspired teachers to combine their understanding of how students learn with their own knowledge of a particular discipline in order to construct a framework for instruction (Figure 1). Within this framework, learning has been described as an active building process that is student centered and interactive among the teachings of the theorists Piaget, Vygotsky, and Dewey. Under the teacher's guidance, learners have selected and transformed information, constructed hypotheses, and made decisions.

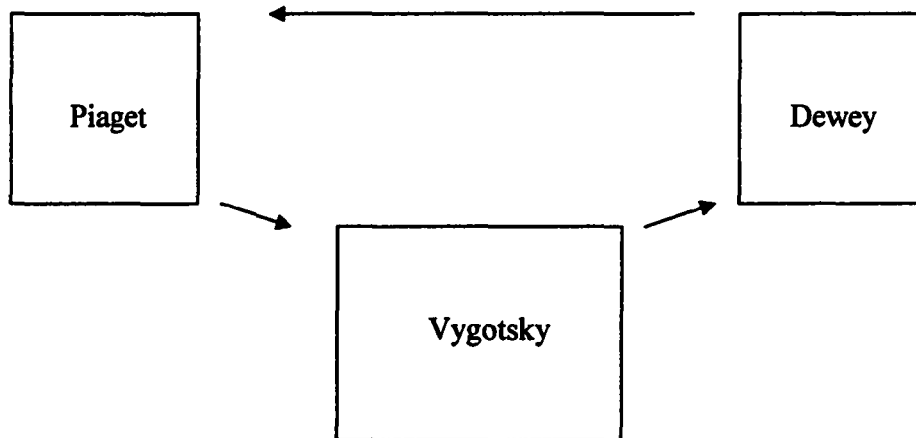


Figure 1. Constructivist Theorists

Constructivist theories were based on work in the psychology and anthropology disciplines and have been described as knowledge that is temporary, developmental, non-objective, internally constructed, and socially and culturally mediated (DeMontes &

Gonzales, 2000). The authors described constructivism as building upon the experiences that learners bring to the learning situation. Teachers learned in this constructive process wherein they as learners built an internal representation of knowledge based on personal experiences and social contexts.

Adults who related the problem meaningful way to adult life situations were identified as problem oriented learners (Nicholls, 2000). According to Nicholls, there existed a strong relationship between lifelong learning and the manner of presentation of professional development opportunities. He suggested the constructivist approach that included talking and writing about teaching and learning that was grounded in personal experience. This approach allows the practitioner to think about theory and practice in a clear but pragmatic method thus creating both a distinction and a connection between professional development and personal learning as a teacher.

DeMontes and Gonzales (2000) defined as constructivist teachers those who were said to be learners as well as teachers. They supported learning rather than attempted to control it. These teachers evaluated themselves, their students, and the system or school district. When given opportunities, these teachers collaborated with their students and promoted learner-learner collaboration, not competition. Constructivist teachers became good planners, models, guides, observers, and challengers of the learners' conceptions of the world as they saw it.

Vygotsky's work on the development of concepts was of most value to professional development in that it focused upon how concepts and thinking occurred. This was applicable to teachers as learners as well as the students that they taught.

According to Speaker (1999), Vygotsky grouped his thoughts on concept formation into three phases:

- unorganized congeries or heaps,
- thinking in complexes or families organized by real bonds,
- conceptual thinking.

In unorganized congeries or heaps, the learner used trial and error at random followed by syncretic organization in the visual field and, ultimately, reorganization by incoherent coherence. As the learner entered the second phase, he/she thought in associative types, collections, chains, diffuse complexes, and pseudo-concepts. The third phase of conceptual thinking found the learner's mental constructions becoming more complex and more readily accessed by development of the sensory schemata. It was at this point in learning that memory developed for such simple ideas as color. According to Speaker (1999), this contribution applied to adults and might have been Vygotsky's greatest gift to concept development.

Glassman (2001) reported that Dewey concentrated on means, believing that it was the ability of the student to question through experience that was most important. Speaker (1999) reported that Dewey's three major conceptualizations of education were quite relevant. These included preparation, unfolding, and discipline for training the senses. Dewey indicated that the only adequate training for occupation was training through occupations. This concept might have been applied to teachers sharing with other teachers in order to improve teaching and learning. Both Dewey and Vygotsky supported constructivist theories. Education was described as not a matter of telling and being told,

but rather an active and constructive process. Unfortunately, Dewey believed that this principle was almost as generally ignored in practice as it was in theory.

According to Chrenka (2001), lifelong learners such as teachers might have become more open minded to new ideas and formulation of frameworks in which learning was an active student centered process. Some teachers believed that there was more than one way to play Chopin or more than one interpretation of Macbeth. These were the kinds of teachers who might have benefited most from professional development opportunities.

Building upon the concepts set forth by theorists described above, Nicholls (2000) has set forth a framework which summarized thoughts of other 21st century educators and some day might become a model for professional development.

It included

- developing a new mind set;
- learning to promote and market one's skills while networking and cultivating relationships;
- developing self-insight and taking personal charge; and
- developing a range of competencies (p. 370 – 377).

Using the works of Vygotsky, Piaget, and Dewey, and the review of literature, the researcher developed a theoretical base for this study. Figure 2 illustrates the relationship of teacher attitude about professional development, master's degree training, and teacher certification on School Performance Scores. This figure describes the contribution of teacher attitude of professional development, master's degree training, and teacher certification on School Performance Scores.

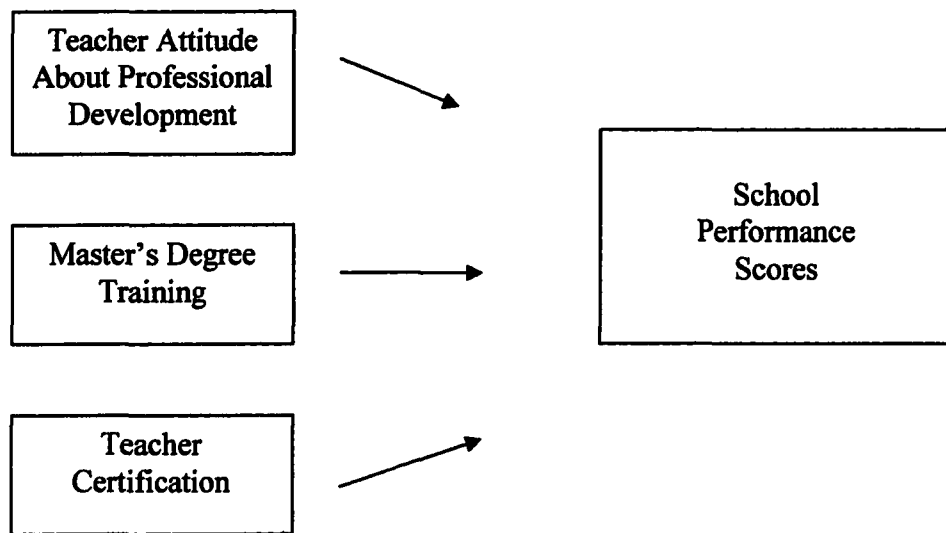


Figure 2. Theoretical Base

Research Questions

To explore the relationship between teacher attitude about professional development, master's degree training, teacher certification, and School Performance Scores, the following three research questions were investigated.

- Is teacher attitude regarding professional development related to School Performance Scores?
- Are teachers having a master's degree related to School Performance Scores?
- Is teacher certification related to School Performance Scores?

Null Hypotheses

For the purpose of this study, three null hypotheses were tested.

Null Hypothesis 1. Teacher attitude regarding professional development programs is not related to School Performance Scores.

Null Hypothesis 2. Teachers having a master's degree are not related to School Performance Scores.

Null Hypothesis 3. The certification status of teachers is not related to School Performance Scores.

Research Hypotheses

For the purpose of this study, three research hypotheses were tested.

Research Hypothesis 1. Teacher attitude regarding professional development programs is positively related to School Performance Scores.

Research Hypothesis 2. Teachers having a master's degree are positively related to School Performance Scores.

Research Hypothesis 3. Teacher certification is positively related to School Performance Scores.

Definitions

General: For the purpose of this study, the following definitions were used.

- **Academically Above the State Average:** Refers to schools receiving a School Performance Score of state average to 99.9.
- **Academically Below the State Average:** Refers to schools receiving a School Performance Score of 30.1 to the state average.
- **Academically Unacceptable:** Refers to schools receiving a School Performance Score of 30.0 or below. The school shall be labeled Academically Unacceptable. This school immediately enters Corrective Actions.
- **Accountability:** The decisions that are made and the actions taken as a result of the performance shown by assessment (Gullatt & Ritter, 2000).

- **Alternative Certification:** Any one of the processes provided by states that provides an individual with training required to meet a given set of standards. This results in allowing individuals who have not completed an accredited college and university education program to teach in public schools.
- **Assessment:** The means or manner by which performance is measured (Gullatt & Ritter, 2000).
- **Certification:** Designation by the state that a teacher has completed requirements and met a given set of standards for teaching as set forth by the *Department of Education*
- **Corrective Action:** Consisting of Levels I, II, and III, the plan and process of assisting deficient performing schools to progress toward growth targets.
- **Descriptive Statistics:** Statistical procedures that organize and summarize the data in a study.
- **Distinguished Educator:** A teacher assigned to assist school personnel in establishing a strategic plan for meeting a growth target and moving toward academic excellence.
- **Instructional Staff Support:** According to the Census Bureau, (Killeen, Monk, & Plecki, 2002), supervision of instruction service improvements, curriculum development, instructional staff training, and media, library, audiovisual, television, and computer-assisted instruction services.
- **Mean:** This term refers to a measure of central tendency where the sum of the deviation scores is zero.

- **Mentoring:** A complex interactive process occurring among individuals of differing levels of experience and expertise that incorporates interpersonal or psychosocial development, career educational development, and socialization functions into the relationship. This one to one relationship is itself developmental and proceeds through a series of stages that help to determine both the conditions affecting and the outcomes of the process.
- **Northeast Region Parishes in the Mississippi Delta:** Includes those parishes whose eastern boundary border the Mississippi River and are located in the northern half of Louisiana.
- **Professional Development:** The enhancement of the knowledge, skills, and understanding of individuals or groups in learning contexts that may be identified by themselves or their institutions.
- **Range:** The measure of the dispersion representing the number of points from the highest score through the lowest score.
- **Reliability:** An indication of the consistency of a scale. A reliable scale is internally consistent and stable over time.
- **School of Academic Achievement:** Refers to schools receiving a School Performance Score of 100.0 to 124.9.
- **School of Academic Distinction:** Refers to schools receiving a School Performance Score of 1215.0 to 149.9.
- **School of Academic Excellence:** Refers to schools receiving a School Performance Score of 150.0 or above.

- **School Performance Scores:** The scores assigned by the Louisiana State Department of Education to a school district which reflect school performance and accountability.
- **Significance:** A difference is said to be significant if the probability of making a Type I error is less than the accepted limit (normally 5%). If a difference is significant, the null hypothesis is rejected.
- **Standard Deviation:** A measure of the dispersion representing a special type of average deviation from the mean in a study.
- **Validity:** Refers to an indication of the accuracy of a scale.

Limitations

For the purpose of this study limitations included teacher attrition during the school year, lack of random sampling, rate of survey participation, and high minority and poverty populations in the districts. Similarities in socio-economic levels of the rural parishes and lack of diversity in population was a limiting factor. Involvement of substitute teachers for absent teachers was a limitation as was the inclusion of only rural high schools. Additionally social desirability response sets could have been a limitation. Teachers who were certified but were teaching outside their area of certification were confounding variables and limitations to the study.

Summary

The purpose of this study was to determine the relationship among three independent or predictor variables that includes proportion of teachers with a master's degree, proportion of certified and uncertified teachers, and teacher attitude about professional development in their districts on district School Performance Scores in

selected northeast Louisiana parishes in the Mississippi River Delta. Rural parishes with declining populations, shrinking tax bases, high minority populations, and large numbers of uncertified teachers needed professional development opportunities that were meaningful to the teachers and that would be implemented in classroom teaching.

Justification for the study existed through the implementation of the school accountability program in Louisiana and the publishing of School Performance Scores that were below standards in the northeast Louisiana parishes along the Mississippi River. Theorists such as Dewey and Vygotsky shared constructivist views for teacher and student learning. These views were valuable in improving professional development. Piaget, Dewey, and Vygotsky's cognitive and social approaches to building knowledge and skills upon previous experiences and training gave a foundation for teacher attitude toward professional development to be related to School Performance Scores.

Archival data that included teacher college degree and certification status have contributed to the assessment of the relationship of professional development to School Performance Scores. The Louisiana Department of Education Web Site has made available information about the selected school districts as well as supplemental data on individual schools.

CHAPTER 2

Literature Review

School Accountability

Just as the President of the United States has historically reported to the American people on the State of the Union each year, many school districts have begun to report to parents and the public on the state of the schools each year. One popular process having been implemented was the development of a local school district effectiveness score that may have been used to compare each school against a rubric of components and standards (Gullatt & Ritter, 2000). In most cases, this process was mandated by the state legislature that justified its use in determining school district funding.

According to Gullatt and Ritter (2000) there are two terms that have been used by almost every state. These terms were described as assessment and accountability. Assessment referred to the means or manner in which performance was measured. Each state has developed its own methods for gathering data to assess. Accountability was defined in terms of the decisions made or actions taken as a result of the performance shown by the assessment.

Implementation of standards has been shown to be among the leading approaches to school improvement (Blum, 2000). Efforts to establish programs that have yielded positive results included student achievement testing, professional development for teachers aligned with test results, rewards, sanctions, and targeted assistance (Lashway,

2001). The purpose of accountability policies was generally designed to improve the teaching and learning that takes place in schools. This has enabled students and teachers to perform to the best of their abilities (Reed, et al., 2000).

Blum (2000) established a need for clear performance standards and benchmarks as the stage for accountability. When all of the stakeholders including parents and community members, students, school and district staff, state and local board members, and legislators had a clear understanding of what all students must learn and how well they should learn it, school and districts became accountable for learning by all of the students.

According to Gullatt and Ritter (2000), remediation for the schools that were designated as low performing was made a priority. School districts were not interested in ranking schools from top to bottom or against each other. Most districts preferred to profile the school's progress toward the established benchmarks.

Increasingly, teachers have been held accountable for school ratings in order to link scores to educational funding (Gardner, 2002). Urban and rural areas have met funding problems which negatively impacted student achievement and overall school performance.

According to Lashway (2001) teachers often questioned specific policies but rarely argued that they should not be held accountable. Current accountability systems have been based upon the belief that people perform better when they have a clear goal and when their performance has well defined consequences. The desire to attain rewards and avoid sanctions has thus kept teachers focused on student improvement and school performance.

Maryland has established a successful program for improving school accountability (Yen & Ferrara, 1997). In Maryland, the consistently low performing schools chose to become Challenge Schools that received funding and outside expert guidance on improving school performance using the Maryland School Performance Assessment Program. Some were designated as Reconstitution Schools which were reorganized by an outside organization.

School Performance Scores

Across the United States, school performance scores or school report cards have been shown to vary greatly. Some relied upon pages of statistics with no explanation while others qualitatively described exemplary performance and standards. Other studies have shown that parents and school officials have not gained information from these documents needed to support school improvement (Gullatt & Ritter, 2000).

In Louisiana, mandates have been established that every school would participate in a school accountability system based on student achievement as approved by the Louisiana State board of Elementary and Secondary Education (Louisiana Department of Education, 2002). A School Performance Score (SPS) has been calculated for each high school with scores ranging from 0 – 150 and above, with a score of 100 indicating that a school has reached the 10-year goal and a score of 150 indicating that a school has reached the 20-year goal.

According to the State Department of Education, the school SPS has been described as a composite of student achievement data from norm-referenced tests, criterion referenced tests, attendance, and dropout rates. Schools have been given performance labels which include School of Excellence, School of Academic Distinction,

School of Academic Achievement, Academically Above Average, Academically Below Average, and Academically Unacceptable School (Louisiana Department of Education, 2002). Schools labeled Academically Unacceptable have been placed immediately into corrective action after completing Corrective Actions Levels I, II, and III. After this process, if the school did not meet the target growth, it would lose its State approval and all State funds. Change processes have been designated under the direction of and assistance of a Distinguished Educator after which the school must show improvement.

For schools that exceed minimum requirements, rewards have been scarce. The most common awards or bonuses to local school districts have been public recognition such as newspaper articles, plaques for placement in the local schools, and certificates of achievement (Gullatt & Ritter, 2000). In some school districts, tuition exemption has been used as a reward for excellence. Fourteen states have promised increased funding for schools that have raised their School Performance Scores more than the state's determined growth rate. Presently, the procedure to distribute rewards to local school districts for success in state rankings has been under revision and appears to have political connotations.

The relevance of high stakes testing has been questioned by educators across the United States as the emphasis on student achievement components of school accountability scores increase. Gardner (2002) explained that educators in support of high stakes testing have stated that emphasis on achievement could be a powerful tool to change classroom and school practices for the better. He added that the tests provided a clear, unbiased view of student performance from school to school, year to year. The

author related that achievement data from the tests has provided educators with valuable diagnostic information to improve classroom practices and student learning.

Educators who oppose high stakes testing have stated that no single assessment should have been given so much weight (Gardner, 2002). Educators have expressed concern that high stakes tests have forced teachers to narrow the focus of their curriculum to concentrate on what is included on the test to the detriment of other topics. These opponents contended that too much class time is spent on test preparation, and that emphasis on the test reduces room for the teachers' creativity and the students' enjoyment of learning. In addition, it was asserted that many tests do not adequately match state standards and have not been an accurate reflection of student learning. Both sides of the debate shared valid points.

In efforts to improve school performance via increasing student achievement, a consensus of suggestions related to student achievement assessment has been offered by Gardner (2002):

- Assessments should provide a clear, unbiased view of student performance.
- Assessments should provide relevant and timely diagnostic information to improve classroom practices and student learning.
- Assessments should support relevant standards and set high expectations for all students.
- Assessments should directly target high stakes goals.
- Assessments should support breadth in the curriculum to ensure that attention is given to all standards and subject areas.

- Assessments should offer flexibility to support teachers' creativity and promote students' learning enjoyment.

Socioeconomic Influences

According to Desimone (1999), socioeconomic status has had an impact on student achievement and school performance. In the United States, one of the driving forces of educational policy has been the desire to equalize disparities in schooling opportunities and outcomes. These disparities have become significant in that those inequalities in educational opportunities have resulted in job market disparities that have negatively impacted minority students' earning potential and ability to succeed.

Ogbu has tried to explain why minority students have performed at lower achievement levels than non-minority students (Ogbu & Simons, 1998). By classifying students as voluntary (immigrants) or involuntary (race), he has suggested some implications of culture and heritage regarding achievement expectations. Structural barriers in minority education have been described as community forces which are products of socio-cultural adaptation and are located within the minority community.

Culturally responsive instruction has been determined to require that teachers understand their students' culture and language (Ogbu & Simons, 1998). By bringing students' and their community's folklore and customs into the classroom, teachers have been able to begin to bridge the cultural gap. A frame of reference has been defined as the way in which a person or a group looks at a situation. People in different situations have expressed differences in their frame of reference. It has been helpful to teachers to learn about their students' culture and life experiences and to communicate interest in their world. This served to validate their identity.

Students in poverty areas who attended school for thirteen years and who graduated were more likely to be mis-educated than students who dropped out of school (Haberman, 2001). Graduates were exposed and rewarded over this time period for learning misconceptions that would prevent them from ever participating successfully in the real world of work or becoming lifelong learners. This situation has been accentuated by the description of schools serving students in poverty areas. These schools had a set of basic skills learned by following directions for the purpose of securing an immediate reward. The most reasonable strategy for beginning to address the mis-education of children in poverty was by selecting new populations of teachers prepared in new ways to be successful and stay in school districts that have failed to meet the students' needs.

Nyhan and Alkadry (1999) reported that socio-economic conditions have been a strong predictor of achievement scores. These socio-economic conditions were said to be exogenous or outside of the control of the school districts and required community-wide strategies for improvement. There remained a strong public perception, reinforced by elected officials, that the problem of low achievement scores could be resolved by the school district.

According to Solorzano and Yosso (2001), the influence of race has proven to be the more significant factor regarding student achievement. Critical Race Theory has challenged education to examine how theory and practice have been used to stereotype students. There have been five themes identified regarding Critical Race Theory (CRT).

- The centrality and intersectionality of race and racism has recognized the central role that racism has played in the structuring of schools and schooling

practices. Racism has been shown to intersect with other forms of subordination including sexism and classism.

- The challenge to dominant ideology examined the system of education as part of a critique of societal inequality.
- The commitment to social justice was described as being committed to social justice and offered a vision of elimination of racism, sexism, and poverty along with the empowering of underrepresented minority groups.
- The centrality of experiential knowledge recognized that the experiential knowledge of women and men of color along with heritage preservation techniques including chronicles and family histories were valuable.
- The interdisciplinary perspective challenged the traditional analysis by looking at racism through historical and contemporary context.

Having identified poverty and race as critical issues, teacher education programs have met a unique challenge to ensure culturally proficient faculty (Quezada & Louque, 2001). Diversity in teacher education programs have benefited student achievement in cases where the programs were systemic and innate rather than designed as a legislative mandate. In teacher education, cultural proficiency has been demonstrated in many ways, including how education departments supported faculty of color, students of color, a multicultural curriculum, and a program that fostered equity.

Quality teacher preparation programs have come to the realization that it was imperative that faculty in teacher education value diversity, assess cultural factors, manage the dynamics of differences, institutionalize cultural knowledge, and adapt to diverse needs (Quezada & Louque, 2001). Student self-perception has been shown to be

impacted by school culture and learning environment, and students have been challenged to examine core values and cultural beliefs.

Adding minority teachers to the faculty was described as another technique for enhancing learning among minority and poverty students (Hawk, Burke, Brent, Warren, & McCarley, 1999). In a study from North Carolina, the researchers noted that while the public school population was 42.5%, the minority teacher population decreased by 16%. In addition, 23% of the African American teachers in the state planned to retire within five years and only 12% of the state's college and university minority students were enrolled in teacher education.

Professional development was shown to be a positive influence in preparing teachers to teach in poverty areas and schools with students from lower socio-economic homes. Recruitment of minorities in the teaching profession was suggested as was coaching or mentoring for novice teachers (Haberman, 2001). A coalition of major educational and community institutions planned and designed a new system of pre-service and in-service teacher education to meet the needs of the Milwaukee Public Schools. The resulting proposal was a Milwaukee Teacher Education Center that built upon previous knowledge. Local and national input regarding teacher preparation for working successfully with children in poverty was gathered and included in the program.

Inequalities in educational opportunities have been shown to generate job market disparities later in life for those minority children who grew up in poverty. The educational system in the United States has not succeeded in equalizing disparities in quality of education offered minority children in poverty neighborhoods and that offered to middle income non-minority children in middle class districts (Desimone, 1999).

Professional Development

According to DeMontes and Gonzales (2000), the U.S. Department of Education has described professional development as the rigorous and relevant content, strategies, and organizational supports that ensure the preparation and career long development of teachers and others whose competence, expectations, and actions influence teaching and learning. The education system has failed to provide adequate opportunities for teachers to thrive. The authors indicate that society appears to expect today's teachers to teach tomorrow's skills using yesterday's training.

School districts have begun to explore non-traditional methods of in-service training and professional development for teachers. In efforts to build new cultures of professional learning within schools, educators have advocated the creation of Professional Development Schools. The National Teacher Training Institute has been described as one that has provided high quality professional development for teachers at numerous sites throughout the United States (Donlevy, 2001).

In relation to the area of professional development, students/teachers commented on the open ended item "The exhibition influenced my ongoing professional development by..." Over half of the respondents felt that the exhibitions influenced their professional development by assisting them in reflecting on and organizing their work. They reflected upon their work and set goals based upon their perceived strengths and weaknesses. Engaging in this reflective process helped develop confidence through greater self-awareness and heightened their perceptions of being life-long learners. Participants reflected that they were reminded that they are life-long learners as teachers and that they still must have a desire to learn (Willis & Davis, 2002).

Quality and availability of professional development has been linked directly to school district funding (Killeen, Monk, & Plecki, 2002). Districts spend about three percent of total general expenditures for professional development activities. This amount has equated to approximately \$200 per pupil. There has been much debate regarding the amount of money invested in professional development for classroom teachers compared to the amounts of money invested in employees by private corporations and businesses for their professional development and business development. Some states have allotted funding for professional development according to enrollment. Others have been aligned for equalization. Often structure rather than need has dictated spending.

According to Killeen, et al., (2002) activities concerned with directing, managing, and supervising the improvement of instructional services has been categorized as a primary expenditure in professional development. In addition, activities that assist instructors in designing curriculum and learning of techniques to motivate students were placed in this group. The final budget group was shown to be activities that involve improving the occupational health or professional training of instructional staff, including expenditures for workshops, demonstrations, school visits, sabbatical leave, and travel leaves.

Subtle or hidden costs of professional development have been identified (Killeen, et al., 2002). The authors described costs that are often difficult to capture. When a teacher left the classroom to participate in professional development, a substitute teacher was hired. On the average, students may not have learned as much in the hands of the substitute teacher as they would have in the hands of their regular teacher. A second example cited was the cost associated with early release days, or those days when

students were dismissed early from the school day in order for teachers to have time at school for professional development activities. Both examples were additional factors or contributions to professional development costs, but were costs that are difficult to quantify and to measure.

When school districts have considered professional development schools or other revisions in professional development for teachers, the question has arisen as to why professional development needed to change (Dorph & Holtz, 2000). Generally old models for professional development have been used by the districts, infrastructure issues have not been addressed, and attitudes have not changed. It has been shown that in order for educational reform to succeed, support and motivation are needed from state boards of education as well as local school districts (Professional Development for Teachers, 2000).

According to the report of the National Joint Committee on Learning Disabilities, teacher competencies critical to student achievement have changed significantly (2000). In the changing society, teachers were required to possess a rich understanding of pedagogical and content-specific knowledge. In addition, teachers must have expressed desire to add to their instructional repertoire new methods and approaches for instruction. Professional development which was at one time “sit and get” sessions that relatively passive participants were made aware of the latest ideas regarding teaching and learning from experts was restructured. The 21st century professional development was redesigned to include ongoing, high quality sessions utilizing a variety of approaches with intensive follow-up and support. This has evolved into an ongoing process, not an event occurring in time.

Effective professional development described by the Council for Learning Disabilities included ongoing acquisition of new skills that ensured all students progress in the curriculum (National Joint Committee on Learning Disabilities, 2000). The best professional development has not been defined by a few days of programs each year. Instead, research based approaches and updates continually available encouraged better teaching. Professional development required strong leadership and support in funding as an integral part of the school's strategic plan. Time during the workday for staff members to participate has been deemed essential so that teamwork is strengthened and teachers learn to share and build upon each others' strengths.

Above all, teachers, administrators, and the entire education community were asked to come to an understanding of the change process. To learn has been defined as to change as individuals and collectively as an educational community. In the report of the National Joint Committee on Learning Disabilities, the National Staff Development Council in 1995 has noted that the characteristics of a productive professional development program include relationships to school settings and programs, involvement of teachers in the planning process, provision of choices and different learning opportunities, use of a variety of teaching methods, continuation of assistance and support, and organization of follow-up in the form of coaching or mentoring.

The relevance of professional development to student achievement and thus school performance was illustrated by schools who have partnered with other public schools and area universities in order to better equip teachers to teach (Cobb, 2001). The idea of partnering in order for teachers to become change agents had its roots in

progressive education articulated as early as Dewey in his 1920 book entitled *Reconstruction in Philosophy*.

Philosophy and practice have changed greatly in the specific subject matter areas. The creation of transformative adult learning in professional development has illustrated that a practice-based approach to teaching results in improved student achievement in mathematics (Clarke, 2002). In this study traditional skills and rules were contrasted to children as thinkers. Cognitive creativity were used to expand children's thought processes when teachers possessed the techniques with which to guide them.

Clarke (2002) described truly transformative learning professional development experiences for teachers as including the following concepts. The maintenance of a primary focus on the student behaviors rather than on changing teacher behaviors was needed. Teachers had to remember the purpose of teaching. Support of the ongoing work of the teacher was identified as crucial as was a sound foundation in mathematics content. The modeling of good instruction by observations/demonstrations was valuable as was taking into account teacher personalities, stated as "no one size fits all." One of the most challenging concepts to traditionalists was the creation of a healthy dis-equilibrium, one of the basic principles of constructivist learning. By combining these techniques and premises, teachers learned to appreciate professional development as a continuing process over the course of a career.

This concept was expanded by studies done by Garet, Porter, Desimone, Birman, and Yoon (2001). Data from a *Teacher Activity Survey* revealed core features of professional development activities that had significant, positive effects on teachers' self reported increase in knowledge and skills and actual changes in classroom practice. A

focus on content knowledge, opportunities for active learning, and coherence with other learning activities were identified as most valuable. Structural features which positively affected teacher learning included the form of the activity, collective participation of teachers from the same school, and the duration of the activities.

To carry out the demands of educational reform and school improvement, teachers had to be immersed in the subjects that they taught and have the ability to communicate knowledge and to develop advanced thinking and problem solving skills among the students (Garet, et al., 2001). In spite of the expressed needs and interests in professional development as a tool for improved student achievement and school performance, little systematic research has been conducted on the effects of professional development on those changes. Some studies conducted over the past decade suggested that professional development duration had been related to the depth of teacher change. In other words, follow-up and continuation was determined to be vital.

Structural features that have been identified as positive have included the most common type of professional development, and the most criticized in the literature, the workshop. A workshop has been characterized as a structured approach occurring outside the teacher's classroom. It generally involved a leader with special expertise and participants who attended the sessions at scheduled times, often after school, on the weekend, or during the summer (Garet, et al., 2001). Institutes, courses, and conferences have been other traditional forms of professional development with basically the same format as workshops. These activities may be required or may be opportunities for voluntary participation. In either case, motivation levels have been generally low for teacher involvement.

With the increased interest in improving school performance and student achievement, reformed types of professional development have emerged (Garet, et al., 2001). Study groups, mentoring, and coaching have been initiated as part of the regular school day's activities with results being positive and reports indicating that they were easier to maintain over time.

Traditional and non-traditional core features have focused on the content (Garet, et al., 2001). New approaches have been developed which not only impart new knowledge and information, but also suggested new teaching strategies to improve student creative thinking. Considerable emphasis has been given to improving teachers' understanding as to how children learn. This evolved into new curricula and/or teaching methods. Studies in California have shown that compared to more general professional development, professional development that focused on specific content and how students learn that content had larger positive effects on student achievement outcomes, especially achievement in conceptual understanding. Teachers reported higher implementation of these concepts in the classroom than previously reported.

DuFour (2001) reported that improved implementation of new concepts was increased in a small Virginia school through motivation of the teachers to buy-into the new concepts before professional development was offered. The school was described as a professional learning community with teachers required to attend nearly 120 hours of professional development training during the spring and summer months. This information was set forth at informational sessions held in the schools.

Providing teachers official time to meet as teams was shown to be critical. Schedules were constructed so that all teachers named in a teaching team could meet

together regularly (DuFour, 2001). Establishing and promoting a strong positive attitude was noted as very important. Teachers were approached as professionals with strong work ethics. According to DuFour teachers were told that if they were to work so hard, they should not work in vain. In other words, if they were to dig for gold, they should at least dig where the map shows that they could expect to find gold.

The role of the principal was stressed in motivating, planning, and supervising meaningful professional development for every teacher (DuFour, 2001). No set pattern for in-service training was shown to fit every school. School culture and climate as well as the socio-economic variables were strong influences upon meaningful professional development. General suggestions made included the importance of recognizing the history and strengths of each school. Inclusion of teacher ideas in identifying hopes and vision was noted to be an asset in gaining buy-in as was the importance of community priorities. Principals who have seen success in professional development noted the alignment of school structures to support a professional learning community and the overall goal of keeping the focus on learning.

Mentoring

One of the cost-saving techniques that has been used by school districts across the United States is mentoring. In a study on mentoring, Perry (2000) described mentoring as a dynamic practice with no one process or model appropriate for all situations. Success was shown to be dependent upon variables in each school district and with local practice and policy.

The success of programs in professional development has been shown to improve student learning and school performance, and to decrease teacher attrition rates

(West, 2002). Nearly twenty-one percent of all new teachers have left the profession after their first three years of service. Thirty percent of all K–12 teachers have quit their jobs during the first five years with lack of job satisfaction being named as the primary reason for leaving. Professional development in the form of mentorship has been shown to help acclimate new teachers and prepare educators for taking the lead role in their own professional development and commitment to teaching.

Creative professional development was used in Ohio to help novice as well as experienced teachers (West, 2002). In this study student academic success was in need of improvement. New teachers expressed needs for skillful experienced teachers who are willing to give them assistance upon request. Pressures mounted from district administration that asked all staff to “step up and make it (student success) happen.” Excuses for a lack of performance were no longer tolerated.

Partnerships, collaboration, and reform have served as terms for guiding teacher education experiences with a goal of educational reform or improvement (Davies, Brady, Rodger, & Wall, 1999). One essential component of this partnership was staff development. It changed from a one week summer institute that consisted of intensive workshops to monthly meetings where classroom mentors shared curricular growth, innovative ideas, and teaching philosophies. University site-based instructors working with the mentor teachers designed and implemented ongoing professional development opportunities for educational reflection and growth.

Novice teachers have generally worked with cooperating teachers during pre-service. Having graduated and begun teaching for the first time, many of these new educators struggle to make the transition from student to teacher. Ganser (2002) has

shown that cooperating teachers and mentors have exhibited many of the same strengths and goals. Mentoring has become a vital part of many school district professional development plans.

The plan for supporting professional development of teachers was illustrated to be functional, not built upon the traditional expert-in-a-workshop or one-two day seminar format. The most effective teachers were immersed in the subjects that they taught and had the ability both to communicate basic knowledge and to develop advanced thinking and problem solving skills among their students (Garet, Porter, Desimone, Birman & Yoon, 2001). An integration of reading, research, goal setting, timeliness, and mentoring was required. Teachers were urged to team teach with a mentor, to tape themselves as they taught for later critique, and to share successes and concerns in a safe nurturing professional environment. Administrators facilitated the discussions, answered questions, and accommodated teachers as needed.

In Ohio, a professional development program described by West (2001), became an ongoing effort available for new and experienced teachers. The most difficult part of this program was the securing of mentor teachers. The study reported by West indicated that the best characteristics for mentor teachers included a willingness to help new teachers with lesson planning, unit development, and the acquisition of instructional aides. This process required time from the teacher away from his/her classroom responsibilities.

West (2001) disclosed that the attitude of not overburdening the mentor teacher was vital because it allowed both teachers to make mistakes and work together to reach solutions. Any good mentor in professional development had to be accessible when

needed and a good listener who knew when and how to provide constructive criticism. Teachers who had worked with mentor teachers indicated that a supportive, exemplary, and caring professional manner was important as was a genuine expertise in the respective area of teaching. Teachers who were respected by peers, parents, and students tended to be the most effective mentors. As a part of professional development, this aspect was deemed well worth the time and effort required.

Russotti and Shaw (2001) reported studies that indicate the need for professional development for staff members who are not the primary classroom teacher. In a study done with visually impaired students, teaching assistants were shown to have received little or no training or professional development opportunities. In classrooms, teaching assistants have been bombarded by questions, have observed inappropriate behaviors, and have been asked to perform roles for which they were not prepared. Although this was a special audience, results indicated that training was clearly needed for the benefit of the students and their achievement.

Considering other non-traditional situations, Willis and Davies (2002) explored the concept of use of professional portfolios by teachers and teacher candidates. Primary goals for these portfolios were to clarify, reinforce, and evaluate attainment of a program's goals and serve as an assessment tool. They appear to supplement the efforts of mentor. The study consisted of a survey which used a Likert scale to determine teacher opinions of portfolios in terms of assessing professional growth. Comments made in the open ended stem responses supported the teachers' desire for personal ownership and decision making about the portfolio contents.

Mentoring as a component of professional development and professional growth was examined in a study reported by Davies, Brady, Rodger, and Wall (1999). Benefits of mentoring were reported as teaching styles that addressed student needs and program influences. As in other studies, these mentor teachers worked in partnerships enhanced by mutual respects and complementary strengths. The teachers reported that these partnership type relationships built self-confidence, promoted professional behaviors, reduced isolation, validated beliefs, increased teaming, and provided meaningful professional development activities. These were substantiated by novice and experienced teachers.

Thus far, the discourse has been related to mentoring as a benefit to novice teachers. Davies, et al., (1999), has reflected upon the positive impacts on the mentor teachers as well as the novice educators. Self-confidence, self-reflection, professionalism, collegial interaction, and growth were discussed as benefits to the mentors. Mentors reported that they were forced to take a critical look at themselves as teachers. These mentors felt challenged to read, to question what they do, and how they did it. Mentors noted increased efforts to be better professionals and set a better example. Rewards varied from intrinsic to tangible perks such as tuition waivers and opportunities to attend professional meetings.

Inexperienced teachers noted that one of the most valuable and challenging components of teaching was classroom management. It was in this area that mentoring was reported to be especially helpful. No matter how much classroom instruction a new teacher has received, experiences met when entering a classroom for the first time pose special problems for many. Mentor teachers noted that lack of consistency in discipline

was common among new teachers. Positive results were noted but not until the third semester in the mentoring program.

The perspective of mentoring has been shown as most useful for teachers in the early years of teaching. The most successful mentoring programs which were conducted as part of professional development were designed more as a collaborative partnership than a mentor/protégé. In the partnership, mentoring was described not only as the experienced giving to and supporting the inexperienced, but also the sharing of equal but different skills and competencies within and between the two educators (Perry, 2000). It has been argued that at least three years are needed to establish a meaningful partnership.

Mentoring has been identified as an ideal way to help novice teachers and experienced teachers improve teaching methods (Perry, 2000). Learners go to school to learn, not just to learn how to learn. Teachers, too, have been described as lifelong learners. Perry described the styles of learning as types of learning. These types of learning styles focused upon included diverger, assimilator, converger, and accommodator. Teachers noted surprise at the diversity of preferred learning styles held by the group. The teaching profession finds vast ranges of learning styles within the profession.

With school district budgets stretched to the limits, mentoring has offered potential for school reform. Regardless of learning style, the mentor and the partner teacher benefited from maintaining journals, establishing teaching logs, engaging in professional goal setting, research, collaborative presentations, formal graduate coursework, and communication of issues and concerns in forums with peers (Davies, et al., 1999).

For novice teachers the mentor programs that have been offered by some school districts have served as an extension of the cooperating teachers or pre-service educator teachers who helped student teachers to become classroom professionals (Ganser, 2002). These cooperating teachers and mentor teachers have eased the transition as they helped inexperienced teachers build their knowledge, skills, and confidence in the complex work world of teachers. Active mentoring and other professional development programs have been shown vital in maintaining and increasing the teacher supply. This was shown to be particularly important during the next decade due to increasing enrollments in many parts of the United States, increasing waves of teacher retirements, and initiatives that focus on reducing class sizes.

Given that mentor programs have been shown to be effective in improving teacher quality, school districts have begun to look at qualifications to be a mentor teacher. According to Ganser (2002), mentor training has been required by 18 states. Requirements have been established in other states and have usually been based upon some combination of teaching experience, master's degree attainment, and training through courses, seminars, or workshops.

As a significant component of effective professional development, mentoring has not received its rightful recognition or compensation. Relatively meager extrinsic rewards have been made available to cooperating teachers and mentors in terms of cash stipends or tuition vouchers to date (Ganser, 2002). Although a relatively small portion of the school district's budget has been dedicated to professional development, some extrinsic incentives may emerge. These incentives were included due to the demand for mentors to assist the increasing number of novice teachers to be hired as replacements for the drops

due to retirements. On the average, skillful mentor teachers have served in this capacity at least ten times by mid-career.

When considering structuring of a professional development and/or mentoring program, experienced practitioners have modeled the legal and medical professions in their practice of placing student apprentices in real-world, clinical situations early in their training. Traditionally, most beginning teachers have entered the classroom with only minimal opportunity to interact with students and, more importantly, learned only briefly from master teachers (Smith, 2002).

Smith (2002) discussed the PathWise framework, designed by the Educational Testing Service (www.ets.org). In this program, the trained mentor was able to observe and analyze teaching in light of nineteen specific criteria. These criteria will provide substantive and specific feedback and coaching in a team or partnering relationship. The mentor format is especially productive in professional development opportunities in technology training for teachers at diverse grade levels and at various levels of expertise.

Technology

Educators who are skillful in technology have become poised to make a substantial contribution to American education (Bybee, 2001). Technology has an inescapable presence in our society that will ultimately require all citizens to master it in order to function effectively. With time, the technological literacy of all Americans will become a national imperative and an educational goal for all teachers and schools.

It was shown by Bybee and Horsley (2000) that professional development has provided the opportunities for educators to learn what they need to know and be able assist students in achieving technological literacy standards as well as general knowledge.

In order to function effectively, teachers will have to unlearn much of what they believe, know, and know how to do while forming new beliefs and skills for the 21st century.

The use of the Internet based telecommunications supports a constructivist approach to learning because it provides the tools to increase the information available in the classroom in a frame of reflection and creative thinking (DeMontes & Gonzales, 2000).

Professional development methods have been shown to be a building process. Change was described as an evolutionary rather than a replacement model or event. Pedretti, Smith, and Woodrow (1999) have referred to change as gradual, internally planned and in harmony with the organic system. They related these comments to Stake's philosophy that self-managed staff development scaffolded by carefully wrought aid from outsiders to form a partnership for change. Through technology, enhanced professional development teachers have become "coaches" and "facilitators" in practice.

The advent of the technological era is welcomed universally. Burns (2002) stated that in the first professional development sessions held, many teachers were clearly uncomfortable with computers, and most said that they would not use technology if available. In this study, teachers were asked about their fears. The predominant concern was classroom management due to limited hardware resources. In actuality less was more.

Teachers were forced to group students to take advantage of the limited equipment. Both the physical configuration of the room and the organization of the classes became less centralized. Students worked together and relied on one another as opposed to the teacher who became a facilitator. When the teacher recognized the

students' creativity, interdependence, and proficiency with technology, most indicated that they were more inclined to give students more autonomy in terms of their work (Burns, 2001).

Schools studied by Burns used a low level of technology and learner centered approaches to teaching. The researchers noted that although the teachers had undergone district technology training for as much as 30 hours. This was a requirement in order to receive the hardware in the classroom. In spite of this, 80% of the teachers were either nonusers or occasional users, using technology about once per month, with only a few teachers qualifying as serious users who incorporated the computer in class once per week.

In order to better equip the teacher to serve as a technology facilitator, the professional development offered was in the form of teams of teachers moving from one learning station to another. Sharing expertise and concerns with other educators was a method of reducing stress and increasing use of available technology (Burns, 2002).

Bybee and Horsley (2000) explained that professional development has provided the foundation for teachers and must consider four needs. First, teachers have had to learn about and develop skills related to technology. Second, educators had to have opportunities to deepen their content knowledge about technology and how to incorporate it into their subject. Third, teachers required tools to help them continue their learning along with motivation to do so. Fourth, long term professional development programs, not just events such as workshops, were identified as needs to support the kinds of changes required for the technological literacy standards to touch all students and make an impact on school performance.

Implementation of professional development related to technology has been addressed by group learners called learning communities. These communities have been described as a group of learners who have similar interests, a desire to learn, and a willingness to share ideas and opinions (Newell, Wilsman, Langenfeld, & McIntosh, 2002). Citing studies done in Wisconsin, the authors have reinforced the value of technology to in-service training for teachers. Benefits were gained through interaction with other teachers as well as information obtained from the World Wide Web sites and information groups.

One of the most promising avenues for professional development has been the initiation of Web-based training for teachers. Teachers who have been accustomed to traditional classroom instruction have expressed concern over the absence of a live instructor's presence, the strangeness of the presentation format, and the different roles demanded of learners. Cost savings, time flexibility, and availability to remote locations have made distance education via the Web a positive possibility (Rodes, Knapczyk, Chapman, & Chung, 2000). The ability to reach non-traditional learners has been documented as an advantage as has the opportunity for Web-based conferencing by participant.

In the study conducted by Rodes, et al., (2000), Indiana teachers were uncomfortable with a student directed learning approach for the first few classes. It was noted that when the teacher/learners assumed ownership of the class, the level of participation, self direction, and independence with technology based learning increased. Learner participation, task performance, and collaboration opportunities were the keys to success in this study.

Another alternative training for technology in-service was described by Shotsberger (1999). This training took the form of workshops conducted at a central site over the course of several days or even several weeks, typically during the summer months. Problems with this effective method of teaching were the cost of travel and time away from home.

Mercedes, McKay and McGrath (2000) described work done to provide successful professional development programs focused on Internet use. Key to their work was integration of the Internet into traditional curricula in unique and compelling ways. They provided an ongoing support mechanism to assist teachers with projects and problems and worked to build teacher confidence to a level that enabled them to become mentors for others in their school or district. Greenwood (1998) encouraged teachers to do research using the Internet and incorporate this research in a year-long in-service that included meetings and weekly coaching.

Special circumstances have created arenas for technology mediated distance education programs for in-service training. According to Ludlow and Brannon (1999), special education teachers in rural areas were recipients of distance education delivered professional development. Nationally, there has been a critical and persistent shortage of teachers in this and other areas of education. Through distance education, teachers without other opportunities for enhancement of their skills have learned to achieve higher levels of performance. These have included teachers without certification and training in this specialized field.

Teacher reluctance to acquire new skills necessary to incorporate more technology in the classroom has been predominant in education in many districts

(DeMontes & Gonzales, 2000). On one hand, four in ten teachers reported that they did not use technology at all in a typical week, and three in ten stated that their students used technology less than once per week. On the other hand, it was reported that the ratio of students to computers had dropped significantly in the previous year.

In light of professional development, DeMontes and Gonzales noted that today's learners are diverse. A variety of instructional means have been identified as useful. These include distance education, evening and day classes, online classes, and the traditional meeting/workshop format. Advantages identified were reduced time required for course-taking, more affordable courses, availability at convenient locations, and increasing institutions' access to new audiences.

Teacher Attitudes

Positive attitudes toward teaching students in the public schools have been shown to be vital (Ediger, 2002). Rational thinking has told us that good attitudes of teachers are superior in relation to school curriculum, assessment, and performance. Attitudes, as compared to subject matter learning, have been shown to be a more subjective factor in which diverse attempts have been made to measure and objectify how good the attitudes are of an individual or group.

Ediger (2002) has related attitude of science teachers to teacher competency. In addition, teacher personality was related to attitudes in teaching science. Key ingredients have been shown to include experiences of success in endeavors, experiences of interest and challenge, experiences of purpose, experience of feedback for improvement of teaching skills, and experiences that fulfilled needs for recognition and esteem.

Lack of understanding of the relationship of teachers' professionalism to job attitudes, student outcomes, and organizational factors hinder effort to promote teacher professionalism. Cheng (1996) reported findings that showed teachers' professionalism at the school level was positively related to students' affective educational outcomes. In classroom management, teachers with higher professionalism and better attitudes tended to use more professional power as perceived by students. These teachers seemed to show more positive job attitudes and feelings, higher *esprit de corps*, and less disengagement.

Wilson and Coolican (1996), referred to Maslow's work in relation to teacher basic needs being met in order to assure positive attitude and more effective teaching. Empowerment in teacher professional development was discussed from extrinsic and intrinsic perspectives. Power was examined in terms of self-deportment and responsibility to increase skills and knowledge in order to be the best that they could be.

Personality profiles have proven to be valuable in teacher education and professional development (Sears, Kennedy, & Kaye, 1997). Research on personality characteristics of prospective and practicing teachers has been done for more than 40 years. A variety of models have been used with Myers-Briggs being chosen here.

South Florida has been described as one of the fastest growing areas in the United States by Nyhan and Alkadry (1999). The authors related that even in crowded classrooms such as in Broward or Dade Counties, class size did positively impact student achievement due to improved student and teacher morale. They further noted that changing teacher behavior was often seen as a key to improving student achievement scores. Merit pay, benchmarking, and vouchers were some of the reform options that were available to policy makers.

Teacher Certification

Statistics have warned us that by the year 2008, more than two million teachers will be needed to fill open teaching positions created by increasing student populations and rapid rise in retirements (Whiting & Klotz, 2000). Despite the efforts of teacher training programs in nationally accredited universities, the gap between qualified practicing teachers and the student population has widened. Some districts have turned to alternative certification in order to fill these vacancies. This has become a Band-Aid for education, resulting in people who are trained in a content area being thrust into educational environments for which they are not prepared to transfer this content knowledge.

Throughout the United States, alternative teacher licensure programs have been determined to be very different. They cannot be viewed as equal in terms of content, duration, rigor, or support for learning how to teach (Berry, 2001). Nontraditional programs across the country were identified as ranging from graduate level teacher education programs that used different and more responsive delivery models to short term alternative licensure programs that reduced the requirements for earning a state license. The researcher also discovered emergency hiring practices that filled vacancies by letting virtually anyone teach a class.

Under a newly proposed and recently implemented model from the Mississippi Department of Education, alternative certification can be met by taking nine specific courses, amounting to 30 graduate credits. The main requirement for this degree program is that the student must obtain a teaching job before beginning the summer college credit course (Whiting & Klotz, 2000).

Some progressive school districts have applied a concept of building on previous successes to teacher supply and alternative certification. According to Gursky (2001), take smart, enthusiastic people who are not in the field of education but are looking for a career change, give them a few weeks of intense summer training, and then put them to work as classroom teachers. In New York, these successful career changers were placed in the city's toughest and lowest performing schools. One highly successful financier, technology executive and business owner, entered teaching on his own through provisional licenses to teach in shortage areas such as math and science. He was a teacher for female inmates at Rikers Island prison and was a teacher of seventh grade math and science at one of New York's low performing schools. He loves the challenge of the job.

New York has had mixed results from these career changers. More than ten percent of the new teachers left before the end of the year. Other cities such as Denver have made plans to hire 100 career changers under alternative certification programs during the next two years. The district of Columbia public schools aimed to recruit 100 people from other professions. According to Gursky (2001), First Lady Laura Bush previously stated that teacher recruitment would be a priority issue for her.

The severity of the shortage of certified teachers has reinforced the value of professional development. According to Whiting and Klotz (2000), the following are necessary experiences in addition to practice teaching:

- Detailed exposure to various concepts that address expectancy that all teachers are teachers of literacy rather than just a subject content.
- Sound grasp of communication skill strategies and how they can be infused in content areas.

- **Knowledge of instructional theory and the skill to translate it into best practice.**
- **Commitment to maximizing instructional time into meaningful activities.**
- **Covenant that assures a risk-free learning environment where intimidation, humiliation, and reprisal do not exist.**
- **Resolution to ensure that ongoing, varied assessment strategies are appropriately employed.**

This type of in-service training has been shown important in states such as Texas in which a shortage of more than 41,400 teachers has been noted. Many minorities and academically strong teachers have been attracted to other professions shortly after graduation from college or within the first five years of teaching. This has further complicated the problem (Plemons & Herrington, 2000).

In New York, Berry (2001) reported that 15% of the alternative recruits quit their teaching jobs just two months into the school year. Studies have shown that 60% who entered teaching through shortcut programs left by their third year. This reinforced the concept that there are no shortcuts to quality teacher training. Some programs such as Teach for America (Tell, 2001) were criticized for two reasons. They provided inadequate preparation to meet the rigors of classroom management and a two year contract was not long enough to make a substantial change in the targeted schools.

North Carolina has been shown to reflect national trends according to Hawk, Burke, Brent, Warren, and McCarley, (1999). Faced with a crucial teacher shortage that included a shortage of minority teachers, North Carolina established an alternative teacher certification program. They began teacher recruitments as early as the middle

grades, but with limited success. Supported by the state's legislators, a favorable climate, downsizing of both the military and industry, the program has set the stage for many potential career change candidates. The vast majority bring maturity plus a variety of experiences to the classrooms, although they do not have teacher education degrees. Responses thus far are encouraging.

In consideration of the cost of teacher certification programs and alternative certification, Pathways to Teaching Careers has been identified as a program that has a relatively high cost in terms of resources, but has had a positive return for investment. Additionally, 41 states and the District of Columbia sponsored teacher certification programs that provided alternative routes to more expensive college preparation (Rice & Brent, 2002). One successful approach was to blend the special programs with college coursework (Weichel, 1999) thereby improving quality of training and minimizing cost.

According to Stilwell (1999), the introduction of the World Wide Web into teacher education has provided the opportunities for immediate exchange of information in finding available teachers and sharing information about certification requirements and salary options. Coeyman, Jonsson, Teicher, and Wiltenburg (2001) reported that some incentives also have been offered such as signing bonuses ranging from \$2,500 in South Carolina to \$20,000 in Massachusetts.

Certification and alternative certification requirements have been restricted by barriers according to Finn and Madigan (2001). As rules have changed, a principal can now select a certified teacher, a former private school teacher, or a career changer with alternative certification. Making this type of decision has been delegated as part of the principal's job. It was stipulated that the best gauge of teacher quality was whether

teachers improved their students' academic performance. Evaluations were done by the principal with the help of reliable external testing data.

Summary

Education has become a priority across the United States. School accountability has been addressed by school districts with different forms and processes leading toward one goal: improved school performance. Studies reported in the literature indicate that professional development has contributed significantly to the improvement of teacher quality when addressed in appropriate ways.

School accountability has been reported as a combination of factors that include teacher variables. Degree, certification, attitude, and participation have been identified as factors that influence school performance and teacher effectiveness. Mentoring, computer technology, and non-traditional professional development programs have been implemented in some districts to facilitate teacher training. In light of the critical shortage of teachers and the trend for this problem to expand, states have begun looking at recruiting successful people who are mature and ready for a career change. Alternative certification programs have been instituted in states with such critical shortages with varying degrees of success. A multiplicity of methods for training these diversely experienced people to manage a classroom and transfer knowledge to students has been explored with varying results.

Evaluation of teacher attitudes toward learning and teaching has provided additional data for use in improving professional development opportunities. Particularly in math and science, the teacher attitude and relationship to the student has been shown to be important in student achievement. As learners, teacher attitudes have been shown to be

positively linked to such practices as mentoring for novice teachers. Experienced teachers also linked professional development in technology to teacher attitudes.

Socioeconomic factors have been identified and explored as critical to securing and retaining certified teachers in public schools, particularly in rural areas. Culturally and socially diverse populations have been shown to require teachers with enhanced skills and capabilities for effective teaching and learning.

CHAPTER 3

Methodology

Introduction

Methodology for this study was designed to investigate the relationship between three independent variables: teacher attitudes about professional development, having a master's degree, and teacher certification on School Performance Scores. The population for this study was a set of schools, school districts, and teachers in parishes in the Louisiana Mississippi River Delta with the sample being composed of ten schools, five school districts, and 236 teachers in rural parishes that were socio-economically similar and located geographically in the northern part of the state.

Research Design

The researcher used a correlational design to determine if there were a relationship among the three independent variables and School Performance Scores. Independent variables included teacher attitudes about the value of and implementation of professional development as provided, proportion of school and district teachers with master's degrees, and proportion of certified and uncertified teachers in the schools and districts. The dependent variable was the School Performance Score.

Population and Sample

The population for this study was a set of schools, school districts, and teachers in parishes in the Louisiana Mississippi River Delta. The sample for this study included all

schools with grades 9–12 in the five selected rural delta parishes in Louisiana. All ten public high schools in these five districts were included in the study. The five districts were selected due to the convenience of location and the description as rural and socio-economically similar. Poverty and high racial minority populations were found to be characteristic of these school districts.

Instrumentation

Prior to preparing instruments or gathering data, permission was obtained from the Human Use Committee of Louisiana Tech University. Accordingly, human use forms were completed by all participants (Appendixes A & B). Participant consent forms were obtained from each participating teacher. Both archival and survey data were collected by the researcher during the investigation process. Contacts were made with administrators and teachers in person and by letter (Appendixes C, D, & E). At these meetings the purpose of the study, the justification, methodology, instrumentation, and procedures were discussed, and all questions answered.

Data requested included an attitude survey of teachers to evaluate teacher perception of quality of information and skills presented during professional development activities (Appendix F). Level of adoption and use of knowledge and skills were then assessed. Respondent motivation was maximized by informing participants of the potential use of the information gained to justify funding and to enhance decision making in ways that could positively impact the school district.

The ten item *Teacher Perception of Professional Development Survey* was constructed for this study. Respondents rated each of the ten items according to a scale of 1 – 7 with 1 = strongly disagree, 2 = moderately disagree, 3 = slightly disagree, 4 =

undecided or do not know, 5 = slightly agree, 6 = moderately agree, and 7 = strongly agree.

Reliability was assessed by Cronbach's alpha with a resulting score of 0.77. As described by Cronk (2002), a Cronbach's alpha score nearer to 1.00 indicated a very good reliability while scores closer to 0.00 indicated a poor internal consistency or reliability. Cronbach's alpha is a measure of internal consistency. Cronbach's alpha comprises a number of items that make up a scale designed to measure a single construct and determines the degree to which all of the items measure the same construct. It is noted that this test did not reveal whether or not it was measuring the correct construct. That required testing for face and content validity. Before any instrument can be valid, it must be deemed reliable (Cronk, 2002). Items were evaluated independently and compared to each other.

The *Teacher Perception of Professional Development Survey* contained items that were specific and therefore could conceivably be answered differently depending on professional development experiences. For example:

- Item # 8 My district uses mentoring programs to strengthen teacher performance.
- Item # 9 Our school district provides stress reduction workshops.

Face validity and content validity were established for the survey instrument. Face validity was accomplished by peer review and evaluation of the survey items and rating of the survey items. In order to assess face and content validity of the *Teacher Perception of Professional Development Survey* items and rating scale, three expert judges with terminal degrees in education evaluated the items. These professional educators were

employed by East Texas Baptist University and Louisiana State University. Review of the survey instrument by Professor A indicated that the respondents were given the opportunity to express their thoughts to two similar statements phrased in different ways. This was noted as a positive characteristic of the instrument in that it used multiple measures of the target statement.

Professor B commented that a statement relative to participation in professional organizations and conferences might yield further information relative to the teacher attitude about professional development.

Professor C who reviewed and critiqued the survey instrument commented that the items appeared to be clear, easily understood, and well-developed. These three individual critiques were conducted independently and the results of the commentary utilized to evaluate the instrument for content validity. Copies of the instrument were provided to the superintendent of the district and the principal of each school included in the study.

Procedural Details

Consent letters were obtained granting permission to administer the surveys and to obtain archival data from school district records (Appendixes A, B, C, D, & E). All participants completed the Human Use Committee consent forms as required by Louisiana Tech University and by the individual school districts (Appendixes A & B). Each district administrator and each teacher participant was assured of confidentiality and anonymity at the level of the individual teacher respondents. Consistent with the requirements of the University Human Use Committee of Louisiana Tech University data collected have been reported for schools and districts, not for individual teachers.

In addition to the consent letters and forms, the researcher met with each superintendent of schools or professional development coordinator to explain the process that assured anonymity of the respondents as well as the purpose of this study. The researcher then answered any questions regarding the process. Clarification of the purpose of the study and its methodology was provided to each principal at the participating high schools in the sample in order to facilitate instrumentation with a minimum of teacher time in answering the surveys or administrative time in collecting the forms.

Data Collection Procedures

Archival data included proportion of teachers having a master's degree and proportion of certified and uncertified teachers which was obtained from the district school board offices. Additional archival data used in the study included statistics from the Louisiana Department of Education's annual report that included the School Performance Scores for the selected districts. Teacher data on the report were also used as needed. For this study the one year of data for 2001-2002 was used.

The survey questionnaire was personally prepared and distributed by the researcher to either the district coordinator for professional development or the high school principal. This designated person administered the survey to those high school teachers who indicated that they were willing to participate. Explanations from the researcher were provided to the teachers, principals, and superintendents via letters and personal visits with the goal of increasing participation in the survey. The researcher attempted to enhance motivation to participate by providing information on potential use of the study for justification for funding and resources as requested by the district

administrators. At the conclusion of the study cumulative results will be provided to those districts that participated and that requested the report.

As the instruments were distributed, it was requested that the teachers return them within one week or sooner if possible. The researcher returned to the districts and collected the surveys from principals or administrators and began data analysis.

Data Analysis Procedure

Data analysis was done with the *Statistical Package for Social Sciences* computer program. Standard descriptive statistics (means, standard deviations, frequencies) were calculated as appropriate for each of the independent and dependent variables. These data show movement toward trends and may assist school and district personnel in providing improved professional development for the staff.

Each research question was evaluated by using either a Chi-Square test, a Pearson product moment coefficient correlation, or a Spearman rho correlation as appropriate between the independent variables and School Performance Scores. Since the ten *Teacher Perception of Professional Development Survey* items, the two *Teacher Perception of Professional Development Survey Factors*, and the *Teacher Perception of Professional Development* total scores were based on a seven-point rating scale conforming to an interval level scale of measurement, the Pearson product moment correlations were used to test the hypotheses concerning relationship between teacher attitude about professional development and district School Performance Scores. A Spearman rho procedure was also used to test Research Hypothesis 1 due to the small sample size.

Research Hypothesis 1 states that teacher attitude regarding professional development programs is positively related to school and district School Performance

Scores. Since the proportion of teachers with master's degrees and certification are based on frequency, nominal data, and because the sample size of the districts is small ($N = 5$ for districts and $N = 10$ for schools), Chi-Square tests of significance were used to test the hypotheses regarding relationships among proportion of certified teachers and those teachers having master's degrees and School Performance Scores. For the purpose of Chi-Square analyses the School Performance Scores were divided into five groups of two high School Performance Score districts and three low School Performance Score districts.

Justification for use of the Chi-Square test was provided in a discussion of use of Chi Square tests (Cronk, 2002). Cronk described this nonparametric test as useful when the corresponding parametric procedures are inappropriate. A significant Chi-Square test of $p < .05$ indicates that the data vary from the expected values. A test that is not significant at $p > .05$ indicates that the data are consistent with the expected or chance values.

Pyrczak (2001) discussed Chi-Square testing as most useful with simple nominal data in situations that do not directly permit the computation of means or standard deviations. These tests may be performed as one-way or two way tests depending upon the data available and intended use.

A multiple regression analysis was also conducted on the data to identify how variables were related to each other and the strength of the relationship. (Urdan, 2001). In addition, for further analysis, separate correlation coefficients were computed among each of the ten items on the *Teacher Perception of Professional Development Survey* and the dependent variable.

The Pearson product moment correlation coefficient was discussed by Pyrczak (2001) as a widely used statistic for describing the linear relationship between two variables. The range of this statistic is from -1.00 to +1.00 with -1.00 indicating a perfect inverse relationship—the strongest possible inverse relationship. A score of +1.00 indicates the strongest possible direct relationship. When scores approach 0.00, this indicates the tendency toward no relationship (Pyrczak, 2001).

Limitations

For the purpose of data analysis in this study the following limitations have been noted. These include restriction of range of the School Performance Scores. This restriction may be explained by the unforeseen similarities of the schools and the parishes or districts in the Louisiana Mississippi Delta. Other limitations included teacher attrition during the period of the survey, lack of random sampling and low rate of survey participation.

Similarities in socio-economic levels of the rural parishes and lack of diversity in the population was an additional limiting factor. The population consisted of high levels of minority population and populations in poverty. The geographical location of these rural schools and school districts contributed to the socio-economic similarities. The inclusion of only rural high schools was a limiting factor as were social desirability response sets in regard to survey response participation. Involvement of substitute teachers for absent teachers was an unpredictable limitation. These substitute teachers did not participate in the survey. Certified teachers who were teaching outside their area of certification have been identified as limitations to the study as were teachers having more than a master's degree.

CHAPTER 4

Results

Introduction

Results of the investigation of the relationships among the three independent variables on School Performance Scores have been described in two parts. These parts differentiated between the results of the teacher survey and the analysis of archival data: (1) data concerning construction of and response to the *Teacher Perception of Professional Development Survey* (2) data concerning the tests of hypotheses.

Part 1 includes a construction and factor analysis of the *Teacher Perception of Professional Development Survey*, and Part 2 includes the Chi-Square, Spearman rho, or Pearson product moment correlation coefficients tests of the hypotheses. Since coefficients close to 0 have been shown to represent weak relationships, data in this study revealed weak relationships. A significant correlation would have indicated a reliable relationship, but not necessarily a strong correlation. The results are interpreted following the convention that the correlations with values greater than .7 were considered strong and those that were less than .3 were considered weak. If correlations fell between .3 and .7, they were referred to as moderate.

Part 1: Development of the Teacher Perception of Professional Development Survey

The purpose of this section was to report the results of the data gathered from the survey instrument used to determine the relationship between teacher attitudes about professional development and School Performance Scores.

The descriptive statistics for the *Teacher Perception of Professional Development Survey* and outcome variables are displayed in Table 1. The mean, standard deviation, maximum, and minimum were identified along with the number of participants. Items 1–10 on the survey instrument have been abbreviated for use on the tables throughout this document. They were stated on the instrument as:

- Item 1: I am satisfied with the curriculum and professional development opportunities currently provided by our school district.
- Item 2: I believe that the curriculum professional development opportunities provided by our school district are meeting my needs.
- Item 3: I feel that our school district does an excellent job of providing professional development opportunities.
- Item 4: I believe that the time I spend in professional development is worthwhile.
- Item 5: If our school district provided technology-based professional development, I would participate.
- Item 6: I implement knowledge gained from professional development workshops in my classroom teaching.
- Item 7: Participation in graduate classes is encouraged in this district.
- Item 8: My district uses mentoring programs to strengthen teacher performance.
- Item 9: Our school district provides stress reduction workshops.
- Item 10: I feel that this school district uses adequate funding for professional development.

Each item was constructed to stand alone as a component of teacher attitude about professional development, allowing use as a single item indicator of attitude about professional development. These items were constructed to assess commonly included components in professional development, procedures for professional development, and overall satisfaction and attitude as perceived by public school teachers in the sample districts and schools.

Table 1 lists the ten items that were included in the survey and the corresponding descriptive statistics including the number, mean, standard deviation, maximum, and minimum scores. The data were skewed. This can be explained by the similarity of the schools and the school districts included in the study. Socio-economic factors which included minority populations and poverty conditions contributed to the skewness.

The restriction of range was a limitation to the data. With the lowest possible total score of 10 and the highest possible score of 70, the sample of all scores was between 51–70. The respondents as a group responded using only choices 5, 6, and 7 of the rating scale. The restriction of scores from the sample schools and districts may have caused the researcher to underestimate the real relationship between the independent variables and the School Performance Scores.

The number of respondents varied from 129 to 132. The difference in the participation is explained by the decision of one respondent to omit certain items on the survey and due to two respondents not following instructions for responding to the items on the instrument.

Table 1. Descriptive Statistics for Predictor Variables: Teacher Perception of Professional Development Survey Items, Total Scores, and Factor Scores

Variable	Number	Mean	Standard Deviation	Maximum	Minimum	Skew
Item 1 Satisfaction	132.00	5.44	1.70	7.00	1.00	.211
Item 2 Needs met	132.00	5.38	1.59	7.00	1.00	.211
Item 3 Excellent job	132.00	5.32	1.70	7.00	1.00	.211
Item 4 Time spent	132.00	5.67	1.56	7.00	1.00	.211
Item 5 Technology	131.00	6.16	1.35	7.00	1.00	.212
Item 6 Stress	129.00	2.55	1.82	7.00	1.00	.213
Item 7 Grad.classes	132.00	4.88	1.93	7.00	1.00	.211
Item 8 Mentoring	131.00	5.57	1.76	7.00	1.00	.212
Item 9 Resources	132.00	5.13	1.57	7.00	1.00	.211
Item 10 Implement	132.00	5.12	1.59	7.00	1.00	.211
Total TPPS score	129.00	59.00	11.00	70.00	51.00	
District SPS	5.00	63.07	11.11	73.00	63.07	
Factor I	129.00	1.62	1.00	1.69	-3.59	
Factor II	129.00	-2.10	1.00	2.26	-2.75	

Note: Not all Ns are equal due to incomplete data.

Factor Analysis and Results for Teacher Perception of Professional Development Survey

A factor analysis study of the *Teacher Perception of Professional Development Survey* was performed to identify *Teacher Perception of Professional Development Survey* subscales. The identification of *Teacher Perception of Professional Development Survey* subscales could make interpretation simpler and more meaningful than interpretation of each of the ten *Teacher Perception of Professional Development Survey* items. The scale responses among the ten item *Teacher Perception of Professional Development Survey* were intercorrelated by Pearson product moment correlation coefficients and factor analyzed via principal component method. Due to the small sample size, Spearman rho was also used to test the strength of the relationship with no significant relationship being established from results. Pearson product moment coefficient correlation revealed no significant relationship.

Table 2 identifies each item by number and abbreviation in the left column and the item number and abbreviation for *Teacher Perception of Professional Development Survey* (TPS) above each column. As expected, all ten items displayed positive correlations with the remaining items, indicating that the ten items were similarly assessing a general construct for teacher attitude about professional development. Correlations were in the high to moderate range, with a few items showing low correlations (e.g. Items 5 & 6, $r = .11$) These low item intercorrelations occurred on items that dealt with specific opportunities and may have reflected the reality of the professional development opportunities in a particular school or district.

Table 2. *Intercorrelations of Teacher Perception of Professional Development Survey*

Item #	TPS1	TPS2	TPS3	TPS4	TPS5	TPS6	TPS7	TPS8	TPS9	TPS10
Item #1 Satisfaction	1.00	0.88	0.84	0.50	0.29	0.20	0.38	0.35	0.54	0.52
Item #2 Needs met	0.88	1.00	0.87	0.58	0.31	0.18	0.41	0.37	0.58	0.59
Item #3 Excellent job	0.84	0.87	1.00	0.55	0.28	0.25	0.44	0.42	0.57	0.58
Item #4 Time Spent	0.50	0.58	0.55	1.00	0.52	0.30	0.45	0.28	0.44	0.46
Item #5 Technology	0.29	0.31	0.28	0.52	1.00	0.11	0.28	0.29	0.45	0.41
Item #6 Stress	0.20	0.18	0.25	0.30	0.11	1.00	0.37	0.28	0.24	0.31
Item #7 Grad.Classes	0.38	0.41	0.44	0.45	0.28	0.37	1.00	0.42	0.47	0.53
Item #8 Mentoring	0.35	0.37	0.42	0.28	0.29	0.28	0.42	1.00	0.48	0.45
Item #9 Resources	0.54	0.58	0.57	0.44	0.45	0.24	0.47	0.48	1.00	0.91
Item #10 Implement	0.52	0.59	0.58	0.46	0.41	0.31	0.53	0.45	0.91	1.00

Note: Bold data reflect no significance at $p < .05$.

For the next step in the factor analysis of the *Teacher Perception of Professional Development Survey* instrument, a study of the Eigenvalues was done. An inspection of the size of the Eigenvalues supported the selection of two factors which were selected for rotation. As displayed on a scree plot, only *Teacher Perception of Professional Development* Factors I and II had eigenvalues greater than 1.0. Only the two factors with eigenvalues larger than 1.0 were retained as shown in Figure 2. Interpretation of loadings revealed that Factor I reflected those items that concerned a general attitude about professional development while Factor II included those items that concerned more specific professional development opportunities offered by the schools or school districts.

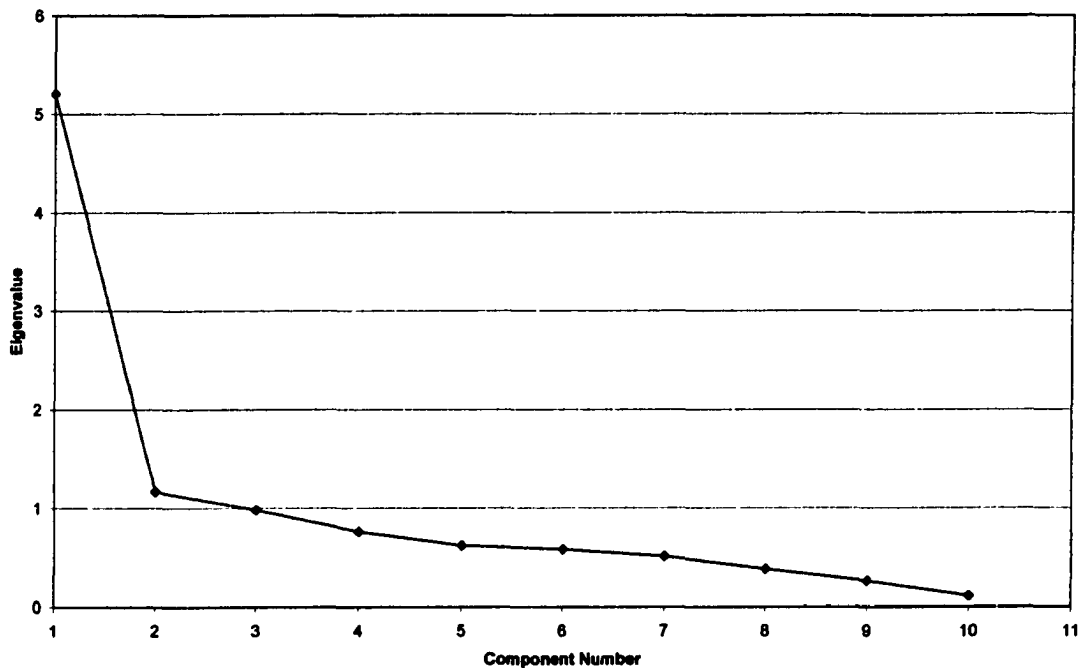


Figure 3: Scree Plot of Teacher Perception of Professional Development Survey

Factor I accounted for 52% of the total variance while Factor II accounted for an additional 11.6% of the total variance. Only Factors I and II had Eigenvalues of > 1.0 . The Eigenvalues were 5.2 and 1.1, respectively. Thus, the two factor solution accounted for 63.7% of the variance. For the purpose of this study the two factors were rotated using varimax criteria, resulting in the rotated component matrix displayed in Table 3. Varimax orthogonal rotations were selected, rather than oblique rotations in order to facilitate clarity and ease of interpretation.

Factor I was labeled *General Satisfaction with Professional Development* and Factor II was labeled *Specific Professional Development Opportunities*. The labels were assigned based on the descriptions of the items on the survey instruments. Factor I items included to as Item #1 Satisfaction, Item #2 Needs met, and Item #3 Excellent job. Factor II items were designated as Item #6 Stress, Item #7 Graduate classes, Item #8 Mentoring, Item #9 Resources, and Item #10 Implementation.

Table 3 reveals a clear interpretation of the meaning of rotated Factors I and II. Factor I showed the strongest loadings on Items #1, #2, and #3 of the Teacher Perception of Professional Development Survey. These items were stated as:

- Item #1 (loading = .91) I am satisfied with the curriculum and professional development opportunities currently provided by our school district.
- Item #2 (loading = .93) I believe that the professional development opportunities provided by our school district are meeting my needs.
- Item #3 (loading = .88) I feel that our school district does an excellent job of providing professional development opportunities.

Table 3 reveals the strongest loadings for Factor II as Items #6, #7, #8, #9, and #10 of the *Teacher Perception of Professional Development Survey*. The items for Factor II were stated as:

- Item #6 (loading = .65) I implement knowledge gained from professional development workshops in my classroom teaching.
- Item #7 (loading = .65) Participation in graduate classes is encouraged in this district.
- Item #8 (loading = .62) My district uses mentoring programs to strengthen teacher performance.
- Item #9 (loading = .65) Our school district provides stress reduction workshops.
- Item #10 (loading = .68) I feel that this school district uses adequate funding for professional development.

For Factor I all of these marker items, loading approximately .90, concerned the level of general satisfaction with the professional development opportunities provided. For Factor II the five marker items that each loaded similarly in the range of .60 each concerned the specific professional development opportunities offered. Factor scores for Factors I and II were generated for each respondent and used as additional predictor variables concerning teacher attitudes about professional development.

Table 3. *Rotated Component Matrix*

Item #	Component #1	Component #2
Item #1 Satisfaction	.91	
Item #2 Needs met	.93	
Item #3 Excellent job	.88	
Item #4 Time spent	.52	
Item #5 Technology		.54
Item #6 Stress		.65
Item #7 Grad. Classes		.69
Item #8 Mentoring		.62
Item #9 Resources		.65
Item #10 Implementation		.68

Part 2: Tests of Hypotheses

Each hypothesis was tested with the researcher selecting a two-tailed probability level of $p < .05$ as has been done conventionally in this type of study. Three main hypotheses were tested. All hypotheses are stated in the null form as well as in the form of research hypotheses. Results were reported by school and by school district or parish rather than by individual teacher. There were five school districts that included a total of ten schools. The total number of potential teacher respondents to the *Teacher Perception of Professional Development Survey* in the school district was 236. There was a total of 132 respondents to the survey which gave a 55.9% rate of return. As noted in Table 4 the number (N) of respondents ranged from 129 to 132 on the individual *Teacher Perception of Professional Development Survey* items. The reason for this was that three respondents chose to omit selected items or failed to follow directions for completing the instrument.

Research Hypothesis 1: Teacher attitude regarding professional development is positively related to School Performance Scores. In the null form, it is: Teacher attitude regarding professional development is not positively related to School Performance Scores. This hypothesis was tested at the district or parish level by a series of Pearson product moment correlation coefficients as listed in Table 4. A set of ten Pearson correlations was computed, one correlation for each of the ten *Teacher Perception of Professional Development Survey* items with the corresponding district School Performance Scores. As indicated in Table 4, none of these Pearson correlations were statistically significant at $p < .05$.

The mean School Performance Score for the five districts was 65.77 with a standard deviation of 13.99. The minimum was 41.5 and the maximum denoted was 75.6.

These nonsignificant Pearson correlations indicated that teacher attitude or perception of professional development was not positively related to School Performance Scores.

Table 4. Pearson correlations by Teacher Perception of Professional Development Survey Predictor Variables and School Performance Scores.

Item #	r	p	n
Item #1 Satisfaction	-.03	ns	132
Item #2 Needs Met	-.01	ns	132
Item #3 Excellent Job	.01	ns	132
Item #4 Time Spent	-.02	ns	132
Item #5 Technology	-.07	ns	131
Item #6 Stress	.00	ns	129
Item #7 Grad. Classes	-.06	ns	132
Item #8 Mentoring	.00	ns	131
Item #9 Resources	.05	ns	132
Item #10 Implementation	.03	ns	132

Table 5 shows the descriptive statistics by individual school regarding the *Teacher Perception of Professional Development Survey*. The similarity of the responses by the respondents is reflected in the data. With seven possible choices of responses on the survey a minimum score of 10 and a maximum score of 70 was possible. However, in this sample of ten schools, the school *Teacher Perception of Professional Development Survey* means ranged from 47.0 to 58.6. This obtained range of 11.6 is much less than the possible range of 60 indicating a restriction of range of the *Teacher Perception of Professional Development Survey* scores.

Table 5. Descriptive Statistics of the Teacher Perception of Professional Development Survey by School

School	Mean	Median	Std. Dev.	Minimum	Maximum	Skewness
#1	47.5	49.0	13.45	20.0	68.0	-.575
#2	53.5	54.0	10.52	32.0	69.0	-.505
#3	58.6	59.0	7.67	45.0	70.0	-.292
#4	52.1	55.5	11.77	11.0	66.0	-1.98
#5	44.2	39.5	12.30	32.0	63.0	-1.38
#6	54.7	61.0	15.01	19.0	69.0	-1.96
#7	49.6	51.0	10.92	30.0	69.0	-.188
#8	50.3	51.0	12.12	24.0	65.0	-.849
#9	47.0	47.0	12.28	24.0	63.0	-.761
#10	51.0	52.0	9.49	36.0	69.0	-.009

As described in Table 6 the comparison of the combined mean scores for all 10 schools reaffirmed the results given by the Pearson product moment correlation coefficient. With the data being considered significant at $p < .05$, neither method of testing revealed a significant relationship.

Table 6. Correlations of School Mean Scores on Teacher Perception of Professional Development Survey with School Performance Scores

	School Performance Score
Pearson Product Moment Correlation	-.12
Significance 2-Tailed	$p < .73$, ns
Spearman Rho Correlation	-.19
Significance 2-Tailed	$p < .60$, ns

The total value scores do not relate in a positive way to School Performance Scores with a Pearson correlation coefficient of $-.07$ and $N = 129$. Factor I was tested with an r value of $-.03$ with $N = 129$, and Factor II was tested with a Pearson r value of $-.05$ with $N = 129$.

To further clarify the relationship of the attitude of teachers as revealed in the *Teacher Perception of Professional Development Survey* as it related to individual School Performance Scores, the following graphs (Figures 3 and 4) were constructed. As observed the data for the mean scores per school were skewed. Similarly, the data for the School Performance Scores was restricted in range. This unexpected lack of diversity resulted in no significant relationship as tested by Pearson product moment or Spearman rho tests.

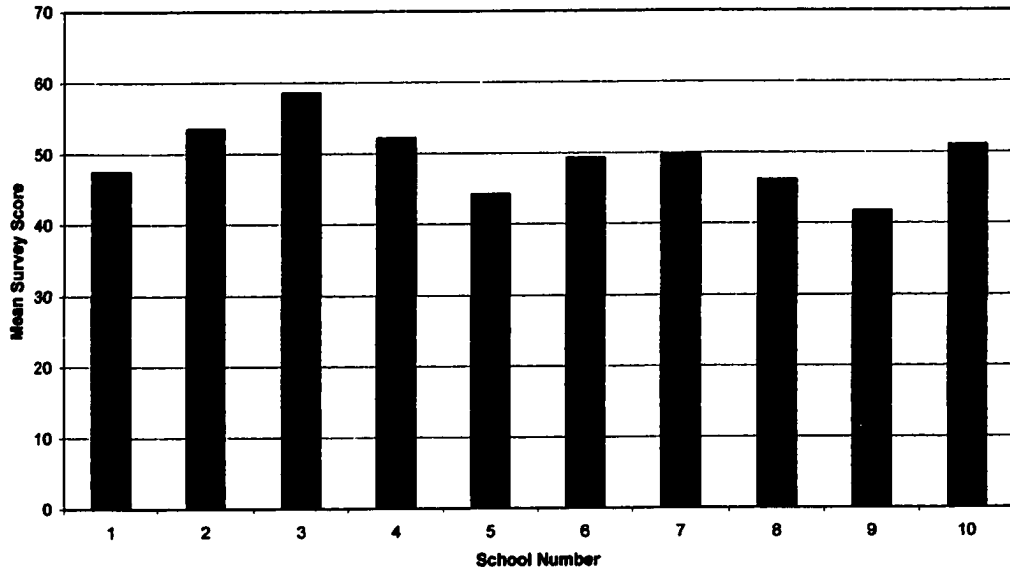


Figure 4. Relationship Between Mean Survey Score and School Performance Score

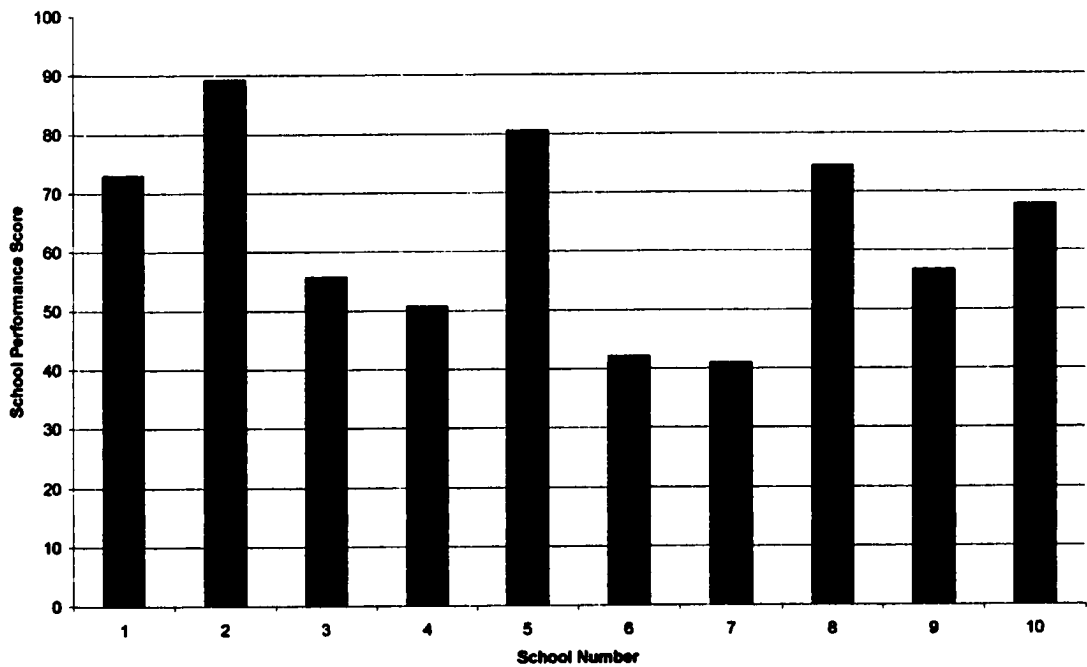


Figure 5. Relationship Between School Performance Score and School Number

Research Hypothesis 2. Teachers having a master’s degree are positively related to School Performance Scores. The null hypothesis stated: Teachers having a master’s degree are not positively related to School Performance Scores. More specifically the research hypothesis was that the districts in the “higher” School Performance Score categories would show a significantly higher proportion of teachers with master’s degrees than the proportion in the “lower” School Performance Score schools or districts. The “higher” district category was defined by the two districts with the highest mean scores while the “lower” district category was defined by the three districts with the third, fourth, and fifth highest mean School Performance Scores. This hypothesis was tested using a Chi-Square test of the frequency of teachers with and without a master’s degree in the two School Performance Score categories. Table 7 indicates there was not a statistically significant relationship between proportion of teachers with master’s degrees in a school or district and the School Performance Score category (higher or lower).

Table 7. Chi-Square Test of Teachers Having Master’s Degrees by District

SPS Rating	With Master’s Degrees	Without Master’s Degrees
Higher	77	86
Lower	30	43
Chi-Square = 0.769	df = 1	ns

With this nonsignificant Chi-Square it was concluded that there was not a statistically significant relationship between proportion of teachers with master's degrees in a district and the district School Performance Scores. An examination of these data by percentages in the districts provides further clarification as seen in Table 8.

Table 8. Percentages of Teachers With and Without Master's Degrees in Higher and Lower School Performance Score Districts.

SPS Rating	With Master's Degrees	Without Master's Degrees	Total
Higher	47.24%	52.76%	100.00%
Lower	41.09%	58.91%	100.00%
Total			100.00%

The number of teachers with master's degrees and without master's degrees was also listed for each school. Table 9 has been constructed to display this information. All schools had some teachers with master's degrees, but no school had all of its teachers with master's degrees. This study did not separate those teachers who had higher than a master's degree from those who had a master's degree.

Table 9. Teachers with Master's Degrees by School Numeric Data

School	With Master's Degree	Without Master's Degree
School #1	17	20
School #2	5	8
School #3	13	16
School #4	10	50
School #5	2	13
School #6	12	13
School #7	15	5
School #8	8	11
School #9	9	16
School #10	17	21

In Table 10, summaries of the frequency data in percentages expand the researcher's understanding of the proportion of teachers with and without master's degrees in schools. In evaluating the percentage data of teachers with master's degrees by school, data in Table 10 revealed that one school had as high as 75% of its teachers with a master's degree and one school had as few as 13% of its teachers with a master's degree. The school with 75% of its teachers with a master's degree has a School Performance Score of 40.9, and the school with 13% of its teachers with a master's degree has a School Performance Score of 80.5.

Table 10. *Teachers with Master's Degrees Percentage Data by School*

	Yes	No	Total
School # 1	46%	54%	100%
School # 2	38%	62%	100%
School # 3	45%	55%	100%
School # 4	17%	83%	100%
School # 5	13%	87%	100%
School # 6	48%	52%	100%
School # 7	75%	25%	100%
School # 8	42%	58%	100%
School # 9	33%	67%	100%
School # 10	45%	55%	100%

Data in Table 11 revealed no statistically significant relationship between having a master's degree and School Performance Score category by school. It was revealed in Table 11 that no statistically significant relationship existed as evaluated by the archival data relative to having a master's degree or teacher certification status. Using both Spearman's rho and Pearson's product moment correlation coefficient the test at $p < .05$ revealed that neither was significant.

Table 11. *Relationship of Teachers Having a Master's Degree on School Performance Scores by School*

	Score
Pearson Product Moment Correlation	-.336
p Value 2-Tailed	.343, ns
Spearman's Rho	-.503
p Value 2-Tailed	.138, ns

Research Hypothesis 3. Teacher certification is positively related to School Performance Scores. The null hypothesis stated that teacher certification is not positively related to School Performance Scores. More specifically the research hypothesis was that the districts in the "higher" School Performance Score category would show a significantly greater proportion of certified teachers than the proportion in the "lower" School Performance Score schools or districts.

As related in Table 12 there was no statistically significant relationship shown by the Chi-Square test of Hypothesis 3. However, with the critical value of 3.10 for significance at $p < .05$, a Chi-Square score of 2.53 was determined to be of sufficient strength to indicate a movement toward a trend of higher School Performance Score categories for school districts with higher proportions of certified teachers.

Table 12. Number of Teachers With and Without Certification by District

	Yes	No
Higher	117	46
Lower	97	56
Chi-Square = 2.53	df = 1	ns

It was concluded that there was not a statistically significant relationship between proportion of certified teachers in a district and the district School Performance Score category, though a non-significant trend in that direction was demonstrated. This study considered teacher certification, but did not differentiate between those teaching outside their area of certification.

Table 13 summarizes the frequency data in Table 12 in percentages, further clarifying the frequency results in Table 12. Although not significant statistically, the results indicated movement toward a greater proportion of certified teachers in the “higher” School Performance Score districts (71.1%) than in the “lower” School Performance Score districts (63.4%). This difference of 7.7% was in the hypothesized direction. Only one school had 100% of its teachers classified as certified. These data did not include those teachers who were certified but were teaching outside their area of certification. Archival data was coded certified or uncertified.

The data for teachers with master’s degrees and for teacher certification were archival data provided by the five school districts that were included in this study. The

data were for the 2001-2002 school year in each of the districts. No data for substitute teachers were reported by the respondents or district administrators.

Table 13. Percentages of Teachers With and Without Certification by District With High and Low School Performance Scores

	Certified	Uncertified	Total
Higher	71.78%	28.22%	100.00%
Lower	63.40%	36.60%	100.00%
Total			100.00%

As the data for teacher certification was analyzed by school, the raw numeral data for teachers in the ten individual schools is summarized in Table 14. As many as 51 teachers in one school were certified to teach and as many as 34 teachers in one school were not certified to teach the classes that they were teaching at the time of this study. Only one school reported 100% of the teachers were classified as certified.

Table 14. *Certification of Teachers by School*

School	Certified Teachers	Uncertified Teachers
School #1	33	4
School #2	13	0
School #3	8	34
School #4	51	9
School #5	13	2
School #6	16	9
School #7	14	6
School #8	15	4
School #9	9	15
School #10	30	8

As further explanation of the proportion of certified and uncertified teachers in the individual schools, Table 15 was prepared. In this table data revealed that 60% of the schools had proportions of > 75% of their teachers certified while 10% of the schools were seen to have fewer than 25% of their teachers classified as certified. Only one school reported 100% of its teachers as certified.

For the school that had 100% of its teachers certified, the School Performance Score is 89.2. The school that reported 19% of its teachers as certified had a School Performance Score of 55.7.

Table 15. *Percentage Data of Certification of Teachers by School*

School	Certified	Uncertified	Total
School # 1	89%	11%	100%
School # 2	100%	0%	100%
School # 3	19%	81%	100%
School # 4	85%	15%	100%
School # 5	87%	13%	100%
School # 6	64%	36%	100%
School # 7	70%	30%	100%
School # 8	79%	21%	100%
School # 9	38%	62%	100%
School # 10	79%	21%	100%

In review of the data regarding the effect of teacher certification on School Performance Scores by individual school, both Pearson product moment correlation coefficient and Spearman rho correlations were performed. As seen in Table 16, no statistically significant relationship was observed regarding the certification of teachers and School Performance Scores when reported by schools.

Table 16. Relationship of Teacher Certification to School Performance Scores by School

	School Performance Score
Pearson Product Moment Correlation	-.03
Significance 2-Tailed	p< .94, ns
Spearman Rho Correlation	-.14
Significance 2-Tailed	p< .70, ns

With significance set at the conventional level of $p < .05$, two-tailed, no statistically significant relationship was determined by either the Pearson product moment correlation coefficient or the Spearman rho correlation.

In order to further examine the degree to which the three independent or predictor variables could predict School Performance Scores, a multiple regression analysis was performed based on the sample of the ten schools. Table 17 displays the results of the multiple regression analysis. Considering the lack of relationship revealed by the Pearson product moment correlation coefficient and the Spearman rho correlation, it was further verification that no significant relationship was discovered when this method of analysis was used.

For the full model, wherein all three independent or predictor variables were used to predict School Performance Scores, a total R^2 of .243 was obtained, which was not significant at $p < .05$. Thus, the three independent or predictor variables together do not predict a statistically significant proportion of the variance in the School Performance Scores.

Table 17. Multiple Regressions of Three Independent Variables and Dependent Variable by School Total Value Mean

Multiple Regression Model Summary			
Model	R	R ²	Std. Error of the Estimate
1	.493	.243	17.4547

As indicated in Table 18, none of the three independent or predictor variables showed a significant relationship to the School Performance Scores.

Table 18. Multiple Regression Coefficients

Model	Coefficients			
	Beta	Std. Error	t value	p value
Constant	118.373	93.307	1.269	.252
Master's Deg.	.303	.358	.848	.429
Certification	-.105	.259	-.407	.698
Total Survey	-1.179	1.549	-.761	.475

Summary

From analysis of data, it was determined that no statistically significant relationships existed in this sample of schools and districts between the independent or predictor variables examined in Hypotheses 1, 2, and 3 and School Performance Scores. There was sufficient evidence in the data to describe a possible movement toward higher school categorical labels and school performance scores in districts where there was a

higher proportion of certified teachers. No such movement was noted in the data reported by schools.

Teacher Perception of Professional Development scores revealed no statistically significant relationship with school or district performance scores so Null Hypothesis 1 was accepted. There was no significant relationship indicated by proportion of teachers with a Master's degree and school or district School Performance Scores so Null Hypothesis 2 was accepted. In Hypothesis 3 there was no statistically significant relationship shown between teacher certification in the school or district and School Performance Scores, and Null Hypothesis 3 was accepted. For the purposes of this study, the researcher was not able to reject any of the null hypotheses.

CHAPTER 5

Findings and Recommendations

Introduction

The purpose of this study was to investigate the relationship among three independent or predictor variables: teacher attitudes about professional development, having earned a master's degree, teacher certification, and one dependent variable, School Performance Scores. Part 1 of the investigation involved construction and use of a survey instrument, the *Teacher Perception of Professional Development Survey*, to assess teacher attitudes regarding professional development opportunities in their districts. According to Sparks and Hirsh (2000), professional development was shown to yield dramatic improvements in student learning. This result seems reasonable because teachers could not teach content that they had not learned, nor could they use methods that were unknown to them. This study revealed that there was little diversity in the schools, school districts, or teachers in this sample from parishes in the Louisiana Mississippi River Delta.

Findings

The general findings of this study were that movements toward establishment of trends were seen in the relationship between teacher certification and School Performance Scores although no statistically significant differences were discovered. Participation from the ten schools in five school districts included in this study consisted

of 132 respondents of a potential group of 236 yielding a participation rate of 55.9%. Teacher attitudes about professional development as measured by the ten *Teacher Perception of Professional Development Survey* items, the *Teacher Perception of Professional Development* total score, and the *Teacher Perception of Professional Development* Factors I and II were not significantly related to district School Performance Scores.

There was a clear restriction in range of the School Performance Scores for the ten schools and five districts included in this study. This restriction in range was due to the fact that this region of schools and school districts shared socioeconomic factors that resulted in their having similarly low School Performance Scores. Restriction of range has been documented to result in obtaining nonsignificant statistical results for a sample, when in fact a significant valid statistical relationship exists within a larger, more representative sample, or within a population. The geographic and socio-economic similarities of the districts were limitations to the study as were recognized in the review of literature and in methodology. The five School Performance Scores ranged from 63 to 73, which also shows restriction of range. In Louisiana, School Performance Scores can range from 0 – 150 and above.

Data in Table 1 showed that the mean Teacher Perception of Professional Development Survey item scores revealed one item (#5) with a mean above 6.0, seven items (# 1, #2, #3, #4, #8, #9, #10) with means between 5.0 and 6.0, and only two items with means below 5.0 (# 6 and # 7). This shows restriction of range for the Teacher Perception of Professional Development Survey.

Lack of diversity in the public school districts in the Mississippi River Delta parishes has been observed to be compounded by the number of students attending private schools. It had been noted in several school districts that a majority of the teachers did not live within the school district or parish. Some resided in neighboring states or parishes. In order to obtain a more significant picture of the strengths of the relationships between teacher perception of professional development and School Performance Scores, a broad range of parishes should be included in future studies, parishes that include those scoring in high, medium, and low categories of the Louisiana School Performance Scores.

The development of the *Teacher Perception of Professional Development Survey* included evaluation of reliability and validity and the instrument showed a Cronbach's alpha reliability score of .77, and three professors from East Texas Baptist University and Louisiana State University concluded that the instrument was clear, well-developed, and measured what it was intended to measure. With these evaluations completed and this instrument demonstrating satisfactory reliability and validity, the researcher recommended using the *Teacher Perception of Professional Development Survey* for future research about teacher attitudes about professional development.

Tests of Hypotheses

Research Hypothesis 1 stated that teacher attitude about professional development programs is positively related to School Performance Scores. The Null Hypothesis 1 stated that teacher attitude about professional development programs is not related to School Performance Scores. This hypothesis was tested by the *Teacher Perception of Professional Development Survey*. Data were analyzed by testing with both the Spearman

rho and the Pearson product moment correlation coefficients with alpha level set at $p < .05$ two-tailed. Data analysis revealed no significant relationship between teacher perception of professional development and School Performance Scores for the schools or the school districts. Thus, the researcher did not reject the null hypothesis.

Research Hypothesis 2 stated that teachers having a master's degree are positively related to School Performance Scores. Null Hypothesis 2 stated that teachers having a master's degree are not related to School Performance Scores. More specifically it was hypothesized that the schools in districts in the "higher" School Performance Score category would show a significantly higher proportion of teachers with master's degrees than the proportion in the "lower" School Performance Score schools or districts. This hypothesis was tested with a Chi-Square test which revealed a statistic of .769 with $df = 1$, which was not significant. Thus it was concluded that there was not a statistically significant relationship between the proportion of teachers with a master's degree in a district and the School Performance Score category. When evaluating Research Hypothesis 2 by school, it was determined that no significant relationship existed between the teachers who had a master's degree and School Performance Scores and those that did not. The researcher did not reject the second null hypothesis.

Research Hypothesis 3 stated that teacher certification is positively related to School Performance Scores. Null Hypothesis 3 stated that teacher certification is not related to School Performance Scores. More specifically it was hypothesized that the schools or districts in the "higher" category would show a significantly greater proportion of teachers who were certified than the proportion in the "lower" School Performance Score schools or districts. Chi-Square (2.53) with $df = 1$ for the districts and was not

significant. Thus, it was concluded that no significant relationship existed between certification status of teachers and School Performance Score category. With the critical value of 3.10, a score of 2.53 was moving in a direction toward higher School Performance Score categories for schools and districts with higher proportion of certified teachers, although there was no statistically significant relationship. A limitation of this result was that the data reflected the proportion of certified teachers within the schools and districts without consideration of whether or not they were teaching classes outside their area of certification. The movement toward a stronger relationship between teacher certification and School Performance Scores yielded impetus to study alternative certification and certified teachers who teach outside their area of certification. When evaluated by school, the data revealed that there was no significant relationship between teacher certification and School Performance Scores when reported by school.

Recommendations

In order to obtain additional meaningful data, it is recommended that in future studies data be collected from a more representative sample of individual schools and districts. The schools and districts in this study were probably too homogeneous with regard to School Performance Scores for an effective test of the hypotheses. Purposeful sampling of a diverse population would provide more appropriate data for analysis. In order to make comparisons, further study could be done to include not only schools in the ten schools in the five districts along the Mississippi River Delta of Louisiana, but also rural parishes not located geographically on or near the Mississippi River. It is important that future studies minimize restriction of range by sampling schools and districts that vary more widely in School Performance Scores.

In addition, research is needed to determine if there is a relationship between teacher years of service and School Performance Scores in the schools and the school districts. This archival data could be compared along with the proportion of teachers with a master's degree who are teaching outside their area of certification or who have a master's degree in a subject area but not in education. Relationships of proportions of alternatively certified teachers in schools to school performance scores is an additional area for research. Studies including data regarding certified teachers with graduate course work above the master's degree has been suggested as have studies to determine the relationship between uncertified teachers with master's degrees or higher degrees and School Performance Scores.

Consideration should be given to the number of private schools that draw students and certified teachers from the area in future studies. This factor impacts the composition of the student body, availability of certified teachers, and resources available based upon numbers of students enrolled in the fall of each school year. By combining total numbers of students in both private and public schools and total teachers in the private and public sector, different perspectives on professional development and its impact on School Performance Scores could be evaluated.

Limitations

Limitations of this study included

- Teacher attrition during the school year
- Lack of random sampling
- Rate of survey participation which was 55.9% of the 236 surveys distributed
- High minority population

- High poverty population
- Socio-economic similarities of the rural districts
- Lack of diversity in population
- Teacher absenteeism
- Social desirability
- Certified teachers teaching outside their area of certification
- Teachers having a master's degree and above the master's degree
- Restriction in range of School Performance Scores in the five districts used in this study
- Response sets

Teacher attrition during the administration of the survey may have been a limiting factor. Inclusion of only schools and districts in rural parishes in the Louisiana Mississippi River Delta did not allow for random sampling. The rate of survey participation was very good (55.9%), but a higher rate of return could have yielded a broader view of teacher attitudes about professional development.

Characteristics of the geographic location included high proportions of minority and poverty populations. These socio-economic similarities of the sample provided lack of diversity in population that limited the study results. Teacher absenteeism was an unpredictable limitation as was social desirability of participation in such a study. Additional limitations included the certified teachers who were teaching outside their area of certification and the proportion of teachers who had additional education above the master's degree (master's + 30 hours). A final limitation was the restriction of range of the scores that was explained by the similarity of the schools and school districts.

Summary

The purpose of this study was to investigate the relationship among three independent variables: teacher attitudes about professional development, having a master's degree, and teacher certification on School Performance Scores in selected schools and districts in the Mississippi River Delta in Louisiana. The researcher used a *Teacher Perception of Professional Development Survey* in ten schools in five school districts with a total of 132 of a potential 236 teachers participating as respondents yielding a rate of participation of 55.9%. There was an observed movement toward a trend for higher School Performance Scores in those schools or districts with higher proportions of certified teachers, although this was not statistically significant.

No significant effects were found regarding teachers with master's degrees or with responses to the *Teacher Perception of Professional Development Survey*. Similarity of the school districts and limitations of the study may account for these results. It is recommended that further study be conducted involving a more diverse population and with a broader range of School Performance Scores.

REFERENCES

- Berry, B. (2001). No shortcuts to preparing good teachers. *Educational Leadership*, 58, 32–36.
- Blum, R. (2000). Standards based reform: can it make a difference for students? *Peabody Journal of Education*, 75, 90–113.
- Burns, M. (2002). From black and white to color: technology, professional development and changing practice. *T.H.E. Journal*, 29, 36–42.
- Bybee, R. & Horsley, S. (2000). Advancing technology education: The role of professional development. *The Technology Teacher*, 60, 31–34.
- Bybee, R. (2001). Effective professional development for technology teachers. *Technology Teacher*, 61, 26-29.
- Cheng, Y. (1996). Relation between teachers/ professionalism and job attitudes, Educational ourcomes, and organizational factors. *The Journal of Educational Research*, 89, 163-171.
- Chrenka, L. (2001). Misconstructing constructivism. *Phi Delta Kappan*, 82, 694-695.
- Clarke, M. (2002). Practice-based professional development for teachers of mathematics. *Teaching Children Mathematics*, (8), 428.
- Cobb, J. (2001). Graduates of professional development schools programs perceptions of the teacher as change agent. *Teacher Education Quarterly*, 28, 89–107.

- Coeyman, M., Patrik, J., Teicher, S., & Wiltenburg, M. (2001). America's widening teacher gap. *Christian Science Monitor*, 93, 1–2.
- Cronk, B. (2002). *How to use SPSS*. Los Angeles: Pyczak Publishing.
- Davies, M., Brady, M., Rodger, E., & Wall, P. (1999). Mentors and school-based Partnership: Ingredients for professional growth. *Action in Teacher Education* 21, 85 – 96.
- Desimone, L., Porter, A., Garet, M., Yoon, K., Birman, B. (2002). The effects of professional development on teachers' instruction: Results from a three-year longitudinal study. *Education Evaluation & Policy Analysis*, (24), 81–112.
- DuFour, R. (2001). Getting everyone to buy in. *Journal of Staff Development*, 22, 60–61.
- DeMontes, L. & Gonzales, C. (2000). Been there, done that: Reaching teachers through distance education. *Journal of Technology and Teacher Education*, 8, 351-371.
- Donlevy, J. (2001). The national teacher training institute: Professional development for teachers. *International Journal of Instructional Media*, 28, 115–116.
- Dorph, G. and Holtz, B. (2000). Professional development for teachers: Why doesn't the model change? *Journal of Jewish Education*, 66, 66–76.
- Ediger, M. (2002). Assessing teacher attitudes in teaching science. *Journal of Instructional Psychology*, 29, 25–28.
- Finn, C. & Madigan, K. (2001). Removing the barriers for teacher certification. *Educational Leadership*, 58, 29–31.
- Ganser, T. (2002). How teachers compare the roles of cooperating teacher and mentor. *The Educational Forum*, 66, 380-385.

- Gardner, S. (2002). Forecasting and managing student achievement on high stakes tests. *T.H.E. Journal*, 29, 40–41.
- Garet, M., Porter, A., Desimone, L., Birman, B., & Yoon, K. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal* 38, 915-945.
- Glassman, M. (2001). Dewey and Vygotsky: Society, experience, and inquiry in educational practice. *Educational Researcher*, 30. 3–14.
- Greenwood, C. (1998). Commentary: Align professional development, classroom practice, and student progress in the curriculum and you'll improve general education for all students. *Learning Disability Quarterly*, 21, 75-84.
- Gullatt, D. & Ritter, M. (2000). Measuring local public school effectiveness. *Contemporary Education* 71, 29–33.
- Gursky, D. (2001). Career changers find teaching tougher than it looks. *American Teacher*, (85), 7.
- Haberman, M. (2001). The creation of an urban normal school: What constitutes quality in alternative certification? *Educational Studies*, 32, 278-288.
- Hawk, P., Burke, M., Brent, R., Warren, L., & McCarlery, L. (1999). Project ACT: An accelerated alternative licensure program to recruit minorities. *Action in Teacher Education*, 20, 47–55.
- Killeen, K., Monk, D., & Plecki, M. (2002). School district spending on professional development: Insights available from national data (1992-1998). *Journal on Education Finance* 28, 1, 25–49.

- Lashway, L. (2001). Holding schools accountable for achievement. *Teacher Librarian*, 28, 25–27.
- Louisiana Department of Education. (1999) *The Louisiana School and District Accountability System 1999*. Retrieved December 1, 2002, from the Louisiana Department of Education on-line database: <http://doe.state.la.us>.
- Louisiana Department of Education. (2002). *The Louisiana School and District Accountability System 2002*. Retrieved December 3, 2002, from the Louisiana Department of Education on-line database: <http://doe.state.la.us>.
- Ludlow, B. & Brannon, S. (1999). Distance education programs preparing personnel for rural areas: Current practices, emerging. . . *Rural Special Education Quarterly*, 18, 5, 16.
- Mercedes, McKay & McGrath, B. (2000). Creating internet-based curriculum projects: a model for teacher professional development. *T.H.E. Journal*, 27, 114–124.
- National Joint Committee on Learning Disabilities (2000). *Learning Disabilities Quarterly*, 23, 2–6.
- Newell, G., Wilsman, M., Langenfeld, M., & McIntosh, A. (2002). On-line professional development: sustained learning with friends. *Teaching Children Mathematics*, 8, 505-508.
- Nicholls, G. (2000). Professional development, teaching, and lifelong learning: The implications for higher education. *International Journal of Lifelong Education*, 19, 370-377.
- Nyhan, R. & Alkadry, M. (1999). The impact of school resources on student achievement test scores. *Journal of Education Finance*, 25, 211-227.

- Ogbu, J. & Simons, H. (1998). Voluntary and involuntary minorities: a cultural ecological theory of school performance with some implications for education. *Anthropology & Education Quarterly*, 29, 155-188.
- Pedretti, E., Smith, J., and Woodrow, J. (1999). Teaming technology enhanced instruction in the science classroom and teacher professional development. *Journal of Technology and Teacher Education*, (7), 131–134.
- Perry, C. (2000). Mentoring as partnerships in collaboration: one school's story of professional development. *Mentoring & Tutoring*, 8, 241–250.
- Plemons, M. & Herrington, T. (2000). Drought in the teaching profession: Finding ways to replant, cultivate, and replenish. *The Delta Kappa Gamma Bulletin*, 67, 16–20.
- Professional development for teachers. (2000). *Learning Disability Quarterly*, 23, 2–6.
- Pyrczak, F. (2001). *Making Sense of Statistics*. Los Angeles: Pyrczak Publishing.
- Quezada, R. & Louque, A. (2002). Developing diverse faculty in culturally proficient education programs. *Multicultural Education*, 10–14.
- Reed, C., Briley, B., Kindberg, C., McCarthy, M. McCray, M., et al. (2000). What's happening in our schools? Conveying an accurate picture of school performance. *The Clearing House*, 73, 291-294.
- Rice, J. & Brent, B. (2002). An alternative avenue to teacher certification: A cost analysis of the pathways to teaching careers program. *Journal of Educational Finance*, 27, 1029-1048.

- Rodes, P., Knapczyk, D., Chapman, C., & Haejin, C. (2000). Involving teachers in web-based professional development. *T.H.E. Journal*, 27, 94-98.
- Russotti, J. & Shaw, R. (2001). In-service training for teaching assistants and others who work with students with visual impairments. *Journal of Visual Impairment and Blindness*, 95, 483-487.
- Sears, S., Kennedy, J., & Kaye, G. (1997). Myers-Briggs personality profiles of prospective educators. *The Journal of Educational Research*, 90, 195–202.
- Shotsberger, P. (1999). The instruct project: Web professional development for mathematics teachers. *The journal of computers in mathematics and science Teaching*, 18, 49–60.
- Smith, S. (2002). Teacher mentoring and collaboration. *Journal of Special Education Technology*, 17, 47 – 48.
- Solorzano, D. & Yosso, T. (2001). From facial stereotyping and deficit discourse toward a critical race theory in teacher education. *Multicultural Education*, 9, 2–8.
- Sparks, D. & Hirsh, S. (2000). Strengthening professional development. *Education Week*, 19, (37), 42-45.
- Speaker, R. (1999). Reflections on Dewey. Retrieved December 9, 2002, from the University of New Orleans Web Site. <http://ed.uno.edu/faculty/rspeaker>.
- Stilwell, W. (1999). Teacher certification and employment information: Then and now! *Action in Teacher Education*, 21, 1–6.
- Tell, C. (2001). Making room for alternative routes. *Educational Leadership*, 58, 38–41.
- Urduan, T. (2001). *Statistics in Plain English*. Mahwah, N.J: Lawrence Erlbaum Association, Publishers.

- Weichel, W. (1999). Preparing teachers through alternative certification programs. *Kappa Delta Pi Record*, 36, 19–22.
- West, P. (2002). 21st century professional development: The job-embedded, continual learning model. *American Secondary Education*, 30, 72–86.
- Whiting, M. & Klotz, J. (2000). Alternative certification; it's alive, it's alive—but it may not be well. *Contemporary Education*, 71, 39–41.
- Willis, E. & Davies, M. (2002). Promise and practice of professional portfolios. *Action in Teacher Education*, 23, 18–27.
- Wilson, J. & Coolican, M. (1996). How high and low self-empowered teachers work with colleagues and principals. *Journal of Educational Thought*, 30, 99-117.
- Yen, W. & Ferrara, S. (1997). The Maryland school performance assessment program: Performance assessment with psychometric quality suitable for high stakes usage. *Educational and Psychological Measurement*, 57, 60-84..

APPENDIX A
PARTICIPANT CONSENT FORM

APPENDIX A

Participant Consent Form

The following is a brief summary of the project in which you have been asked to participate. Please read it before you sign the statement below.

TITLE: The Influence of Teacher Attitude, Professional Development, and Teacher Certification on School Performance Scores in Selected Louisiana Parishes.

PURPOSE OF THE STUDY: To identify relationships between professional development and school performance scores in selected Northeast Louisiana parishes.

PROCEDURES AND INSTRUMENTS: Teachers will have the opportunity to participate in the Teacher Perception of Professional Development Survey.

RISKS/ALTERNATIVE TREATMENTS: There are no risks associated with participation in this study. Participation is voluntary.

BENEFITS/COMPENSATION: None

I, _____, show by my signature that I have read and understood the description of the study, "Teacher Perception of Professional Development Survey", and its purpose and methods. I understand that my participation in this research is strictly my choice, and my participation or refusal to participate in this study will not affect my position. Further, I understand that I may withdraw at any time or refuse to answer any questions without penalty. I understand that I may request the results of this study when it is completed. I understand that my name will not be revealed in any way and my answers on the survey will be confidential. These are my rights related to participation in this study, and no one has asked me to give them up.

Signature of Participant

Date

CONTACT INFORMATION: The researchers listed below may be reached to answer questions about the research, your rights, or related matters.

Kay Lynn Tettleton
Doctoral Student, LEC Consortium
492 Stable Road
Ruston, LA 71270
(318)255-2050
(318)548-9935

Dr. Cathy Stockton
Major Professor
College of Education
Louisiana Tech University
Ruston, LA 71270
(318)257-3229

**Members of the Human Use Committee of Louisiana Tech University may also be contacted if a problem cannot be discussed with the researchers:
Dr. Terry McConathy (318)257-2924, Dr. Mary M. Livingston (318)257-2292,
Mrs. Deby Hamm (318)257-2924**

APPENDIX B

STUDY/PROJECT INFORMATION FOR HUMAN SUBJECTS COMMITTEE

APPENDIX B**STUDY/PROJECT INFORMATION FOR HUMAN SUBJECTS COMMITTEE**

TITLE: *The Influence of Teacher Attitude, Professional Development, and Teacher Certification on School Performance Scores in Selected Louisiana Parishes*

PROJECT DIRECTORS: Dr. Cathy Stockton, Major Professor
Kay Lynn Tettleton, LEC Doctoral Student

DEPARTMENT: College of Education

PURPOSE OF STUDY/PROJECT: To identify relationships between teacher attitude and participation in professional development, certification, and school performance scores.

SUBJECTS: High School Teachers in selected Louisiana Parishes

PROCEDURE: Teachers will have the opportunity to participate in the Teacher Perception of Professional Development Survey.

INSTRUMENTS AND MEASURES TO INSURE PROTECTION OF CONFIDENTIALITY, ANONYMITY: Survey instruments will not request personal information of the respondents. Results will be reported only by schools and districts.

RISKS/ALTERNATIVE TREATMENTS: There are no risks associated with participation in this study. Participation is voluntary.

BENEFITS/COMPENSATION: None

SAFEGUARDS OF PHYSICAL AND EMOTIONAL WELL-BEING: There will be no potential hazards for participants.

APPENDIX C
HUMAN USE COMMITTEE REVIEW



LOUISIANA TECH
UNIVERSITY

RESEARCH & GRADUATE SCHOOL

MEMORANDUM

TO: Kay Lynn Tettleton
Cathy Stockton

FROM: Deby Hamm, Graduate School

SUBJECT: HUMAN USE COMMITTEE REVIEW

DATE: January 24, 2003

In order to facilitate your project, an **EXPEDITED REVIEW** has been done for your proposed study entitled:

"The influence of teacher attitude, professional development, and teacher certification on school performance scores in selected Louisiana parishes"
Proposal # 1-ABI

The proposed study procedures were found to provide reasonable and adequate safeguards against possible risks involving human subjects. The information to be collected may be personal in nature or implication. Therefore, diligent care needs to be taken to protect the privacy of the participants and to assure that the data are kept confidential. Further, the subjects must be informed that their participation is voluntary.

Since your reviewed project appears to do no damage to the participants, the Human Use Committee grants approval of the involvement of human subjects as outlined.

You are requested to maintain written records of your procedures, data collected, and subjects involved. These records will need to be available upon request during the conduct of the study and retained by the university for three years after the conclusion of the study.

If you have any questions, please give me a call at 257-2924.

A MEMBER OF THE UNIVERSITY OF LOUISIANA SYSTEM

P.O. BOX 7923 • RUSTON, LA 71272-0029 • TELEPHONE (318) 257-2924 • FAX (318) 257-4487 • email: research@LaTech.edu

AN EQUAL OPPORTUNITY UNIVERSITY

APPENDIX D
LETTERS TO SUPERINTENDENTS OF SCHOOLS IN SELECTED DELTA
PARISHES IN LOUISIANA

APPENDIX D

492 Stable Road
Ruston, LA 71270
January 27, 2003

Mr. Marriage Facen
Superintendent of Schools
East Carroll Parish
Lake Providence, Louisiana

Dear Mr. Facen:

Thank you so much for taking your time to visit with Cynthia Pilcher and me last week. As we discussed, I am a doctoral student in the Louisiana Educational Consortium at Louisiana Tech University. With increasing importance of School Performance Scores, school districts across the United States are working to find ways to improve school report cards. I am working on a study entitled *The Influence of Teacher Attitude, Professional Development, and Teacher Certification on School Performance Scores in Selected Louisiana Parishes*.

In order to evaluate the effect of teacher perception of professional development and its impact on teaching and learning, I would like to request your permission to offer all high school teachers (grades 9 – 12) the opportunity to participate in a brief survey. Results will be anonymous and completely confidential. Reports will be reported only by district. If available, the number of hours in which teachers participated in professional development would be most helpful.

In order to incorporate the relationship of certification and degree on School Performance Scores, I would like to also request appropriate archival data on number of certified teachers, certified teachers teaching outside their area of certification, and teachers with alternative certification.

Thank you for your support. The letter that you sent to principals on my behalf is greatly appreciated. I will share results as soon as they are completed.

Sincerely,

Kay Lynn Tettleton

APPENDIX E

LETTER TO PRINCIPALS OF HIGH SCHOOLS IN SELECTED PARISHES IN THE

LOUISIANA DELTA

APPENDIX E

492 Stable Road
Ruston, LA 71270
January 27, 2003

Ms. Jane Smith Principal
Rayville High School
Rayville, Louisiana

Dear Ms. Smith:

I am a doctoral student in the Louisiana Educational Consortium at Louisiana Tech University. With increasing importance of School Performance Scores, school districts across the United States are working to find ways to improve school report cards. I am working on a dissertation study entitled *The Influence of Teacher Attitude, Professional Development, and Teacher Certification on School Performance Scores in Selected Louisiana Parishes*.

In order to evaluate the effect of teacher perception of professional development and its impact on teaching and learning, I would like to request your assistance by allowing teachers at your school to participate in a brief one-page survey. Results will be anonymous and completely confidential. Reports will be included only by district.

Your assistance is appreciated.

Sincerely,

Kay Lynn Tettleton

APPENDIX F

LETTER TO HIGH SCHOOL TEACHERS IN SELECTED DELTA PARISHES IN

LOUISIANA

APPENDIX F

January 29, 2003

To: High School Teachers

From: Kay Lynn Tettleton

I am a doctoral student in the Louisiana Educational Consortium at Louisiana Tech University. With increasing importance of School Performance Scores, school districts across the United States are working to find ways to improve school report cards. I am working on a dissertation study entitled: *The Influence of Teacher Attitude, Professional Development, and Teacher Certification on School Performance Scores in Selected Louisiana Parishes*.

In order to evaluate the effect of teacher perception of professional development and its impact on teaching and learning, I would like to request your assistance by participating in a brief one-page survey of your opinions. Results will be anonymous and completely confidential. Reports will be included only by district.

Thank you for your assistance.

Sincerely,

APPENDIX G

TEACHER PERCEPTION OF PROFESSIONAL DEVELOPMENT SURVEY

APPENDIX G

TEACHER PERCEPTION OF PROFESSIONAL DEVELOPMENT SURVEY

Instructions:

Please read each item carefully. Think about your opinion. Decide which of the seven descriptive choices best fits your opinion. Write the number that you choose in the blank beside the statement.

- 1 = Strongly disagree
- 2 = Moderately disagree
- 3 = Slightly disagree
- 4 = Undecided or do not know
- 5 = Slightly agree
- 6 = Moderately agree
- 7 = Strongly agree

- _____ 1. I am satisfied with the curriculum and professional development opportunities currently provided by our school district.
- _____ 2. I believe that the curriculum professional development opportunities provided by our school district are meeting my needs.
- _____ 3. I feel that our school district does an excellent job of providing professional development opportunities.
- _____ 4. I believe that the time I spend in professional development is worthwhile.
- _____ 5. If our school district provided technology-based professional development, I would participate
- _____ 6. I implement knowledge gained from professional development workshops in my classroom teaching.
- _____ 7. Participation in graduate classes is encouraged in this district.
- _____ 8. My district uses mentoring programs to strengthen teacher performance.
- _____ 9. Our school district provides stress reduction workshops.
- _____ 10. I feel that this school district uses adequate funding for professional development.