An Examination of Mississippi Public School Teachers' Perceptions of the Effectiveness of Their Professional Development Experiences in Raising Student Achievement

Daniel Martin Rushing
University of Southern Mississippi

Follow this and additional works at: https://aquila.usm.edu/dissertations

Part of the Educational Administration and Supervision Commons, Educational Leadership Commons, and the Teacher Education and Professional Development Commons

Recommended Citation
Rushing, Daniel Martin, "An Examination of Mississippi Public School Teachers' Perceptions of the Effectiveness of Their Professional Development Experiences in Raising Student Achievement" (2012). Dissertations. 445.
https://aquila.usm.edu/dissertations/445

This Dissertation is brought to you for free and open access by The Aquila Digital Community. It has been accepted for inclusion in Dissertations by an authorized administrator of The Aquila Digital Community. For more information, please contact aquilastaff@usm.edu.
AN EXAMINATION OF MISSISSIPPI PUBLIC SCHOOL TEACHERS’ PERCEPTIONS OF THE EFFECTIVENESS OF THEIR PROFESSIONAL DEVELOPMENT EXPERIENCES IN RAISING STUDENT ACHIEVEMENT

by

Daniel Martin Rushing

Abstract of a Dissertation Submitted to the Graduate School of The University of Southern Mississippi in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

December 2012
ABSTRACT
AN EXAMINATION OF MISSISSIPPI PUBLIC SCHOOL TEACHERS’
PERCEPTIONS OF THE EFFECTIVENESS OF THEIR PROFESSIONAL
DEVELOPMENT EXPERIENCES IN RAISING STUDENT ACHIEVEMENT
by Daniel Martin Rushing
December 2012
The purpose of this study is to provide insight into the elements needed to
produce a high quality professional development program for teachers. The researcher
sought to determine possible factors that had a significant relationship to Mississippi
public school teachers’ perceptions of the effectiveness of their professional development
experiences in raising student achievement. Furthermore, the researcher wanted to
identify possible inequities with professional development opportunities for teachers in
Mississippi. It is the hope of the researcher to highlight the characteristics of effective
professional learning defined by research that would kindle a desire in classroom teachers
to advance their skill levels and increase their knowledge and understanding of how
children learn.

Data for this study was collected from classroom teachers in Mississippi using a
researcher-made online survey that was correlated with the eight characteristics of
effective professional development listed in Mississippi’s professional development
model (MDE, 1998) and the seven professional learning standards provided by Learning
Forward (2011). Overall findings revealed that Mississippi public school teachers
perceive that their educational leaders do an adequate job of providing professional
learning opportunities that have improved student achievement. Additionally, participants perceived that the use of technology has enhanced their professional development experiences. However, some effective professional development practices are inequitable across Mississippi and are in need of improvement. Results from this study revealed that the majority of participants are not satisfied with their professional development experiences, specifically in the areas of learning communities, data collection and teacher input, and on-going support.
AN EXAMINATION OF MISSISSIPPI PUBLIC SCHOOL TEACHERS’ PERCEPTIONS OF THE EFFECTIVENESS OF THEIR PROFESSIONAL DEVELOPMENT EXPERIENCES IN RAISING STUDENT ACHIEVEMENT

by

Daniel Martin Rushing

A Dissertation Submitted to the Graduate School of The University of Southern Mississippi in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

Approved:

David E. Lee
Director

J. T. Johnson

Rose M. McNeese

Chuck Benigno

Susan A. Siltanen
Dean of the Graduate School

December 2012
DEDICATION

This work is dedicated to the memory of my grandfather, James Edward Rushing, Jr. The life-long example he displayed of hard work, perseverance, and diligence was a constant memory that echoed through my thoughts during times of self-doubt and struggle with the development of this project.

Additionally, this work is written in honor of my father, James Edward Rushing, III. His quiet strength, consistent wisdom, and steadfast encouragement have always been present on whatever journey I undertook. He has never wavered with his support of my dreams.

Finally, this work is dedicated to my children, Sean Alexander Rushing and Haleigh Nicole Rushing. May they always remember times when I seemed engulfed in my studies working diligently to reach my goal and complete the race set before me. May they always know that they also have the strength to endure whatever challenges are set before them. May they remember their father and know that they too are capable of accomplishing all that they dream of doing.
ACKNOWLEDGMENTS

I would like to thank the members of my doctoral committee: Dr. David Lee, Dr. J.T. Johnson, Dr. Rose McNeese, and Dr. Chuck Benigno. I am eternally grateful for the encouragement they gave me throughout this project. Because of their guidance and leadership I was able to complete a task that I truly thought was impossible to achieve.

Additionally, I want to acknowledge the support I have received on a daily basis from my family. Everyone from the Rushing household to the Temple clan has been nothing but a source of strength. Thank you one and all for believing in me.

Some frown upon the acknowledgement of God or faith in an academic project by citing the continuous debate of the separation of church and state. However, I personally cannot separate any aspect of who I am from my Christian faith. It was God’s faithfulness that guided my footsteps on this quest. It was by walking in His mercy and grace that I was able to complete this endeavor. Because of this fact, I must give all glory to God alone for the good things He has done.

Finally, I want to thank my wife, Angela Temple Rushing, for the unconditional devotion she demonstrated through her willingness to accommodate my work and school schedule. She never hesitated in giving the love I needed to see this journey to completion.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>ii</td>
</tr>
<tr>
<td>DEDICATION</td>
<td>iv</td>
</tr>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>v</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>viii</td>
</tr>
<tr>
<td>CHAPTER</td>
<td></td>
</tr>
<tr>
<td>I. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td></td>
</tr>
<tr>
<td>Research Hypotheses</td>
<td></td>
</tr>
<tr>
<td>Research Questions</td>
<td></td>
</tr>
<tr>
<td>Definition of Terms</td>
<td></td>
</tr>
<tr>
<td>Delimitations</td>
<td></td>
</tr>
<tr>
<td>Assumptions</td>
<td></td>
</tr>
<tr>
<td>Justification for the Study</td>
<td></td>
</tr>
<tr>
<td>Summary</td>
<td></td>
</tr>
<tr>
<td>II. LITERATURE REVIEW</td>
<td>14</td>
</tr>
<tr>
<td>Introduction</td>
<td></td>
</tr>
<tr>
<td>Theoretical Framework</td>
<td></td>
</tr>
<tr>
<td>History of Professional Development in Mississippi</td>
<td></td>
</tr>
<tr>
<td>Relevant Studies</td>
<td></td>
</tr>
<tr>
<td>Educational Reform Through Effective Professional Development</td>
<td></td>
</tr>
<tr>
<td>Effective Professional Development Through Learning Communities</td>
<td></td>
</tr>
<tr>
<td>Effective Professional Development Through Technology</td>
<td></td>
</tr>
<tr>
<td>Summary</td>
<td></td>
</tr>
<tr>
<td>III. METHODOLOGY</td>
<td>56</td>
</tr>
<tr>
<td>Overview</td>
<td></td>
</tr>
<tr>
<td>Research Design</td>
<td></td>
</tr>
<tr>
<td>Participants</td>
<td></td>
</tr>
<tr>
<td>Instrumentation</td>
<td></td>
</tr>
<tr>
<td>Procedures</td>
<td></td>
</tr>
<tr>
<td>Limitations</td>
<td></td>
</tr>
<tr>
<td>Data Analysis</td>
<td></td>
</tr>
</tbody>
</table>
IV. RESULTS .................................................................................................................67
   Introduction
   Descriptive Data
   Research Questions
   Statistical Findings
   Qualitative Comments
   Summary

V. DISCUSSION ...........................................................................................................87
   Introduction
   Summary
   Discussion
   Limitations
   Recommendations for Policy and Practice
   Recommendations for Future Research
   Conclusion

APPENDIXES ...........................................................................................................96

REFERENCES ............................................................................................................109
LIST OF TABLES

Table

1. Frequencies and Percentages of Grade Level Taught, Years of Experience, Mississippi License Class Level, and Experience with Professional Learning Communities ..........................................................68

2. Statistical Results from Participants’ Responses to Statements Correlated with the Eight Characteristics of Effective Professional Development ........................................72

3. Statistical Results from Participants’ Responses to Statements Correlated with the Seven Standards for Professional Learning ..........................................................75

4. Participants’ Grade Level Taught ..................................................................79

5. Participants’ Years of Classroom Teaching Experience ..................................80

6. Participants’ Mississippi License Class Level ...................................................81

7. Participants’ Experience with Professional Learning Communities ................82
CHAPTER I
INTRODUCTION

Currently, Mississippi educators are in the process of implementing a three-year phase-in of the Common Core State Standards (CCSS). Individual public school district teams made up of curriculum coordinators, principals, and teachers all across the state are attending training sessions on how to effectively deconstruct these standards and successfully map them into the classroom curriculum. This change has been sparked by the official adoption of the CCSS by the Mississippi Board of Education in June of 2010 (Burnham, 2010). The CCSS were developed with the goal of meeting both the academic and career requirements necessary for the 21st century learner to be successful.

Teachers, once again, are required to modify their current instructional strategies to meet the demands of an ever-evolving curriculum. Moreover, they are being required to become more technologically advanced in their strategies as rapid development of new technology is ever-present in today’s professional and social society. “The workforce demands employees to use technology. Because schools are in the business of educating young people to be productive citizens, educational leaders must insist that students be required to become familiar with technology in their learning process” (Cole & Styron, 2006, p. 32). This standards-based curriculum initiative requires teachers to participate in effective professional development that will provide the knowledge and skills necessary to positively affect student achievement. However, traditional models of professional development will produce little change. The large-scale presentations given by an expert will not lead to educational reform. In fact, this method will most likely be counterproductive, creating resentment and antagonism among its participants (Reeves,
2008). For the implementation of the Common Core State Standards to be successful, Mississippi educators must collectively embrace what research says about effective professional development and its power to spark change in the classroom that produces student achievement.

Significant research focusing on the elements of effective professional development contends that educational reform is dependent on high-quality professional development for teachers (Darling-Hammond & Ball, 1997; Hochberg & Desimone, 2010; Learning Forward, 2011; Viadero, 2007). Hawley and Valli (2000) referenced the fact that local, state, and federal policymakers are investing more heavily in teachers’ continuing professional development because of the realization that the most powerful influence on students’ learning is the quality of teaching and that school reform requires change in structure, culture, and capabilities. Cowan and Edwards (2011) state, “under NCLB [No Child Left Behind Act of 2001], professional development is considered an essential strategy to turning around failing schools” (p. 250). Killion (1999) determines that well-trained and prepared classroom teachers are more effective and therefore have a greater impact on student achievement.

Because school districts in Mississippi continuously feel the pressures of accountability, educators must address the methods used in training classroom teachers to produce high student achievement. “Teachers are required to provide a variety of learning models to accommodate a variety of learning styles possessed by students. Staff development for teachers should be no different” (Cole & Styron, 2006, p. 33). With so much at stake for everyone involved (districts, schools, administrators, teachers, and students), ongoing, effective professional development is vital. For the kind of significant
change required to successfully implement the CCSS, school districts must have a plan for professional development and training that is grounded in significant data.

Educational leaders must make every effort to provide effective professional development that meets the needs of their teachers (Cole & Styron, 2006). Districts must strive to know and understand effective methods of skill enhancement to meet the learning needs of today’s students. Change is coming and coming quickly. For this reason, school districts must adhere to the opinions of their teachers on how to best implement the new curriculum. Teachers themselves report that the more time they spend in effective professional development activities, the more likely they are to improve their instruction (Killion, 1999). In the same respect, teachers are aware of the importance of the use of technology with instruction (Cole & Styron, 2006) to meet the demands of 21st century learning. It is a must that school administrators listen to their classroom teachers concerning all aspects of the culture, climate, and operations of the school. Their experiences with professional development should guide their decisions on successfully implementing the new Common Core State Standards.

Professional development focused on a specific purpose and conducted over time, can be an important instrument in producing student academic achievement. Garet, Porter, Desimone, Birman, and Yoon (2001) concluded that the instructional practice of teachers changed when they participated in professional development that targeted subject specific content, was coherent with the current academic curriculum, and involved active learning embedded in the day-to-day activities of the school. Learning Forward (2011) states, “to bridge the knowing-doing gap and integrate new ideas into practice, however, educators need three to five years of ongoing implementation support
that includes opportunities to deepen their understanding and address problems associated with practice” (p. 45). Viadero (2007) reported on a 2000 study by the National Staff Development Council (NSDC) that examined the professional development programs of eight public schools that had made measurable gains in student achievement. The NSDC (as cited in Viadero, 2007) found that in each school, “the very nature of staff development [had] shifted from isolated learning and occasional workshops to focused, ongoing organizational learning built on collaborative reflection and joint action” (p. 3). The results from this study revealed that the schools’ professional development programs were collaborative in nature and sought to provide on-going learning opportunities for teachers. In addition, all programs emphasized data-driven decision making founded on accountability results (Viadero, 2007).

The consensus of the research appears to be that traditional methods of conducting staff development are ineffective in raising student achievement. They do not create reform in producing best practices for classroom instruction. Moreover, research presents the idea that effective instructional practice comes from a collaborative approach that allows for teacher input, practice, follow-up, and feedback. These theories are just a sample of numerous studies conducted on effective development methods. With reform becoming a constant factor in education, researchers have sought to establish the best means of producing changes in teachers’ instructional practice that influences student achievement.

With this in mind, the *Mississippi Public School Accountability Standards* require school districts to provide a minimum amount of time during a school year for intensive professional development. Currently, teachers are contracted to work 187 days in an
academic year. Schools are required to provide a minimum of 180 regular instructional days for students. This leaves seven days for teacher professional development which calculates to approximately fifty-six hours designated for professional development. Yoon, Duncan, Lee, Scarloss, and Shapley (2007) concur that the results from their review of more than 1,300 studies addressing the effect of professional development on student achievement show an average of 49 hours of effective professional development is needed to impact student achievement. By this measure, Mississippi teachers are allotted sufficient time to learn and implement only one new instructional strategy or skill during a school year. Reeves (2008) contends that much of his experience supports the suggestion that in the area of standards-based assessments, instructional consistency is only achieved by at least twenty four hours of hands-on seminars. It is evident that if school districts want to be successful in transitioning to the Common Core State Standards curriculum, they must discover new and innovative uses of time without greatly effecting the teacher’s regular work day and possibly the time used for curriculum planning or classroom instruction.

The Federal No Child Left Behind Act of 2001 requires schools to provide opportunities for teachers to receive “high quality” professional development (NCLB, 2002). These requirements are broad, as well, and do not provide a specific process. Professional development activities that target newly acquired content knowledge, as well as instructional strategies, are vital for effecting student achievement (Ingvarson, Meiers, & Beavis, 2005). This results in teachers being subjected yearly to various instructional methods and programs that are designed to enhance student learning. Across the country, school districts are currently spending excessive amounts of money for
professional development that is “woefully inadequate” (Borko, 2004, p. 3). The lack of specific implementation guidelines breeds inconsistency among individual districts.

Hirsh (2009b) states, “ensuring that best practice is everyday practice in schools requires opportunities for teachers to learn from each other, collaborate, view each other’s practice, and share what works from classroom to classroom and from school to school” (p. 1). Some school districts in Mississippi appear to value the effectiveness of professional development, adhering to current research as to the productive methods for implementing an effective staff development program. Others, however, seem to focus only on meeting the state requirement and pay little attention to effective methods for producing quality learning experiences for their faculty. Their methods tend to be archaic and still employ one-day or short-term workshops peppered throughout a school-year. These staff development days are fragmented and allow for little opportunity, if any, for discussion, application, and follow-up. Teachers’ professional development experiences are extensive because of the lack of consistency in implementation. “In order for standards to make the jump from theoretical discussions during a staff development seminar to actual classroom practice, more than mere training sessions are required” (Reeves, 2008, p. 51). For this reason, teachers’ perceptions are valuable in improving and enhancing current professional development policies and programs within the state. Their opinions as professional educators are vital to establishing programs that have a positive effect on student achievement. Classroom teachers should be able to answer the question of whether or not the minimum amount of time required by state accountability standards for professional development is sufficient for true skill enhancement. Also,
their insight on the effectiveness of current methods being used by school districts will help guide educators in meeting the teachers’ needs for professional growth.

Statement of the Problem

It is the goal of this study to give further insight on the elements needed to produce a high quality professional development program for teachers that ignites a desire in them to advance their skill levels and increase their knowledge and understanding of how children learn. Moreover, it is the researcher’s hope that by valuing teachers’ input of program development, they will feel invested in the process and take ownership of their own continuous education and training. The theory is that if teachers believe that administrators and researchers listen to their opinions about professional development, their outlook and attitudes would change toward participating in staff development activities. It should be noted, however, that much of the research has not attempted to tie professional development directly to student learning but rather points out the importance of effective methods and models that have had an indirect effect on student achievement. This is due in part to the complexity of establishing a clear connection between the two (Loucks-Horsley & Matsumoto, 1999).

For this study, the researcher examined Mississippi public school teachers’ perceptions of the effectiveness of their professional development experiences in raising student achievement. Factors that were considered were the participants’ grade level taught, years of teaching experience, Mississippi license class level, and experience working with professional learning communities. The researcher sought to analyze their perceptions of Professional Learning Communities (PLCs) as a method for a high-quality, effective staff development program. According to Darling-Hammond and
Richardson (2009), PLCs are an approach to professional development that meets the criteria for high-quality, effective professional development as described by current research. Teachers’ experiences with PLCs are valuable in determining best practices for conducting quality programs that develop pedagogical knowledge and instructional strategies. In addition, the researcher considered the relationship between the use of technology in professional development activities and the enhanced learning of the participants. Survey participants were asked to give examples of experiences where technology was used effectively to deliver effective professional learning.

It was anticipated that differences would be found in the participants’ perceptions according to all of the factors considered for this study. The instructional practices of elementary teachers vary from those teaching on the secondary level. This should have a direct effect on teachers’ experiences with professional development programs among grade levels. Novice teachers should have had different experiences from veteran teachers, and teachers’ educational knowledge should have influenced their philosophy on the value of teacher training and its effect on raising student achievement. Also, the participants’ exposure and experience with PLCs as methods of professional development should have revealed a relevance to the perceptions of the participant. Lastly, their exposure to technology as a delivery system should have an impact on their new skill development and learning.

The fact of whether participants for this study are experienced with the concepts targeted was determined by their collective responses to descriptive statements as well as qualitative information given to open-ended questions on the researcher-made survey.
Research Hypotheses

The following hypotheses were tested during this study:

1. There is a statistically significant relationship between teachers’ perceptions of their professional development experiences and the grade level that they teach.
2. There is a statistically significant relationship between teachers’ perceptions of their professional development experiences and their years of experience.
3. There is a statistically significant relationship between teachers’ perceptions of their professional development experiences and their certification level.
4. There is a statistically significant relationship between teachers’ perceptions of their professional development activities and their experience with professional learning communities.

Research Questions

The following questions were investigated during this study:

1. What are Mississippi public school teachers’ perceptions of the effectiveness of their professional development experiences on raising student achievement?
2. Are Mississippi public school teachers satisfied with the professional development opportunities provided by the Mississippi Department of Education and their local school district?
3. Does professional development in Mississippi comply with the guidelines published in the professional development model established by the Mississippi Department of Education (MDE, 1998)?
4. Does professional development in Mississippi adhere to the Standards for Professional Learning (Learning Forward, 2011)?
5. How does the use of technology as a delivery system enhance the professional development experiences of teachers in Mississippi?

Definition of Terms

*Effective Professional Development* – a comprehensive, sustained, and intensive approach to involving teachers’ and principals’ effectiveness in raising student achievement (Hirsh, 2009a).

*Professional Learning Communities* – an ongoing practice through which teachers and administrators work collaboratively to seek and share learning and to act on their learning, their goal being to enhance their effectiveness as professionals for students’ benefit (Hord, 1997).

*Professional Development for a New Millennium* – Mississippi Board of Education’s model for professional development (MDE, 1998).

*Standards for Professional Learning* – the third iteration of standards outlining the characteristics of professional learning that lead to effective teaching practices, supportive leadership, and improved student results (Learning Forward, 2011).

*Learning Forward* – formerly the National Staff Development Council (NSDC), an international membership association of learning educators focused on increasing student achievement through more effective professional learning.

*MDE* – Mississippi Department of Education

*NCLB* – No Child Left Behind Act of 2001 – a reauthorization of Elementary and Secondary Education Act. It had a number of measures designed to force large gains in student achievement and to hold states and schools more accountable for student progress (NCLB, 2002).
Goals 2000: Educate America Act – a federal law established in 1994 that defined eight national education goals and frameworks. It is considered the predecessor to NCLB, 2001 (Goals 2000, 1994).

HOUSSE – an alternative method to assessing teacher subject matter competency is the High, Objective, Uniform State Standard of Evaluation. It allows current teachers to demonstrate subject matter competency and Highly Qualified Teacher (HQT) requirements through a combination of proven teaching experience, professional development, and knowledge in the subject acquired over time through working in the field (USDE, 2004).

ESEA – Elementary and Secondary Education Act of 1965 –federal law that provides financial assistance to local educational agencies serving areas with concentrations of children from low-income families (ESEA, 1965).

Student Achievement – the measure of a student’s performance based on an established set of criteria for determining academic growth. For this study, this term relates to (a) the percentage of students proficient at grade level, and (b) the percentage of students meeting their annual growth prediction on the Mississippi Curriculum Test, 2nd Edition (MCT2) (MDE, 2005).

Instructional Strategies – approaches educators take during instruction to actively engage student learning and meet or exceed established academic standards.

Delimitations

The delimitations of this study are as follows:

1. This study focused on the professional development experiences of K-12 teachers in the state of Mississippi.
2. The participants were delimited to teachers who are members of the Mississippi Professional Educators (MPE) and who are employed by the 19 randomly selected school districts in Mississippi.

3. The variables were delimited to the participants’ grade level taught, years of teaching experience, Mississippi license class level, and experience working with professional learning communities.

4. Any and all variables not specifically identified were considered to be beyond the scope of this study.

Assumptions

During this study, the following assumptions were made:

1. Only K-12 teachers currently working in Mississippi participated in the survey.

2. All participation was entirely voluntary.

3. Participants responded to the survey only once.

4. All responses to the survey were authentic.

Justification for the Study

This study attempted to provide Mississippi educators with an opportunity to voice their perceptions of how well their professional development experiences affect their students’ achievement. Moreover, it gave educational leaders in Mississippi a snapshot of current teacher attitudes toward professional development opportunities in the state. Ultimately, this study showed whether classroom teachers in Mississippi valued the professional development opportunities provided to them by the Mississippi Department of Education (MDE) and their Local Educational Agencies (LEAs).
It was the goal of this study to emphasize the necessity of providing more high-quality, effective professional development than has traditionally been provided as a catalysis for developing students as 21st century learners that are able to perform the complex and analytical skills required to be successful (Darling-Hammond & Richardson, 2009). Wiliam states, “to successfully raise student achievement, we must improve the quality of the teachers working in our schools – specifically, we must work to improve the teachers we already have” (Wiliam, 2007, p. 184).

Summary

Public education in Mississippi is currently in the midst of significant change that has the promise of establishing true educational reform. With the adoption of the Common Core State Standards, our state is committing to providing a free and public education that produces students that are equipped to meet the complex challenges of the 21st century. However, for change to occur, state educational leaders at every level must embrace the reality that effective professional development goes beyond the “add-on” philosophy steeped in the culture where the only true goal of professional development is to meet requirements necessary for license renewal (Danielson, 2008; Reeves, 2008). Educational leaders throughout Mississippi must become champions of the cognitive approach to life-long learning. It is in this attitude shift that educators will produce continuous professional learning that modifies and enhances their instructional strategies in an effort to raise student achievement.
CHAPTER II
LITERATURE REVIEW

Introduction

The literature review conducted for this study involved an examination of both the historical legislation that established the foundation for current professional development practices in Mississippi and the currently published findings that support the conceptual framework for the Mississippi Department of Education’s (1998) professional development model, *Professional Development for the New Millennium*, as well as Learning Forward’s (2011) *Standards for Professional Learning*. These two documents provide the standards for what constitutes high-quality, effective professional development in the state of Mississippi as examined by this study.

This study analyzed the participants’ (Mississippi public school teachers) perceptions of their professional development experiences in relation to how well their students achieve academically. The variables considered for analysis included teachers’ perceptions of professional development experiences in relation to their years of teaching experience, their grade level taught, their certification level, and experience with participating in professional learning communities. Similar variables were considered in the multi-year national evaluation of the Eisenhower Professional Development Program. The literature produced from this research is highlighted in this chapter. This review is organized into seven sections. The first section provides a theoretical framework for this study by focusing on the eight characteristics of effective professional development found in Mississippi Department of Education’s (MDE, 1998) professional development model, *Professional Development for the New Millennium*. Additionally, the newly
revised *Standards for Professional Learning* published by Learning Forward (2011), formally the National Staff Development Council, is highlighted. The second section discusses the history of professional development in Mississippi in relation to current professional practice by state and local educational agencies. The third section provides a sample of previous relevant studies on teachers’ perceptions of their professional development experiences. The fourth section highlights literature that analyses the impact of the educational reform movement on professional development. The fifth section discusses research on the concept of professional learning communities as an effective approach for meeting the criteria for professional development. The sixth section reviews the influence and impact that technological development has on professional learning.

The last section contains the chapter summary.

### Theoretical Framework

It is a well-known statistical fact in the educational community that the classroom teacher has the greatest impact on student achievement. Darling-Hammond (1996) concludes that improving the quality of instruction through effective professional development can impact student achievement more than any other factor. Guskey (2009) states, “at every level of education, those responsible for planning and implementing professional development must learn how to critically evaluate the effectiveness of what they do” (p. 228). Desimone (2011) concludes that the true test of professional development effectiveness is whether it has led to improved student learning. Recognizing that schools are no better than the teachers and administrators who work within them, lawmakers and educational leaders emphasize professional development as a key component of reform in nearly every education improvement plan (Guskey, 2003).
However, Birman, Desimone, Porter, and Garet (2000) reveal that providing multiple high-quality features in professional development activities is challenging and requires a substantial amount of time, planning, and financial resources that many schools and districts do not always have. This proves to be a burden on local educational agencies as they strive to meet the ever-evolving professional needs of their teachers. Loucks-Horsley and Mastsumoto (1999) conclude, “if teachers make specific changes in their practice as a result of learning from professional development, then their students’ learning can be improved” (p. 259). For this reason, understanding what makes professional development effective is critical to understanding the success or failure of school reform (Desimone, 2011).

In an effort to support the evaluation of professional development effectiveness, Desimone (2011) presented a basic model that represents interactive relationships among the core features of professional learning, teacher knowledge and beliefs, classroom practice, and student outcomes. Successful professional development (Desimone, 2011) follows these steps:

1. Teachers experience professional development.
2. The professional development increases teachers’ knowledge and skills, changes their attitudes and beliefs, or both.
3. Teachers use their new knowledge, skills, attitudes, and beliefs to improve the content of their instruction, their approach to pedagogy, or both.
4. The instructional changes that the teachers introduce to the classroom boost their students’ learning.
Much of the research reviewed to create Desimone’s model has shown that professional development activities that are coherent with polices and other professional experiences and that support national, state, and district standards are directly related to increased teacher learning and improved classroom practice (Birman et al., 2000). Garet et al. (2000) states, “efforts to align professional development with state and district frameworks, standards, and assessments offer one approach to increasing the coherence of the instructional guidance teachers receive” (Garet et al., 2001, p. 928). Mississippi Public School Accountability Standards mandated in process standard number 21, “the school district implements a professional development program that complies with the guidelines published in Professional Development for the New Millennium” (MDE, 2010, p. 25). This model combined with the Standards for Professional Learning (Learning Forward, 2011) is the conceptual framework for this study. These guidelines are the state and national measures used to provide a coherent structure to professional development opportunities that will enhance professional practice. Moreover, they embody the elements of what current studies reveal to be high-quality, effective professional development.

Professional Development for a New Millennium defines professional development as “a growth-promoting learning process that empowers stakeholders to improve the educational organization” (MDE, 1998). It states that the purpose for professional development is “to improve student learning by creating an environment that will enable stakeholders to: invest in quality opportunities to grow individually and collaboratively, enhance job-related skills, acquire new knowledge, and share expertise and insights” (MDE, 1998). The eight principles of effective professional development
outlined by Hawley and Valli (1999) provide the model used by the developers of Mississippi’s professional development model. These researchers examined effective professional development programs for common factors. The eight principles outlined in the model were associated with all programs studied and established an essential characteristic of effective professional development that involves continuous teacher learning within the context of collaborative problem solving (Hawley & Valli, 1999). The model design identifies these principles as effective characteristics that are grounded in research and shown to be essential to improving student academic performance. The work group that created Mississippi’s professional development model used this report as a blueprint for its design. The following is a list of the eight characteristics as defined by the model with the workgroup’s explanation given for contextual significance and application.

1. Be driven by analysis of the difference between (a) goals and standards for student learning and (b) student performance. All professional development efforts should be driven by analyses that is student-centered and defines what educators need as opposed to what they want to learn (MDE, 1998).

2. Involve learners (e.g., teachers) in identifying what they need to learn and, when possible, in developing the learning opportunity or process to be used. Professional development should promote learner motivation by involving them in identifying what is to be taught and the method in which it is taught (MDE, 1998).
3. Be primarily school-based and integral to school operations. Professional development should directly relate to specific school curriculum and operations. Teachers should be allowed to recognize, analyze, and solve genuine problems and concerns within their school (MDE, 1998).

4. Provide learning opportunities that relate to individual needs but are organized around collaborative problem solving. Effective professional development should allow teachers to work collaboratively to clarify their learning needs and share knowledge as well as expertise (MDE, 1998).

5. Be continuous and ongoing, involving follow-up and support for further learning including support from sources external to the school. Professional development should be ongoing that allows for teachers to enrich their professional development experiences with sources that are found beyond the school (MDE, 1998).

6. Encourage educators to systematically evaluate the results of their efforts to apply what they’ve learned through staff development. Educators should be encouraged to systematically evaluate the overall effectiveness of their staff development experiences to discover why or why not student achievement has been influenced (MDE, 1998).

7. Provide opportunities to engage in developing a theoretical understanding of the knowledge and skills to be learned. This characteristic emphasizes the importance for all educational ideas and practices to be modified to particular students and contexts in order to be effective. Teachers should be encouraged to take theoretical understanding and mold them to their specific students and classroom curriculum (MDE, 1998).
8. Be integrated with a comprehensive change process that deals with the impediments to, and facilitators of, student learning. This characteristic sums up all others by highlighting the very basic concept of applying newly learned knowledge and skills with the goal of enhancing student learning. The first section analyzes the Mississippi Department of Education’s professional development model that was created in 1996. It was developed with the goal of providing support to educators as they strive to meet the ever-changing needs of their students (MDE, 1998).

Mississippi’s model for professional development includes multiple forms of learning intended to be relevant to teachers in the classroom, as well as supportive of school plans for organizational improvement. It is based upon a shared vision and goals for improving student performance including achievement, behavior, and attitude. It supports professional development that is intensive, high-quality and of a sufficient duration to have a positive impact on teaching and learning and ultimately on student success in the classroom.

In July of this year, Learning Forward (formerly the National Staff Development Council, NSDC) released the Standards for Professional Learning (2011). This newly revised list of seven standards outlines the characteristics of professional learning that produce effective instructional practices, supportive leadership, and improved student achievement. These standards were established in an effort to describe the attributes that guide the decisions and practices of educators when constructing professional learning opportunities and plans (Learning Forward, 2011). “The standards make explicit that the purpose of professional learning is for educators to develop the knowledge, skills, practices, and dispositions they need to help students perform at higher levels” (Learning
Forward, 2011, p. 14). The following is the published list of the newly revised *Standards for Professional Learning* developed by Learning Forward (2011):

1. *Learning Communities*: Professional learning that increases educator effectiveness and results for all students occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment (Learning Forward, 2011).

2. *Leadership*: Professional learning that increases educator effectiveness and results for all students requires skillful leaders who develop capacity, advocate, and create support systems for professional learning (Learning Forward, 2011).

3. *Resources*: Professional learning that increases educator effectiveness and results for all students requires prioritizing, monitoring, and coordinating resources for educator learning (Learning Forward, 2011).

4. *Data*: Professional learning that increases educator effectiveness and results for all students uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning (Learning Forward, 2011).

5. *Learning Designs*: Professional learning that increases educator effectiveness and results for all students integrates theories, research, and models of human learning to achieve its intended outcomes (Learning Forward, 2011).

6. *Implementation*: Professional learning that increases educator effectiveness and results for all students applies research on change and sustains support for implementation of professional learning for long term change (Learning Forward, 2011).
7. **Outcomes:** Professional learning that increases educator effectiveness and results for all students aligns its outcomes with educator performance and student curriculum standards (Learning Forward, 2011).

Both the eight characteristics for effective professional development (MDE, 1998) and the seven standards for professional learning (Learning Forward, 2001) provide the conceptual framework for this study. In fact, part of the research utilized to develop the eight characteristics came from an earlier set of standards published by the NSDC in 1995. Now that these standards have been revised, it is vital to include them as the current guide for effective professional development.

### History of Professional Development in Mississippi

Teacher professional development programs in Mississippi are guided by both state and federal laws. Educational reform efforts over the last two decades have increased the rigor of curriculum content and raised the goals for student achievement. This realization has demanded attention to be placed on the quality of teacher professional development (Borko, 2004). Mississippi has been a catalyst for many of these reform efforts.

For this study, the historical background of professional development in Mississippi begins with the 1982 special legislative session spearheaded by Governor William Winter (Nash & Taggart, 2006). It was during this time that the Governor signed into law the Education Reform Act of 1982. This comprehensive package of initiatives defined many aspects of current operations of the public school system in Mississippi including,
mandatory statewide kindergartens, a new reading aide program that placed teaching assistants in the first three grades of elementary schools, a compulsory attendance law, teacher pay raises, the initial public school accreditation system, powers and responsibilities of the new lay board of education, and training programs for school administrators (Nash & Taggart, 2006, p. 170).

Governor Winters spoke of the momentous occasion, saying:

The needs of education and the relationship of those needs to our future growth and progress cannot be put aside any longer. . . . Per capita income is tied directly, unequivocally, and irrefutably to education. Unless we take some very specific actions to improve our educational system, it will never be adequate to move our state out of last place in per capita income. It’s time to act now . . . I hope that we will seize the opportunity to do the most significant thing that you or I may have the privilege of doing. (Nash & Taggart, 2006, p. 170)

It was from this reform effort that legislative mandate section 37-17-8 of Mississippi Code of 1972 was amended to address the establishment of criteria for comprehensive in-service staff development plans in each school district in the state. A portion of this mandate was amended during the 1992 legislative sessions and again in 1998 sessions. This amendment specifically addresses staff development plans and currently states in part,

The State Board of Education, through the Commission of School Accreditation, shall establish criteria for comprehensive in-service staff development plans. These criteria shall: (a) include, but not be limited to, formula and guidelines for allocating available state funds for in-service training to local districts; (b) require
that a portion of the plans be devoted exclusively for the purpose of providing staff development for beginning teachers within that local district and for no other purpose; and (c) require that a portion of the school district's in-service training for administrators and teachers be dedicated to the application and utilization of various disciplinary techniques. The board shall each year make recommendations to the Legislature concerning the amount of funds which shall be appropriated for this purpose (MS Code 37-17-8).

In response to the 1992 amendment of MS Code 37-17-8, the Mississippi Board of Education established its policy requiring a professional development model for local school districts. State School Board Policy 4500 was revised in October of 1997 and currently reads,

The Mississippi Department of Education will develop and disseminate a professional development model which sets forth expectations for individual educators and for local school district programs. As revisions are made and approved by the State Board of Education, the modifications will be disseminated to the appropriate individuals in the education community. An up-to-date copy of the model shall be kept on file in the Mississippi Department of Education.

(MDE, 1997, p. 1)

In compliance with this policy, the Mississippi Department of Education – through the Department of Leadership Development and Enhancement – created the model, Professional Development for the New Millennium (MDE, 1998). This was done through the joint-efforts of a work group established by MDE. This group was comprised of all stakeholders including school administrators, teachers, community and business
leaders, state level educators, representatives from institutions of higher learning, and the state legislature. They worked over a six month period constructing the initial model (MDE, 1998). A major part of their efforts was seeking continuous input and support from various professional and state organizations as well as education support groups.

The State Board of Education approved this model in 1996 (MDE, 1998), and it became the blueprint for coherent professional development in Mississippi. In 1998, the Mississippi Legislature amended MS Code 37-17-8 concerning specific requirements. MDE in response then revised their model to reflect statutory changes (MDE, 1998). To the best of this researcher’s knowledge, this professional development model has not been revised since this time.

Research cited in the establishment of this model is still relevant to current educational reform efforts. Moreover, the Mississippi Board of Education continues to support the vital importance of teacher professional development through its ongoing support of the model. For Mississippi public school teachers and their school districts, *Professional Development for the New Millennium* serves as a handbook that provides the definition and purpose of professional development, as well as identifies the eight design characteristics for professional development strategies that research has shown to be essential to improving students' learning over time (MDE, 1998). Support and guidance for Mississippi’s focus on teacher professional development would be strengthened as federal lawmakers began to review educational reform movements on a national level. Beginning in 1994, the federal government began to reinvest their focus on research findings that presented guidance in the key features of school improvement and increased student achievement.
Federal law addressing various national educational issues spans several decades. For this study, the timeline for relevant federal legislation begins in March of 1994 with the enactment of the Educate America Act. This piece of legislation (Goals 2000, 1994) strengthened reform efforts for teaching and learning nationwide. This legislation mandated educational reform emphasizing the importance of consensus decision-making and unbiased educational opportunities that produced student achievement. Specifically, goal four of this mandate was significant in addressing the need for effective professional development. It reads,

(1) By the year 2000, the Nation's teaching force will have access to programs for the continued improvement of their professional skills and the opportunity to acquire the knowledge and skills needed to instruct and prepare all American students for the next century.

(2) The objectives for this goal are that (i) all teachers will have access to pre-service teacher education and continuing professional development activities that will provide such teachers with the knowledge and skills needed to teach to an increasingly diverse student population with a variety of educational, social, and health needs; (ii) all teachers will have continuing opportunities to acquire additional knowledge and skills needed to teach challenging subject matter and to use emerging new methods, forms of assessment, and technologies; (iii) States and school districts will create integrated strategies to attract, recruit, prepare, retrain, and support the continued professional development of teachers, administrators, and other educators, so that there is a highly talented work force of professional educators to teach challenging subject matter; and (iv) partnerships
will be established, whenever possible, among local educational agencies, institutions of higher education, parents, and local labor, business, and professional associations to provide and support programs for the professional development of educators. (Goals 2000, 1994, Sec. 102)

This piece of legislation gave revised encouragement for educational reform in Mississippi through effective professional development. It provided not only Mississippi, but also the nation as a whole with a framework for meeting national education goals. Furthermore, it reflected what research was saying about the vitality of effective professional development in reforming the nation’s educational operations and improving student achievement.

The Federal government, again, ratified Mississippi’s educational reform efforts with the No Child Left Behind Act of 2001. This federal law supports standards-based educational reform. It focuses on establishing high standards and setting measurable goals for student achievement. Relevant to this study, NCLB spotlights the importance of high-quality professional development through mandates outlined in Title II, Part A. Specifically, section 2112 requires states to submit an application for funding that must include the following,

(6) A description of how the State educational agency will encourage the development of proven, innovative strategies to deliver intensive professional development programs that are both cost-effective and easily accessible, such as strategies that involve delivery through the use of technology, peer networks, and distance learning.
(7)(A) A description of how the State educational agency will ensure compliance with the requirements for professional development activities described in section 9101 and how the activities to be carried out under the grant will be developed collaboratively and based on the input of teachers, principals, parents, administrators, paraprofessionals, and other school personnel. (NCLB, 2002)

NCLB also targets the quality of classroom teachers by requiring that teachers be highly-qualified according to a specified criteria provided by the law. The goal of this land-mark piece of legislation is to assure that a highly-qualified teacher is present in every classroom. It gives educators a definition of what constitutes a high-quality teacher and requires that only those meeting these standards be present in the classroom. NCLB requires teachers in K-12 schools to meet its definition of highly-qualified through three criteria: 1) hold a minimum of a bachelor's degree, 2) meet full state teacher certification requirements, and 3) demonstrate subject matter knowledge in each core academic subject assigned to teach, including in Bilingual, English Language Learner, and Special Education classrooms (NCLB, 2002).

The U.S. Department of Education gave flexibility for veteran teachers to meet NCLB’s highly-qualified teacher requirements by allowing states to create an alternative method of demonstrating subject area competency and justifying certification. The HOUSSE (High, Objective, Uniform State Standard for Evaluation) option for teacher certification is a state-defined method that defines proof of meeting requirements as a combination of teaching experience, professional development, and knowledge of subject garnered over time in the profession. HOUSSE requirements are outlined in USDE (2009) policy that states:
(a) measure grade appropriate subject-matter knowledge and teaching skills, (b) be aligned with K-12 learning standards, (c) provide objective, coherent information on teachers’ subject matter competency, (d) be applied uniformly, (e) take into consideration, but not be based primarily on, the time a teacher has been teaching a subject, and (f) be made available to the public. (p. 16)

Current federal and state legislation have given new life to the educational reform movement in Mississippi that began in 1982. NCLB has provided strength behind the reform philosophy that sparked Governor Winter’s zealous push toward reforming Mississippi’s education system. State accountability standards echo that resounding belief that teachers must be provided with high-quality professional development in order to fuel a positive change in student achievement.

Relevant Studies

There has been a tremendous amount of literature written over the past two decades that focuses on professional development, teacher learning, and teacher change. Both large and small scale studies using various methods of collecting data have emerged targeting the “best practices” of teacher professional learning. Despite these efforts, very few have conducted systematic research on the influences of teacher professional learning on student outcomes (Garet et al., 2001). In an era of standards-based education, there has been no systematic examination of the evidence supporting the theory that implementing content standards results in improved teaching (Snow-Renner & Lauer, 2005).

In 2005, the Mid-Continent Research for Education and Learning (McREL) researchers published their findings about the influence of standards on K-12 teaching
and student learning (Snow-Renner & Lauer, 2005). Their research included the 54 articles that addressed 37 major studies. Many of these studies used both quantitative and qualitative data to analyze changes in teacher instruction or student achievement that would be attributed to professional development or how teachers structure their professional learning opportunities. Most of these studies focused on math or science, with fewer focused on language arts and social studies (Snow-Renner & Lauer, 2005). Results found that standards-based professional development can have a positive effect on classroom practice and student achievement. However, the researchers did note that the research was mixed because there was either no comparison group, or that professional development is often part of a multi-pronged systemic improvement strategy (Snow-Renner & Lauer, 2005).

Based on the McREL study, the characteristics of high-quality professional development that will most likely have a positive affect on teacher instruction are:

1. Of considerable duration
2. Focused on specific content and/or instructional strategies
3. Characterized by collective participation of educators
4. Coherent
5. Infused with active learning

Snow-Renner and Lauer (2005) concluded that states should focus on ensuring that all schools have the resources, time, and money to provide teachers with high-quality professional development. Furthermore, they assessed that professional development that truly produces highly-qualified teachers is a new venture for American education and, without focused allocation of increased resources to support professional learning, the
promise of “highly-qualified” teachers becomes an empty political phrase (Snow-Renner & Lauer, 2005).

Additionally, the researcher strongly reviewed a coordinated set of studies conducted by a team of researchers that evaluated the effectiveness of the federal government’s Eisenhower Professional Development Program (Porter, Garet, Desimone, & Birman, 2003). These large-scale studies surveyed a national probability sample of more than 1,000 teachers who participated in professional development sponsored, at least in part, by the Eisenhower program (Birman, Desimone, Porter, & Garet, 2000). These researchers conducted six exploratory case studies and 10 in-depth case studies in five states. The analyses for these studies observed the relationship connecting professional development characteristics and teacher outcomes with a constant of the subject matter taught, school poverty level, percentage of minority students, school levels, teacher gender, teacher certification, and teacher years of experience (Birman et al., 2000). They hypothesized that by focusing on specific subject content, by engaging teachers in active work, and by fostering a coherent set of learning experiences, a professional development activity is likely to enhance the knowledge and skills of participating teachers and improve their classroom teaching practice (Birman et al., 2000; Garet et al., 2001). Birman et al. (2000) identified three structural features that created the context for professional development. These structural features are defined by Birman et al. (2000) as follows:

1. Form – was the activity structured as a “reform” or “traditional”? Reform activities could be but are not limited to study groups, teacher networks, mentoring relationships, committees, internships, individual research projects, or teacher resource
centers. Traditional activities are those structured in the traditional format of a workshop or a conference.

2. Duration – The amount of time participants spend in the activity and the time span of the activity.

3. Participation – Did the participants work collectively in groups of teachers from the same school, department, or grade level, or did teachers from various schools participate individually?

The researchers for this study also identified three core features that characterize the processes that occur during a professional development experience. These core features are defined by Birman et al. (2000) as follows:

1. Content focus – the level that the activity focuses on improving and deepening teachers’ content knowledge.

2. Active learning – What opportunities did teachers have with actively engaging in meaningful analysis of teaching and learning?

3. Coherence – Did the professional development activity encourage continued professional communication among teachers and incorporate experiences that are consistent with teachers’ goals and aligned with state standards and assessments?

The researchers used detailed descriptions from teachers about their professional development experiences to estimate a formal causal model for identifying effective professional development characteristics. They found support for their model in that the structural characteristics of professional learning activities affect the core features. The core features, in turn, influence how successful the experience is in increasing teacher-reported professional growth and practice (Birman et al., 2000).
This study aimed to define the characteristics of effective professional learning that produce new knowledge and skills and influence student achievement. There are several pieces of literature that report the findings from this analysis. Each of the researchers published an article highlighting the significant results found from their work. The following comments highlight their findings.

The most referenced work from this research is Garet et al. (2001), whose work targeted the connection between teacher professional learning and the participants’ instructional practices as part of a national evaluation of the Eisenhower Professional Development Program. The data gathered were the results from the Teacher Activity Survey conducted using a nationwide classroom teacher sample. It measured the relationship connecting newly learned knowledge from professional development experiences and related changes in the participants’ instructional practice (Garet et al., 2001). Results revealed that the professional development experiences of those surveyed had a significant relationship with changes in their teaching practice. Moreover, it was determined that the type of these experiences was more significant than the length. This was significant considering the amount of critics who encouraged reform methods of design over traditional structures. The study revealed that participants were more likely to participate in collaborative activities grounded in reform efforts, and that the duration of professional development had a significant effect on their collaborative learning efforts. This research was relevant to professional development reform efforts because it gathered data from a large sample of the nation’s teachers. It is important to note, however, that this research did not address the possible relationship between teacher professional learning and its direct effect on student academic performance.
Desimone, Porter, Garet, Yoon, and Birman (2002) wrote an article on the research findings of this study that pointed to examining the association between changes in participants’ instructional practice and their professional learning experiences in an effort to expand on Garet et al. (2001). This study wanted to identify instructional practices introduced through the Eisenhower program that were ineffective as well as effective. Desimone et al. (2002) used the teacher survey results from thirty schools in ten districts. Study participants described professional development activities that they participated in over a year’s time and responded to survey instruments that targeted the characteristics of effective professional learning. They answered questions about their instructional practices in the contexts of instruction strategies, use of technology, and assessment.

Participants were asked about possible changes that occurred after their professional development experiences. It was revealed that professional learning opportunities that centered on precise instructional practices had the greatest effect on change towards teachers’ classroom practices. Professional development was most effective when it provided learning opportunities like colleague interaction to reflect on student achievement and progress, advanced instruction, and the use of various assessments. Developing a connection between teacher learning activities and their previous knowledge also increased professional development effectiveness (Desimone et al., 2002).

Porter et al. (2003) also reported on the Eisenhower Professional Development Program study. This piece of literature discussed effective professional development characteristics in relation to the strategies that school districts could use to provide
effective professional development activities. Here, the researcher determined that change in teacher practice was more likely to occur if professional development was connected to their other professional experiences, aligned with standards and assessments, and fostered professional communication (Porter et al., 2003).

Porter et al. (2003) concluded that many school districts fail to establish meaningful professional development programs. They speculated that one reason for this inconsistency may be the overall cost of providing such programs:

High-quality professional development is expensive, and we estimate that districts spend only $185 per teacher participation. Districts may spend so little money per teacher because they feel a responsibility to provide professional development to all of their teachers. This may push them in the direction of professional development with lower cost per participation. (Porter et al., 2003, p. 29)

All of this literature (Birman et al., 2000; Desimone et al., 2002; Garet et al., 2001; Porter et al., 2003) revealed that effective professional development has certain characteristics. All targeted teachers’ knowledge of specific content matter in relation to how students learn. Also, these studies found that effective professional learning activities provided on-going opportunities for continuous learning through collective participation. These activities included teachers observing teachers, collaborative planning, and small groups reviewing student work. All effective professional development activities supported established school and district goals and were aligned with state standards and assessments (Garet et al., 2001). Moreover, their collective study found that the strength of reform activities was that they tend to have more contact hours and span a longer period of time than traditional activities. This has direct effect on the
core features of active learning, coherence, and content focus (Porter et al., 2003). These
findings confirmed the belief that the structure of professional learning has a significant,
positive effect on modifying and changing classroom instructional strategies. In addition,
this study found that reform-influenced professional development activities produced
more positive results than traditional structures. Penuel, Fishman, Yamaguchi, and
Gallagher (2007) reported that these studies provided a strong basis for developing
hypotheses about what makes professional development effective.

More recently, a large scale study was performed by Penuel et al. (2007) similar
to the research conducted on the Eisenhower program. This research studied professional
development experiences derived from The Global Learning and Observations to Benefit
the Environment (GLOBE) program. This is a K-12 school-based science and education
program that studies the dynamics of Earth’s environment. This research reviewed the
various approaches to professional learning that have the greatest impact on change with
instructional strategies and application of the curriculum. Data addressing follow-up
activities as a factor for change in instructional practice was also analyzed. Information
was gathered from teachers who were a part of GLOBE professional learning programs,
as well as the GLOBE program providers. Program design, participants’ perceptions of
their professional learning experiences, and their use of learned skills and knowledge was
the focus of the method used to collect data. This study found several interesting
relationships. Professional learning activities that targeted curriculum content had a
noteworthy effect on teacher instructional practice. Results found that the method used
for conducting professional learning opportunities influenced participants’ application of
the instructional program. Reform-type activities such as collaborative groups had an
encouraging effect on change in teacher practice. In addition, sustained activities that followed initial professional learning activities produced a positive effect on the participants’ knowledge and skill implementation. Additionally, this study found that activities focused on the individual teacher’s professional needs proved to be a significant factor affecting his or her preparedness. Penuel et al. (2007) also found that professional development designed to span a longer period of time will require coordination with classroom teachers and may be more effective following a reform-oriented design.

These studies, along with others with a similar focus, provide a foundation for discovering a significant relationship between professional learning that produces modification or complete change in instructional practices that affect student academic performance (Desimone et al., 2002). It is important to note, however, that these previously referenced research studies (Birman et al., 2000; Desimone et al., 2002; Garet et al., 2001; Penuel et al., 2007; Porter et al., 2003) all focused on the relationship between professional development and change in teachers’ knowledge and instructional practice. They were not studies addressing the effects of professional development on student achievement.

Yoon et al. (2007) shed light on the complexity of the relationship between professional development and improvements in student learning. Their research showed the exceptionally modest amount of valid and scientifically defensible evidence on this comparison. Out of the more than 1,300 studies reviewed, Yoon et al. (2007) found only nine that met the standards of credible evidence set by the What Works Clearinghouse. Moreover, these nine studies focused on elementary schools and were conducted between 1996 and 2003. No studies of professional development at the middle school or high
school levels met the research standards, nor were any of the studies published between 2004 and 2006 (Guskey & Yoon, 2009).

Educational Reform Through Effective Professional Development

Educational reform is setting ambitious goals for student learning (Borko, 2004). The researcher for this study sought to discover how teachers in Mississippi view their professional development experiences in relation to student achievement. In other words, do teachers believe that their professional development experiences have an effect on influencing the increased achievement of their students?

In order for public education in Mississippi to improve student learning, reform must take place. Putman and Borko (2000) reveal that significant educational reform begins with changes in instructional practice and requires a large amount of learning and modification from the classroom teacher. Harvey Daniels champions this belief during his address to the U. S. Senate (Center for Comprehensive School Reform, 2006) by stating,

 too many professional development programs are generic, promising to raise achievement by addressing diffuse issues such as thinking skills or classroom management. However[,] the most effective programs put content at the center, focusing professional development squarely in the curriculum: on math, or science, or writing, social studies, or reading. (p. 4)

Research has been consistent when examining professional development. The literature can be divided between two conceptual ideas. Studies in the 1960s focused on generalized classroom topics such as time management, providing clear demonstrations, and maintaining students’ attention. These studies revealed moderate gains in students’
basic skills (“Teaching Teachers,” 2005). Beginning in the 1990s, research shifted its attention to a deeper analysis of student learning with an emphasis on reasoning and problem solving skills. Accordingly, professional development was viewed as a possible influence on teacher practice. How students learn, instructional practice tied to subject matter, and teachers’ knowledge of subject matter are key concepts derived from these studies (“Teaching Teachers,” 2005). Research during this wave of studies viewed professional development as a means to improve teacher quality, the theory being that this improvement would have a positive effect on student achievement. Darling-Hammond & Richardson (2009) defend the belief that,

to help young people learn the more complex and analytical skills they need for the 21st century, teachers must learn to teach in ways that develop higher-order thinking and performance. To develop the sophisticated teaching required for this mission, education systems must offer more effective professional learning than has traditionally been available. (p. 1)

The concept of professional learning for classroom teachers has developed and changed in much the same manner as the advancement of educational reform in the American public school system. Katzenmeyer and Moller (2009) illustrated this evolution by structuring a timeline for the history of teacher leadership. Emphasizing the same metamorphosis as “Teaching Teachers” (2005), they showed the transition from teacher-centered professional development to a more collaborative student-centered philosophy embedded in standards-based reform and professional learning communities (PLCs). Katzenmeyer and Moller (2009) outlined the progression of staff development from teacher-centered to student-centered. They begin by highlighting the workshop and
expert training methods of the 1970s. From the 1980s, the researchers targeted the emphasis placed on the concept of collaborative decision-making. This led to the focus on professional learning through small communities found prevalent, in 1990s literature.

Reform efforts have led educational scholars and policy makers to demand professional development that will help teachers enhance their knowledge and develop new instructional practices (Borko, 2004). “Simply stated, to improve American education, we must develop a highly qualified teacher workforce that will, in turn, use its knowledge, skills, and dispositions to ensure increasingly higher levels of performance of our K12 students (Sykes, 1999)” (Katzenmeyer & Moller, 2009, p. 46). This idea supports the reform research findings that the quality of a teacher is the most significant predictor of student success (Danielson, 2008; Hattie, 2003; Darling-Hammond & Rustique-Forrester, 1998).

Change in teacher instructional practice is essential for educational reform and will require support and guidance for professional learners (Borko, 2004). This reform effort is fueled by significant research findings that support numerous theories on effective instructional strategies. Darling-Hammond and Richardson (2009) point to the emphasis research has on the effectiveness of sustained, job-embedded, collaborative teacher learning strategies. They state, “when schools support teachers with well-designed and rich professional development, those teachers are able to create the same types of rigorous and engaging opportunities for students” (pp. 5-6). Continued support for this belief is found in “Teaching Teachers” (2005), which emphasizes that teachers improve their teaching skills through extended periods of focused professional development. Jaquith, Mindich, Wei, and Darling-Hammond (2010) conclude that
state policies and systems that ensure accountability and monitor professional
development, when coupled with intermediary organizations that help extend the
reach of state agencies, support professional learning, and provide a voice for
local stakeholders and outside experts, are among the key factors in implementing
effective professional development across a variety of local schools and districts
(p. 4).

There is a significant correlation between student achievement and teacher
classroom practices (Darling-Hammond, 1996). Guskey (2003) found that the most
frequently mentioned characteristic of effective professional development is enhancement
of teachers’ content and pedagogical knowledge, which allows them to teach a deeper
level using the instructional strategies that will enhance student learning. For this to be
accomplished, professional learning must become a high priority within the school
(Danielson, 2008). It is evident through reform efforts that continuous professional
development programs that address academic content as well as how students learn
content are more effective (Viadero, 2007). “Extended opportunities to better understand
student learning, curriculum materials and instruction, and subject-matter content can
boost the performance of both teachers and students” (“Teaching Teachers,” 2005, p. 4).
Improving student learning consists of more than establishing new programs; it involves
understanding how students learn (Danielson, 2008).

Research supports the idea that the most qualified contributor to the overall
impact that professional development makes on student academic achievement are
teachers who participate in professional learning opportunities supported in a culture of
inquiry (Danielson, 2008). Borko (2004) described learning for teachers as different
aspects of practice, including their classrooms, school communities, conversations with colleagues, and counseling a troubled child. “To understand teacher learning, we must study it within these multiple contexts taking into account both the individual teacher-learners and the social systems in which they are participants” (Borko, 2004, p. 4). The daily exchange between classroom teachers and their students is significant. For this reason, teacher quality is an important factor affecting student achievement (Darling-Hammond & Ball, 1997). Moreover, Danielson (2008) states, “teaching is so complex that it is never done perfectly; every educator can always become more skilled, more expert” (p. 17).

The concept of supplying highly-qualified teachers (NCLB, 2002) in every classroom has prompted educational leaders to establish a level of professional learning that encompasses the criteria for effective professional development that is defined through the literature on educational reform. For Mississippi educators, the reform movement has sparked serious debate about the equitable level of high-quality professional development available to all classroom teachers throughout the state. Highly qualified teachers are essential for successful educational reform to occur (Desimone et al., 2002). This is a profound fact that is overshadowed by numerous elements that greatly deter the provision of high-quality professional development that teachers deserve. One example found is that school contexts differ drastically, and what works well in one setting may not work equally well in another (Guskey, 2009). Since the Education Reform Act of 1982, state policy makers and educational leaders have sought ways to improve student achievement in Mississippi.
The various definitions given for professional development provide a framework for understanding the breadth of the concept (Hirsh, 2009a). Accordingly, Learning Forward (the international association of learning educators focused on increasing student achievement through more effective learning) has introduced the *Standards for Professional Learning* (Learning Forward, 2011) to the Senate HELP Committee and submitted a request to amend the current definition for professional development found in the Elementary and Secondary Education Act (ESEA). If amended, these standards will align the ESEA with the newly published characteristics of professional learning that lead to effective teaching practices, supportive leadership, and improved student results (Learning Forward, 2011). This will be most significant in providing a collective view of the elements of effective professional learning.

Adding to the complexity of defining effective professional development, Hochberg and Desimone (2010) pointed out that accountability standards generated from the current reform legislation require effective professional development in order to produce teacher success that positively affects student academic performance. The instructional strategies needed to impact student achievement should be presented through highly effective professional development that enhances both content knowledge and pedagogical skills that engage the various learning styles of the 21st century student (Ingvarson et al., 2005). Hochberg and Desimone (2010) submit that professional learning is essential for nurturing the knowledge and skills of the classroom teacher so that he or she may apply research-based learning strategies for the improvement of all students’ academic performance. Student-centered professional development embedded
in content standards is an effective method of improving student achievement (Darling-Hammond, Wei, Andree, Richardson, Orphanos, 2009).

Nevertheless, the sustainability of educational reform depends greatly on the quality of classroom teachers (Desimone et al., 2002). Quality professional development is required for teachers to meet the ever-changing demands of school reform (Hochberg & Desimone, 2010). High-quality, effective professional development is essential for providing teachers with the instructional strategies necessary to improve teaching practices and student learning (Ingvarson et al., 2005).

It is evident that educational reform has had a significant influence on the philosophies that drive decisions about professional development. However, as Reeves (2008) points out, “if we have learned anything in the past few decades of ill-fated educational reform efforts, it is that professional development in the traditional form has not worked” (p. 60). The point is that truly effective professional development may stem not from a single list of best practices, but instead from a collection of core elements that must be adapted to the unique contextual characteristics of a particular school. No professional development practice, strategy, approach, method, or activity works well under all conditions. (Guskey, 2009, p. 231)

Educational reform efforts have promoted the use of data to drive planning and development of professional learning. Hattie (2005) states,

the major influence on student learning is the teacher; and here is where I wish to locate the issue of ‘What data would support a teacher to enhance teaching and learning?’ and thus how can we devise systems to ensure that such data is obtained, and when obtained that it makes a difference? (p. 14)
Hawley and Valli (2000) present the theory that examination of student academic performance prescribes the goals teachers will work to achieve through professional development. Educational reform fueled by data-driven decisions is redefining professional development. Desimone (2009) adheres to the concept of true professional learning as moving beyond isolated workshops and conferences to a continuous practice of professional learning emerged in contexts that consider both the teacher and student performance outcomes.

Desimone (2009) concludes that research provides various professional development definitions as well as the characteristic of effective teacher professional development. The definition established by NCLB (2002) views professional development as a necessity in advancing teachers’ understanding of academic subjects and pedagogical knowledge as they strive to become highly-qualified. This has been a cultural shift for many schools where privatized teaching occurs. Discussions are driven by curriculum and student achievement and are less about teachers (Hattie, 2005).

The overall goal of high-quality professional development should be to develop teacher effectiveness on increasing student academic performance (Hirsh, 2009a). One reason for the lack of success with professional development for teachers has been that too much of it does not have enhancement of student learning as the contingency of success (Hattie, 2005). Research shows that this should be accomplished using professional development activities that are focused on collective responsibility, are aligned with student academic performance standards, are coherent with organizational goals, and take place on a continuous basis with collaborative teams of educators involved in ongoing improvement (Learning Forward, 2011; Marzano, 2003; Snow-
Moreover, professional development activities supported by external methods of delivery (webinars, college courses, workshops, etc.) and that address student learning goals inadvertently advance ongoing professional development efforts (Hirsh, 2009a). Teacher professional learning activities should strive to directly affect classroom instructional practice as well as student academic performance. This school of thought is evident in NCLB’s (2002) explanation of high-quality professional development by its focus on increased understanding of academic content, opportunities for active learning, and the promotion of coherence among all elements of improvement.

Learning Forward’s (2011) definition of professional development describes the term as an intensive, sustained approach to improving both teachers’ and principals’ effectiveness in raising student achievement. The scope of this meaning includes developing teacher effectiveness in the classroom and the school principal’s effectiveness as instructional leader. It constitutes a priority on developing academic standards, providing opportunities for student as well as teacher learning needs, monitoring of resources, embedded ongoing implementation, and assessments evaluating professional learning activities. It is currently the most comprehensive definition provided by current literature.

Research has promoted an increase of knowledge and skills in an effort to raise the effect of professional practice on student learning. Additionally, Guskey (2003) promoted the idea that professional learning activities that have specific evaluation methods, are aligned with other reform initiatives, are site-based, and provide continuous time for skills development can have a positive effect on student achievement. Darling-Hammond and Richardson (2009) expressed their belief that true professional learning
that enhances teachers' professional practice as well as student learning must consist of content that is active and sustainable and that considers student learning in the context of school improvement goals. They concluded that meaningful professional development provides opportunities for active learning (Darling-Hammond & Richardson, 2009).

One major focus of reform efforts has been in the concept of support through follow up activities to sustain implementation. Effective professional development activities are ongoing and sustained throughout a teacher’s career (Borko, 2004). Yoon et al. (2007) supports the idea that sustained professional development has a positive effect on student academic performance. Additionally, Joyce and Showers (2002) conclude that it is important in producing effective implementation to have quality methods of training for follow-up activities that occur after initial training. They determined that effective learning processes are complete once new knowledge transfers to instructional practice. Darling-Hammond and Richardson (2009) theorize that instructional practices will likely improve once professional learning is a coherent part of school improvement efforts and is sustained through program or skill implementation. Marzano (2003) emphasizes the need for coherent professional development activities centered in active learning opportunities.

Darling-Hammond and Richardson (2009) view professional development as an approach to creating a coherent element of school reform. The emphasis placed on professional learning fueled the revision of Learning Forward’s professional learning standards. *Standards for Professional Learning* were developed from the belief that, if teachers are not learning collaboratively in the context of a system-wide plan for coherent learning aligned with school wide goals, professional learning is less likely to produce its
intended results (Learning Forward, 2011). With this in mind, professional learning communities provide teachers with the opportunity for reflection on their professional practices that effectively meet the standards.

A school’s culture dictates, in many ways, the true integration of effective change brought through professional development. Implementation efforts may differ depending on how a school’s environment might influence its teachers’ motivation for educational redesign (Hochberg & Desimone, 2010). Exclusive characteristics of a school should be acknowledged when creating professional learning opportunities. Guskey and Yoon (2009) revealed the necessity at all educational levels for job-embedded assistance for teachers as they struggle to adapt new curricula and new instructional practices to their unique classroom contexts. Teacher collegiality and professionalism is identified by Marzano (2003) as a key concept of educational reform where interactions between teachers are collaborative and congenial.

Much of the current research has identified learning communities as a strategy that possesses the characteristics of effective professional learning. Learning Forward (2011) promotes professional learning committees (PLCs) as a successful method for meeting their standards. The next section discusses some of the research on PLCs as an effective method of producing continuous learning.

Effective Professional Development Through Learning Communities

Effective professional development research points to sustained, job-embedded, and collaborative teacher learning strategies as having the most significant effect on student achievement. Hord (2009) reflects that the purpose of a school is the learning of
its students and that the most significant factor in whether students learn well is teacher quality. Wiliam (2007) states,

the learning community offers both support and accountability, but with two conditions: First, the teacher learning community builds trust among its members so that members can move beyond “polite serial turn-talking” and begin genuinely to engage in each other’s professional development. Second, the teacher learning community is genuinely a meeting of equals, at least in terms of power. (p. 199)

An approach to these criteria that has been featured in current literature is the professional learning community or PLC (Darling-Hammond & Richardson, 2009). The instructional quality of the teacher is improved through continuous professional development (Hord, 2009). Standards-based professional development opportunities must not occur in isolation but, rather, as part of a curriculum (Reeves, 2008). There has been a significant amount of research conducted on the relationship between PLCs and the development of improved teacher performance. Many of these studies conclude that teacher quality is a factor in student achievement. A school that develops a culture of both professional and student learners inherently creates a true educational community.

Hord (1997) stated in a literature review, “the research is clear about the significant outcomes for both staff and students that result from professional organization arrangements such as these” (p. 58). Specifically, Hord (1997) explained that professional learning communities benefited teachers by reducing a sense of isolation, increasing vigor through collective responsibility for students’ success, and producing new knowledge and understanding for both the content area and instructional practice.
Additionally, the study validated benefits that PLCs have for students, with positive effects found on student attendance, decreasing student dropout rates, increasing equitable learning, positive academic achievement in core academic subject areas, and smaller achievement gaps between subgroups (Hord, 1997). Ultimately, Hord (1997) concluded that PLCs can increase the capacity of teachers to serve students, but their success depends on what they do in their collective efforts.

According to Darling-Hammond and Richardson (2009), professional learning communities have the potential to change practice and transform student learning when the processes and structures that make true collaborative work possible are present. DuFour, DuFour, and Eaker’s (2008) research continues to promote the benefit of PLCs as a collaborative process that focuses on an individual school’s vision and beliefs for improvement, budgeting, and effective professional development. Darling-Hammond and Richardson (2009) revealed that PLCs are an excellent, cost-effective approach to meeting these criteria. Additionally, Borko (2004) promotes the theory that PLCs foster teacher learning and instructional improvement. Hochberg and Desimone (2010) define professional learning communities as professional development conducted through small groups of teachers working in a collective manner on instructional planning, sharing ideas, and addressing the needs of struggling students. Darling-Hammond and Richardson (2009) revealed that this type of structure produces collective responsibility in that teachers share the burden for school improvement and student achievement. Hord (1997) determined, through extensive research, that collaborative teams of teachers working toward shared goals are an effective, high-quality professional development model. She theorized that successful professional learning is produced once teachers
discover solutions together. Schools that establish shared goals, promote teachers operating as members of a team, and provide time designated for team collaboration create a working environment in which teachers are well informed, professionally motivated, and become an inspiration to their students (Hord, 1997).

Darling-Hammond et al. (2009) outline the essential conditions required for successful professional learning communities. This research concludes that schools where teachers are provided with scheduled time for collaborative team meetings and are included in decision-making foster more productive learning communities. Hord (2009) described a PLC as a community of staff members that collectively takes responsibility to learn new content, strategies, or approaches to increase its effectiveness in teaching. Ingvarson et al., (2005) concluded, “a substantial level of professional community is vital to significant change” (p. 17). The key factors for this level of professional community are time for teacher reflection, collaborative analyses of and discussions about instructional strategies, and a shared responsibility for student learning and performance (Ingvarson et al., 2005). Hochberg and Desimone (2010) support the value of PLCs by emphasizing that these methods allow for sustained opportunities for collaborative teacher learning. Hord (2009) builds on this concept by determining that a professional learning community grounded in a learner-centered environment produces important outcomes for teachers and significant achievement for their students. PLCs concentrate on applying newly-learned instructional strategies and examining their effects on student academic performance (DuFour, 2004). Moreover, Ingvarson et al. (2005) revealed that professional learning communities have a significant, positive effect on teacher knowledge and professional practice.
Research on effective professional learning indicates that sustained, job-embedded, and collaborative teacher learning strategies have a positive effect on student academic performance. It is clear that current literature points to professional learning communities as an effective method for providing high-quality professional development to classroom teachers. It is so valued among researchers that Learning Forward (2011) identified learning communities as the first standard required for professional learning:

Learning communities bridge the knowing-doing gap by transforming macro-level learning – knowledge and skill development – into micro-level learning – the practices and refinements necessary for full implementation in the classroom or workplace. (Learning Forward, 2011, p. 26)

Effective Professional Development Through Technology

Technology for professional learning creates opportunities to access information that enriches practice (Learning Forward, 2011). Technological resources provide the 21st century educator with real-time information on any and every topic imaginable. However, supplying resources without providing effective professional development is a costly mistake that happens for too often. Insufficient professional development plagues new instructional and technological strategy implementation (Creighton, 2003). Often, school administrators provide the physical hardware and software but fail to produce the other conditions necessary for connecting technology with improved student achievement (Styron & Styron, 2011). Effective school leaders must look beyond teaching just skill knowledge and, instead, work to educate and develop teachers to use technology in order to have a positive effect on student learning.
With this in mind, both the International Society of Technology Education (ISTE) and Learning Forward recognize the vitality of technology integration in professional learning opportunities for teachers. ISTE (2008) provides school administrators with seven factors for successfully implementing technology for learning. These factors begin with the view that effective professional development that uses technology in its process is ultimately the foundation for successful technology integration in the classroom. This factor emphasizes the need for access to professional development that is consistent and on-going in order to provide teachers with up-to-date information about changing programs, resources, and applications. It mirrors Leaning Forward’s second standard for professional learning, which promotes the use of high-speed broadband, web-based professional journals, books, software, and a comprehensive learning management system to support both individual and collaborative professional learning (Learning Forward, 2011). Specifically, Learning Forward (2011) states, “access to just-in-time learning resources and participation in local or global communities or networks available to individuals or teams of educators during their workday expand opportunities for job-embedded professional learning” (p. 33). Technology is a tremendous asset in combating the consistent lack of time for effective professional learning that plagues our schools.

The school administrator has the responsibility of providing effective professional development that helps teachers enhance their craft. Moreover, they must provide on-going support and supervision during implementation of new ideas, methods, and teaching strategies. Effective professional development that uses technology to enhance professional learning empowers teachers to successfully implement technology in classrooms in a manner that promotes creative, intellectual abilities to solve real-world
problems (Creighton, 2003). Furthermore, the use of technology as a delivery system for professional learning has the power to overcome inequities and achieve the desired performance outcomes for educators and students (Learning Forward, 2011).

Summary

This literature review has focused on current research that has influenced the professional development efforts of educational leaders in Mississippi. In addition, studies that define the characteristics of effective professional development and promote the need for educational reform through professional development have been highlighted. Specifically, literature on professional learning communities as an effective approach to meeting the criteria for high-quality professional development and literature analyzing technology integration as an effective professional learning delivery system have been reviewed. The research is clear that PLCs are a cost effective method for meeting the continuous demands of 21st century professional learning. In the same respect, successful technology integration in professional learning opportunities empowers educators to enhance student learning and produce high academic achievement.

This literature review is by no means an exhaustive study. It does, however, provide a foundation for the scope of this research project. Ultimately, the research in this chapter exposes a factual need for professional learning opportunities that possess the elements of effective professional development for teachers to produce change in instructional practice and student achievement. Furthermore, the literature champions the idea that the use of technology must be blended into all aspects of teaching, learning, and professional development (Creighton, 2003).
If Mississippi educators want to truly create permanent change that generates student learning in our public schools, they will value the results of the numerous studies that name the classroom teacher as having the greatest impact on student learning outcomes. In turn, they will value the research that identifies the essential elements for creating effective professional learning opportunities as a vital tool for having the greatest potential to improve teacher practice. “Learning is not an add-on to the role of the professional. It is a habitual activity where the group learns how to learn together continuously” (Hord, 2009, p. 40). Danielson (2008) determined that a culture of inquiry should infuse a school’s practices related to professional development and fuel a culture of ongoing learning. Within the context of nearly every school, there are teachers who have found effective ways to help students learn. Identifying and sharing their strategies and practices might provide a basis for highly effective professional development (Guskey, 2003). The goal of professional development is to have a positive impact on student achievement. Teachers must strive to better their knowledge and infuse what they learn with what they do in the classroom. Wiliam states:

if the research on professional development over the last 20 years has shown us anything, it is that we can change teacher thinking without changing teacher practice, and the only thing that impacts student achievement is teacher practice. So if we are serious about raising student achievement, we must focus on helping teachers change what they do in the classroom. (p. 200)
CHAPTER III

METHODODOLOGY

Overview

Effective professional development demands that classroom teachers be valued as adult learners who bring insight and experiences to reform efforts. Learning environments need to allow for their voices to be heard and their opinions to be expressed (“Center for Comprehensive,” 2006). The purpose of the present study was to examine Mississippi public school teachers’ perceptions of the effectiveness of their professional development experiences in raising student achievement. Data was collected from voluntary respondents to an online survey. This chapter provides information explaining the research design, a description of the process that was used to determine the reliability and validity of the instrument that was used for collecting data, the procedures that were followed in collecting data, the limitations of the study, and the methods that were used to analyze the data.

Research Design

This study sought to discover possible inconsistencies among the equity of professional development opportunities for K-12 teachers in Mississippi. This was achieved by exploring the relationships between the individual professional development experiences of Mississippi teachers and the characteristics of effective professional development identified in the Professional Development for the New Millennium (MDE, 1998) and the Standards for Professional Learning (Learning Forward, 2011).

Research data was collected using a researcher-made online survey (Appendix B) that addressed the characteristics of effective professional development discovered by
previous research. The first four questions of the survey gather descriptive data on voluntary participants. These factors (grade level taught, years of teaching experience, Mississippi license class level, and experience with professional learning communities) were used as independent variables for the study. The dependent variable was Mississippi teachers’ perceptions of their professional development experiences. Statements 5 through 16 addressed the eight characteristics of effective professional development identified in *Professional Development for the New Millennium* (MDE, 1998). Individual statements addressed the eight characteristics as follows:

1. Statements 5, 6, and 7 addressed characteristic number one: Be driven by analysis of the difference between (a) goals and standards for student learning and (b) student performance.

2. Statements 8 and 9 addressed characteristic number two: Involve learners (e.g., teachers) in identifying what they need to learn and, when possible, in developing the learning opportunity or process to be used.

3. Statement 10 addressed characteristic number three: Be primarily school-based and integral to school operations.

4. Statement 11 addressed characteristic number four: Provide learning opportunities that relate to individual needs but are organized around collaborative problem solving.

5. Statements 12 and 13 addressed characteristic number five: Be continuous and ongoing, involving follow-up and support for further learning including support from sources external to the school.
6. Statement 14 addressed characteristic number six: Encourage educators to systematically evaluate the results of their efforts to apply what they’ve learned through staff development.

7. Statement 15 addressed characteristic number seven: Provide opportunities to engage in developing a theoretical understanding of the knowledge and skills to be learned.

8. Statement 16 addressed characteristic number eight: Be integrated with a comprehensive change process that deals with the impediments to, and facilitators of, student learning.

Statements 17 through 35 addressed the Standards for Professional Learning (Learning Forward, 2011). Individual statements addressed the seven standards as follows:

1. Statements 17, 18, and 19 addressed standard one: Learning Communities - Professional learning that increases educator effectiveness and results for all students occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment.

2. Statements 20, 21, and 22 addressed standard two: Leadership - Professional learning that increases educator effectiveness and results for all students requires skillful leaders who develop capacity, advocate, and create support systems for professional learning.

3. Statements 23 and 24 addressed standard three: Resources - Professional learning that increases educator effectiveness and results for all students requires prioritizing, monitoring, and coordinating resources for educator learning.
4. Statements 25, 26, and 27 addressed standard four: Data - Professional learning that increases educator effectiveness and results for all students uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning.

5. Statements 28, 29, and 30 addressed standard five: Learning Designs - Professional learning that increases educator effectiveness and results for all students integrates theories, research, and models of human learning to achieve its intended outcomes.

6. Statements 31, 32, and 33 addressed standard six: Implementation - Professional learning that increases educator effectiveness and results for all students applies research on change and sustains support for implementation of professional learning for long term change.

7. Statements 34 and 35 addressed standard seven: Outcomes - Professional learning that increases educator effectiveness and results for all students aligns its outcomes with educator performance and student curriculum standards.

Statements 36 and 38 addressed the research question: What are Mississippi public school teachers’ perceptions of the effectiveness of their professional development experiences on raising student achievement?

Statement 37 addressed the research question: Are Mississippi public school teachers satisfied with the professional development opportunities provided by the Mississippi Department of Education and their local school district?
Statements 39 and 40 addressed the research question: How does the use of technology as a delivery system enhance the professional development experiences of teachers in Mississippi?

Participants

The participants for this study included K-12 Mississippi public school teachers who were either members of Mississippi Professional Educators (MPE) or employed by one of the 19 randomly selected Mississippi public school districts. MPE is a statewide professional organization that consists of pre-K through graduate school educators in the state of Mississippi. Although the organization’s 10,000 members include teachers, administrators, and non-certified staff, only current K-12 classroom teachers were asked to volunteer to participate in the study. In the same respect, only K-12 classroom teachers employed by the 19 randomly selected school districts were asked to participate. All participants’ confidentiality and anonymity were maintained throughout the study.

Instrumentation

A preliminary questionnaire was developed by the researcher to determine the perceptions of Mississippi public school teachers regarding their professional development experiences. The design of the questionnaire consists of 40 questions divided into three sections. The first section has four questions that gather descriptive data about participants. The second section has 12 questions that collect the participants’ perceptions on their professional development activities as they relate to the eight characteristics of effective professional development (MDE, 1998). The third section has 19 questions that collect the participants’ perceptions on their professional development activities as they relate to the Standards of Professional Learning (Learning Forward,
2011). This section also has two questions that ask for an overall perception of the participants’ professional development activities, as well as the use of technology in enhancing professional learning, and two open-ended questions that allow the participants the opportunity to provide qualitative responses in support of their given perceptions. The second and third section of the preliminary survey adheres to a five-point Likert-type scale (Strongly disagree, Disagree, Neither agree or disagree, Agree, Strongly agree) in an effort to capture the intensity of the participants’ perceptions.

An expert panel was used to review the initial draft of the preliminary survey. This panel was made up of three experienced educators, each with the appropriate knowledge required to perform a constructive critique of the rough draft of the preliminary survey. The first panel expert is currently serving as Superintendent of a public school district in Mississippi. He has 23 years of experience as an educator in Mississippi and has held numerous positions in the educational community, including the office of President of the Mississippi Association of School Superintendents. He holds a Ph.D. in Educational Administration with a doctoral minor in Educational Research from The University of Southern Mississippi. The second panel expert is a retired Mississippi educator who is presently serving as a consultant with the Mississippi Department of Education, providing technical assistance for schools that have been identified as in need of improvement. She has held various positions throughout the educational community, both in K-12 and in higher education. She holds a Ph.D. in Educational Administration from Mississippi State University. The third member of the panel of experts consulted for this study is the Senior Advisor for Learning Forward. She has extensive experience in professional development planning, design, implementation, and evaluation both at the
school and system level. She has authored several books and other publications on the topic of effective professional development.

All three experts were asked to analyze the instrument and provide feedback concerning (a) the face validity of the survey in regards to the reading level of items and possible topics that may be sensitive issues to participants and (b) the content validity of the survey in regards to possible omitted, redundant, and poorly written items.

All members of the panel were complimentary of the preliminary survey and felt that the essence of the study was captured in the wording of the survey questions. Nevertheless, each member had concerns. All experts questioned the reading level of the survey. They all also had issues with the wording of specific questions. All three experts felt that some of the questions were confusing and did not adequately communicate what information was being asked of the participant. The third member of the panel had issues with the sentence structure of some of the questions because they were written in passive voice. All issues, questions, and concerns from the panel of experts were considered by the researcher, and the instrument was refined to meet their specifications.

After the successful defense of the research proposal and approval from The University of Southern Mississippi’s Institutional Review Board was achieved (Appendix A), a pilot study was conducted of the preliminary survey using 26 classroom teachers from the North Pike School District in Summit, MS. Two representatives from each grade level (K-12) were asked to participate in the pilot study. These teachers were non-members of MPE and were instructed not to participate in the actual study. However, they were included in the participation incentive portion of the study in an effort to ensure fairness among all participants. The data from the pilot study was entered into the
computer program, Statistical Package for the Social Sciences (SPSS) to determine reliability. The pilot survey had an internal consistency reliability of .950 measured using Cronbach’s Alpha. The researcher explained to the participants that they should respond to the questionnaire and provide feedback as to the functionally of the survey, clarity of the statements, and if all technical aspects work. They were also instructed to check for grammatical and spelling errors. Their feedback revealed a few minor errors in the initial description of the survey. All necessary adjustments to the survey required to meet validity and reliability issues were made after the pilot study. As a final measure to ensure validity and reliability, the first panel expert was asked to review the revised instrument for possible grammatical errors prior to distribution for the live study.

Procedures

Data was collected during the Spring semester of 2012 by asking public school teachers in Mississippi to complete a researcher-made online survey (Appendix B), which quantified data measuring the perceptions of their experiences with professional development. It also gathered qualitative responses that added support to participants’ quantitative responses and strengthened survey results. This data was used to reveal possible inconsistencies among professional development opportunities. In addition, it compared methods used to conduct professional development programs in Mississippi with the characteristics of effective professional development identified in the *Professional Development for the New Millennium* model (MDE, 1998), as well as in the *Standards for Professional Learning* (Learning Forward, 2011).

To establish voluntary participation, the researcher requested permission by email (Appendix C) from the executive director of Mississippi Professional Educators (MPE) to
use their membership database as a resource for soliciting volunteers to complete the online survey. Once permission was granted (Appendix D), MPE used their weekly newsletter to inform its members of the study and provide a link to the survey. Those that accessed the link were presented with a disclaimer that instructed only K-12 teachers to participate. Volunteers that continued from this point were provided with an informed consent letter (Appendix E) that described the study, requested voluntary participation, and highlighted the incentive for participation. The Survey Monkey online survey website was used to conduct the survey and collect data. Participate responses to the survey were exported by the researcher from Survey Monkey into the SPSS statistical analysis computer program after sufficient data had been collected.

The researcher hoped to encourage interest in and motivation for participation by offering participants a chance to win a one year individual membership to MPE (a $120.00 value) through a random drawing.

However, inadequate participation from MPE members occurred during this process and sufficient valid responses from the online survey were not collected. In order to obtain an ample amount of participant responses, the researcher contacted ten randomly selected Mississippi public school superintendents through an email (Appendix F) and requested permission to solicit participation from their faculty. Once permission was granted (Appendix G), the researcher emailed an informed consent letter (Appendix H) to each Superintendent that describes the study, requests voluntary participation, highlights the incentive for participation, and provides a link to the online survey. Each Superintendent was asked to forward this letter to the teachers employed by his or her district. Those who chose to volunteer simply had to use the link provided. The Survey


Survey Monkey online survey website was used to conduct the survey and collect data. Two collector groups were created (MPE members and employees of 19 randomly selected school districts) in an effort to help ensure that one volunteer did not respond multiple times. After an adequate number of responses were collected, the researcher exported the raw data from Survey Monkey into the SPSS statistical analysis computer program for analysis.

The incentive for voluntary participation was modified because requests for participation were sent to the ten randomly selected school districts. All participants were given a chance to win either an MPE membership or a Visa gift card (each valued at $120.00) through a random drawing. Survey Monkey collected only the information necessary for the drawing. After the survey closed, Survey Monkey notified the researcher of the winner of the drawing.

Limitations

The sample for this study was limited to Mississippi public school teachers currently working as classroom teachers. These teachers were limited to grades Kindergarten through 12th. Finally, they were limited to members of Mississippi Professional Educators (MPE), as well as those teachers who are currently employed by the 19 randomly selected school districts.

Data Analysis

After the pilot study was conducted, the researcher began data collection for the research study. Mississippi Professional Educators sent its electronic newsletter, which contained an invitation to volunteer for the study and a link to the online survey, out to its members. However, an inadequate number of volunteers responded. At this point, the
researcher randomly selected ten Mississippi public school districts using Random.org to generate ten random numbers between the range of one and 152. Afterward, the researcher emailed the superintendent of each district and requested permission to contact their school employees about participating in the study. One superintendent responded and gave permission for the researcher to contact his employees (Appendix G). In addition, MPE sent out the newsletter information a second time. An adequate number of participants were collected from these efforts. After all raw data had been collected, the researcher exported all participants’ responses from Survey Monkey into SPSS. The SPSS computer program was used to conduct tests that revealed the statistical significance of the findings. A One-way ANOVA with alpha set at .05 was conducted to provide a correlation analysis using the dependent variable (teachers’ perceptions) and the independent variables (grade level taught, years of teaching experience, Mississippi license class level, and experience with professional learning communities) to reveal possible significant relationships between each independent variable and the dependent variable. The findings were examined in regard to the research questions posed for this study.
CHAPTER IV

RESULTS

Introduction

This study analyzed Mississippi public school teachers perceptions of the effectiveness of their professional development experiences in raising student achievement. The theoretical foundation for what defines effective professional development for this study is found in the research supporting Mississippi’s professional development model (MDE, 1998) as well as the Standards for Professional Learning (Learning Forward, 2011). An online survey correlated with these concepts was conducted through Survey Monkey. Participants were made up of 135 total volunteers. 113 were members of Mississippi Professional Educators (MPE) and 22 were employees of randomly selected school districts in Mississippi. Of the total 135 participants, all responded to questions one through four, 126 responded to statements five through sixteen, and 119 responded to statements seventeen through forty. The statistical results and significant findings from the survey are presented in this chapter.

Descriptive Data

The participants for this study consisted of K-12 public school teachers in Mississippi (N=126). Of those who chose to respond to the survey, 54 were elementary (K-5) teachers representing 42.9% of the total sample, 31 were middle (6-8) level teachers representing 24.6%, and 41 were high school (9-12) teachers representing 32.5% of the sample (Table 1). The results from the ranges selected representing the number of years with classroom teaching experience found that the majority (34 or 26.9%) had between 11 and 15 years experience. Thirty-two (25.9%) participants had between six
and ten years of experience, and the remaining participants consisted of 17 or 13.5% reporting between zero and five years experience, 14 or 11.1% reporting between 16 and 20 years experience, and 29 or 23.1% reporting 21 or more years of experience (Table 1). Concerning the class level of their Mississippi license, 71 or 56.3% of the participants have a Class AA Mississippi teacher license; 46 or 36.5% of the participants reported having a Class A license; seven or 5.6% have a Class AAA license; and two or 1.6% have a Class AAAA Mississippi teacher license (Table 1). When asked to rate their experience with professional learning communities, a surprising 33 or 26.2% of the teachers participating in the study chose “Not at all.” The next rating with the most responses was “Slightly” which was selected by 33 or 23.0% participants. However, the majority of participants (40 or 31.7%) rated their experience as “Moderately.” The remaining participants were made up of 18 (14.3%) who chose “Very” to describe their experiences with PLCs. It is important to note that a mere six or 4.8% chose the category of “Extremely” to describe their experiences with PLCs (Table 1).

Table 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Level Taught</td>
<td>Elementary (K-5)</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>Middle (6-8)</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>High School (9-12)</td>
<td>41</td>
</tr>
<tr>
<td>Years of Experience</td>
<td>0-5</td>
<td>17</td>
</tr>
</tbody>
</table>
Table 1 (continued).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-10</td>
<td>32</td>
<td>25.4</td>
</tr>
<tr>
<td>11-15</td>
<td>34</td>
<td>26.9</td>
</tr>
<tr>
<td>16-20</td>
<td>14</td>
<td>11.1</td>
</tr>
<tr>
<td>21+</td>
<td>29</td>
<td>23.1</td>
</tr>
<tr>
<td>MS License Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class A</td>
<td>46</td>
<td>36.5</td>
</tr>
<tr>
<td>Class AA</td>
<td>71</td>
<td>56.3</td>
</tr>
<tr>
<td>Class AAA</td>
<td>7</td>
<td>5.6</td>
</tr>
<tr>
<td>Class AAAA</td>
<td>2</td>
<td>1.6</td>
</tr>
<tr>
<td>PLC Experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely</td>
<td>6</td>
<td>4.8</td>
</tr>
<tr>
<td>Very</td>
<td>18</td>
<td>14.3</td>
</tr>
<tr>
<td>Moderately</td>
<td>40</td>
<td>31.7</td>
</tr>
<tr>
<td>Slightly</td>
<td>29</td>
<td>23.0</td>
</tr>
<tr>
<td>Not at all</td>
<td>33</td>
<td>26.2</td>
</tr>
</tbody>
</table>

N = 135

Research Questions

This study was led by five research questions. The researcher sought to gain insight on the participants’ overall perceptions of their professional development experiences. From this data, the researcher hoped to discover any possible discrepancies between professional development opportunities currently conducted in Mississippi and the eight characteristics of effective professional development (MDE, 1998) as well as the seven standards for professional learning (Learning Forward, 2011). Lastly, the
researcher sought to analyze the participants’ overall perceptions of their professional development opportunities and their perceptions of the use of technology to enhance professional development. Below are the results from four statistical tests conducted to address each of the four hypotheses. The decisions made from data analysis and the meanings of those decisions are also included. The researcher sought to analyze responses to the following research questions in an effort to gain a true understanding of the participants’ beliefs regarding the effectiveness of professional development in Mississippi.

**Research Question One**

*What are Mississippi public school teachers’ perceptions of the effectiveness of their professional development experiences on raising student achievement?*

Statement 36 of the online survey explicitly addresses this question by having participants rate the statement, “My professional development activities have improved student achievement” using a five-point Likert scale (Strongly disagree, Disagree, Neither agree or disagree, Agree, Strongly agree). Of the 119 participants that responded to the statement, 46 (38.7%) chose “Agree” and 17 (14.3%) chose “Strongly agree” to represent their perception of the effectiveness of their professional development experiences on raising student achievement. Thirty-five (29.4%) remained neutral by choosing “Neither agree or disagree.” For this study, the majority of the participants (53%) found that their professional development experiences have improved student achievement. This statement had a mean of 3.47 and a standard deviation of .98.
*Research Question Two*

*Are Mississippi public school teachers satisfied with the professional development opportunities provided by the Mississippi Department of Education and their local school district?*

Number 37 of the online survey explicitly addresses this question by having participants rate the statement, “I am satisfied with my professional development opportunities provided by the Mississippi Department of Education and my local school district.” The results are interesting. Fifty (42%) of the 119 responses were positive with the choice of either “Agree” or Strongly agree.” However, 42 (35.3%) of the 119 responses were negative with either the choice of “Disagree” or “Strongly disagree.” Twenty-seven participants (22.7%) chose to remain neutral to this statement by selecting “Neither agree or disagree.” This statement had a mean of 3.05 and a standard deviation of 1.18.

*Research Question Three*

*Does professional development in Mississippi comply with the guidelines published in the professional development model established by the Mississippi Department of Education?* (MDE, 1998)

Statements five through 16 on the online survey were correlated to these eight characteristics of effective professional development outlined in Mississippi’s professional development model, *Professional Development for the New Millennium* (MDE, 1998). The researcher analyzed the collective responses of the participants (N=126) in an effort to identify possible trends (Table 2). A Likert scale was used in the survey to aide in analysis. The researcher reviewed the mean, the standard deviation, and
the percentages of the responses to each statement. This analysis revealed two areas of concern. The participants’ responses to statement number nine had a mean of 2.69 and the standard deviation was 1.15. The majority of the responses (54.8%) were “Disagree” or “Strongly disagree.” The remaining percentages were 14.3% “Neither agree or disagree,” 25.4% “Agree,” and 5.6% “Strongly agree.” This statement was correlated with the characteristic number two: Involve learners (e.g., teachers) in identifying what they need to learn and, when possible, in developing the learning opportunity of process used.

The second area of concern was found with statement number 12. It had a mean of 2.88 and the standard deviation was 1.14. The responses for “Disagree” and “Strongly disagree” totaled 46.8% while the responses for “Agree” and “strongly agree” totaled 36.5%. The remaining 16.7% chose the response “Neither agree or disagree.” The statement was correlated with characteristic number 5: Be continuous and ongoing, involving follow-up and support for further learning including support from sources external to the school.

Table 2

Statistical Results from Participants’ Responses to Statements Correlated with the Eight Characteristics of Effective Professional Development

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. My professional development activities are student-centered.</td>
<td>3.54</td>
<td>.98</td>
</tr>
<tr>
<td>Statement</td>
<td>Mean</td>
<td>Standard Deviation</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>------</td>
<td>--------------------</td>
</tr>
<tr>
<td>6. My professional development activities introduce new instructional strategies.</td>
<td>3.67</td>
<td>.88</td>
</tr>
<tr>
<td>7. I collaborate with other teachers at my school to identify our professional learning needs.</td>
<td>3.56</td>
<td>1.13</td>
</tr>
<tr>
<td>8. I am involved in developing learning opportunities for teachers at my school.</td>
<td>2.69</td>
<td>1.14</td>
</tr>
<tr>
<td>9. My professional development activities focus primarily on specific curriculum and operational issues at my school.</td>
<td>3.57</td>
<td>.99</td>
</tr>
<tr>
<td>10. My professional development activities allow me to work collaboratively with my peers to address individual needs.</td>
<td>3.15</td>
<td>1.13</td>
</tr>
<tr>
<td>11. My professional development activities involve on-going support and follow-up from school administrators.</td>
<td>2.88</td>
<td>1.14</td>
</tr>
<tr>
<td>12. My professional development activities include input from external sources.</td>
<td>3.50</td>
<td>.88</td>
</tr>
<tr>
<td>13. My professional development activities allow me to modify instructional ideas and practices to meet the needs of individual students.</td>
<td>3.67</td>
<td>.95</td>
</tr>
</tbody>
</table>
Research Question Four

Does professional development in Mississippi adhere to the Standards for Professional Learning? (Learning Forward, 2011)

Statements 17 through 35 of the online survey were correlated to the seven standards identified in Learning Forward’s (2011) Standards for Professional Learning. The researcher analyzed the collective responses of the participants (N=119) in an effort to identify possible trends (Table 3). A Likert scale was used in the survey to aid in analysis. The researcher reviewed the mean, the standard deviation, and the percentages of the responses to each statement. This analysis revealed three areas of concern. The participants’ responses to statement number 17 had a mean of 2.92 and the standard deviation was .89. The majority of the responses (40.3%) were “Neither agree or disagree.” The remaining percentages were 28.6% “Disagree,” 24.4% “Agree,” 4.2% “Strongly disagree,” and 2.5% “Strongly agree.” This statement was correlated with standard one: Learning Communities – Professional learning that increases educator effectiveness and results for all students occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment. The next area of concern is found with statement number 27. The responses produced a mean of 2.89

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>14. My professional development activities enhance student learning.</td>
<td>3.65</td>
<td>.93</td>
</tr>
</tbody>
</table>

Likert Scale: 1 = Strongly disagree; 2 = Disagree; 3 = Neither agree or disagree; 4 = Agree; 5 = Strongly Agree
with a standard deviation of 1.13. The majority of the responses (45.4%) were for “Disagree” or “Strongly disagree.” The remaining percentages were 20.2% “Neither agree or disagree,” 26.1% “Agree,” and 8.1% “Strongly agree.” This statement was correlated with standard four: Data – Professional learning that increases educator effectiveness and results for all students using a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning. The last area of concern in revealed in the responses to statement 31. The mean for these responses was 3.0 with a standard deviation of 1.06. The majority of the responses (42.8%) were for “Disagree” or “Strongly disagree.” The remaining percentages were 20.2% “Neither agree or disagree,” 28.6% “Agree,” and 8.4% “Strongly agree.” This statement was correlated with standard number six: Implementation – Professional learning that increases educator effectiveness and results for all students, applies research and sustains support for implementation of professional learning for long term change.

Table 3

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>17. My professional development activities occur within Professional Learning Communities (PLCs).</td>
<td>2.92</td>
<td>.89</td>
</tr>
<tr>
<td>18. My professional development activities promote a sense of shared responsibility for student learning among school faculty.</td>
<td>3.15</td>
<td>1.07</td>
</tr>
<tr>
<td>Statement</td>
<td>Mean</td>
<td>Standard Deviation</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>------</td>
<td>--------------------</td>
</tr>
<tr>
<td>19. My professional development activities are aligned with school goals.</td>
<td>3.83</td>
<td>.87</td>
</tr>
<tr>
<td>20. My school leaders promote continuous learning for students, faculty, and themselves.</td>
<td>3.72</td>
<td>1.07</td>
</tr>
<tr>
<td>21. My school leaders value the link between professional learning and increased student learning.</td>
<td>3.78</td>
<td>1.04</td>
</tr>
<tr>
<td>22. My school leaders develop effective learning opportunities that produce continuous improvement.</td>
<td>3.30</td>
<td>1.16</td>
</tr>
<tr>
<td>23. Resources for my professional development activities are prioritized to meet learning needs.</td>
<td>3.23</td>
<td>1.06</td>
</tr>
<tr>
<td>24. Resources used for professional development at my school increase educator effectiveness.</td>
<td>3.30</td>
<td>1.02</td>
</tr>
<tr>
<td>25. My school uses data to define learning goals for professional development.</td>
<td>3.57</td>
<td>1.11</td>
</tr>
<tr>
<td>26. My school collects data about the effectiveness of professional learning on student achievement.</td>
<td>3.34</td>
<td>1.13</td>
</tr>
<tr>
<td>27. My school uses well-designed evaluations to collect information about my professional development activities.</td>
<td>2.89</td>
<td>1.13</td>
</tr>
</tbody>
</table>
Table 3 (continued).

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>28. My professional development activities combine theory, research, and practice to achieve their intended outcomes.</td>
<td>3.33</td>
<td>.99</td>
</tr>
<tr>
<td>29. My professional development activities help me gain a deeper comprehension of new ideas.</td>
<td>3.58</td>
<td>1.02</td>
</tr>
<tr>
<td>30. My professional development activities promote collaboration during the learning process.</td>
<td>3.46</td>
<td>.99</td>
</tr>
<tr>
<td>31. My professional development activities include providing me continuous support over time.</td>
<td>3.00</td>
<td>1.06</td>
</tr>
<tr>
<td>32. My professional development activities use constructive feedback from formative assessments throughout the learning and implementation process.</td>
<td>3.00</td>
<td>1.03</td>
</tr>
<tr>
<td>33. My school uses performance standards to specify what teachers need to know and do to be effective.</td>
<td>3.47</td>
<td>1.03</td>
</tr>
<tr>
<td>34. My professional development activities use student learning outcomes to modify instructional practices.</td>
<td>3.47</td>
<td>1.01</td>
</tr>
<tr>
<td>35. My professional development activities are part of a coherent set of opportunities that support a shared vision for continuous growth and improvement.</td>
<td>3.31</td>
<td>1.05</td>
</tr>
</tbody>
</table>

Likert Scale: 1 = Strongly disagree; 2 = Disagree; 3 = Neither agree or disagree; 4 = Agree; 5 = Strongly Agree
Research Question Five

How does the use of technology as a delivery system enhance the professional development experiences of teachers in Mississippi?

Number 39 of the online survey was correlated with this question by having participants rate the statement, “Technology has enhanced my professional development experiences.” Eighty-five (71.5%) of the 119 responses were positive with either the choice of “Agree” or Strongly agree.” Only 16 (13.5%) of the 119 responses were negative with the choice of either “Disagree” or “Strongly disagree.” Eighteen participants (15.1%) chose to remain neutral to this statement by selecting “Neither agree or disagree.” This statement had a mean of 3.78 and a standard deviation of 1.03.

Statistical Findings

The researcher conducted a One-way ANOVA to test each of the four hypotheses stated in Chapter One. It was anticipated that differences would be found in the participants’ perceptions according to each of the factors considered for this study. Because instructional practices of elementary teachers vary from those teaching on the secondary level, it was hypothesized that this should have an effect on teachers’ experiences with professional development programs. In the same respect, novice teachers should have had different experiences from veteran teachers. Because the certification level given to teachers is based upon their education, the researcher theorized that the participants’ educational knowledge should have influenced their philosophy on the value of professional development and its effect on raising student achievement. Also, the researcher sought to discover the significance of participants’ experiences with professional learning communities. Experience with this method of
professional development should have revealed a significant relationship to their perceptions of their professional development experiences.

Tables 4, 5, 6, and 7 provide descriptive data of the participants’ perceptions of their professional development experiences. Question number 1 instructed participants to identify the grade level that they teach. Question number 2 instructed participants (N=126) to select the numeric range that best represents the number of years they have with classroom teaching experience. Question number 3 asked participants (N=126) to identify their Mississippi license class level. Finally, question number 4 instructed the participants (N=126) to rate their experience with professional learning communities.

Table 4

*Participants’ Grade Level Taught*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What grade level(s) do you teach?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary (K-5)</td>
<td>3.49</td>
<td>.71</td>
</tr>
<tr>
<td>Middle (6-8)</td>
<td>3.41</td>
<td>.75</td>
</tr>
<tr>
<td>High School (9-12)</td>
<td>3.18</td>
<td>.69</td>
</tr>
</tbody>
</table>

Scale: 1 = Elementary (0-5), 2 = Middle (6-8), 3 = High School (9-12)

H1: *There is a relationship between teachers’ perceptions of their professional development experiences and the grade level that they teach.*

The results from the statistical test showed that there was no significant relationship between teachers’ perceptions of their professional development experiences
and the grade level that they teach. $F(2, 123) = 2.357, p = .102$. This indicates that the perceptions of the participants’ professional development experiences are not significantly affected by the grade level that they teach. Elementary teachers reported the highest mean (3.49) with a standard deviation of .71 and high school teachers reported the lowest mean (3.18) with a standard deviation of .69 (Table 4). For this study, the grade level that participants’ taught did not have a significant influence on their perceptions of their professional development experiences.

Table 5

Participants’ Years of Classroom Teaching Experience

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>3.43</td>
<td>.80</td>
</tr>
<tr>
<td>6-10</td>
<td>3.42</td>
<td>.66</td>
</tr>
<tr>
<td>11-15</td>
<td>3.14</td>
<td>.71</td>
</tr>
<tr>
<td>16-20</td>
<td>3.46</td>
<td>.77</td>
</tr>
<tr>
<td>21+</td>
<td>3.51</td>
<td>.70</td>
</tr>
</tbody>
</table>

Scale: 1 = (0-5), 2 = (6-10), 3 = (11-15), 4 = (16-20), 5 = (21+)

H2: There is a relationship between teachers’ perceptions of their professional development experiences and their years of experience.
The results from the statistical test showed that there was no significant relationship between teachers’ perceptions of their professional development experiences and their years of experience. $F(4, 121) = 1.277, p = .283$. This indicates that the perceptions of the participants’ professional development experiences are not affected by their years of teaching experience. Teachers with 21+ years of experience reported the highest mean (3.51) with a standard deviation of .70 and those with classroom experience ranging between 11 and 15 years of experience reported the lowest mean (3.14) with a standard deviation of .71 (Table 5). For this study, the different professional development experiences that novice teachers may have had from those of veteran teachers did not influence their perceptions of their professional development experiences.

Table 6

*Participants’ Mississippi License Class Level*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. What is your Mississippi license class level?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class A</td>
<td>3.47</td>
<td>.80</td>
</tr>
<tr>
<td>Class AA</td>
<td>3.28</td>
<td>.66</td>
</tr>
<tr>
<td>Class AAA</td>
<td>3.74</td>
<td>.71</td>
</tr>
<tr>
<td>ClassAAAA</td>
<td>2.92</td>
<td>.10</td>
</tr>
</tbody>
</table>

Scale: 1 = Class A, 2 = Class AA, 3 = Class AAA, 4 = Class AAAAA

$H_3$: *There is a relationship between teachers’ perceptions of their professional development experiences and their certification level.*
The results from the statistical test showed that there was no significant relationship between teachers’ perceptions of their professional development experiences and their certification level. $F(3, 122) = 1.596, p = .194$. This indicates that the perceptions of the participants’ professional development experiences are not affected by their teacher certification level. Teachers with a Class AAA license reported the highest mean (3.74) with a standard deviation of .71 and those with a Class AAAAA license reported the lowest mean (2.92) with a standard deviation of .10 (Table 6). For this study, the participants’ educational knowledge did not have a significant influence on their perceptions of their professional development experiences.

Table 7

*Participants’ Experience with Professional Learning Communities*

<table>
<thead>
<tr>
<th>Question</th>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. How experienced are you with</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Learning Communities (PLCs)?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely</td>
<td>3.99</td>
<td>.77</td>
<td></td>
</tr>
<tr>
<td>Very</td>
<td>3.43</td>
<td>.97</td>
<td></td>
</tr>
<tr>
<td>Moderately</td>
<td>3.35</td>
<td>.68</td>
<td></td>
</tr>
<tr>
<td>Slightly</td>
<td>3.20</td>
<td>.57</td>
<td></td>
</tr>
<tr>
<td>Not at all</td>
<td>3.39</td>
<td>.69</td>
<td></td>
</tr>
</tbody>
</table>

Scale: 1 = Extremely, 2 = Very, 3 = Moderately, 4 = Slightly, 5 = Not at all
H₄: There is a relationship between teachers’ perceptions of their professional development activities and their experience with professional learning communities.

The results from the statistical test showed that there was no significant relationship between teachers’ perceptions of their professional development experiences and their experience with professional learning communities. $F(4, 121) = 1.548, p = .193$. This indicates that the perceptions of the participants’ professional development experiences are not affected by their experience with professional learning communities. Teachers that categorized their experience with professional learning communities as “Extremely” reported the highest mean (3.99) with a standard deviation of .77 and those that categorized their experience as “Slightly” reported the lowest mean (3.20) with a standard deviation of .57 (Table 7). For this study, the level of the participants’ experience with PLCs did not have a significant influence on their perceptions of their professional development experiences.

Qualitative Comments

Number 38 of the online survey was an open-ended question that allowed participants an opportunity to provide specific examples of their professional development experiences that they perceive as having improved the academic achievement of their students. Of the 119 statements given, 91 (76%) were categorized by the researcher as positive statements. For example, one participant stated, “received training on early childhood educational strategies, classroom management, etc. This was a hands-on professional development - which allowed us to use the resources and practice the ideas/techniques right there...with feedback from the leaders.” Another positive statement by a survey participant elaborated, “I have had professional development
opportunities that introduce and follow up on how to implement new curriculum that I use, REad Well, Nuefeld Math, and Anchor Benchmark Comprehension. The district also provided and [sic] excellent professional development on the LETRS program. I use many of those activities to improve academic achievement of my students.” In contrast to these statements, there were twenty-eight (23%) that the researcher categorized as negative. One example of these comments said, “I have never been given the opportunity to receive any training/professional development that would help my students academically, and trust me, I've asked. The closest I've received is a set of books and videos. They have helped me.” Another participant’s negative comment stated, “professional learning seems to be geared toward a checklist of things I need to check off as an administrator/central office person and not geared to what teachers need to further their individual learning. Many times it is simply a waste of time!” One very revealing statement revealed, “I am not aware of any professional development experience that directly led to an improvement in the academic achievement of my students.” Some of the statements were short comments like “not applicable” or “N/A.” These comments were not included in the analysis. Overall, most of the participants were able to provide examples where they participated in professional development provided by the Mississippi Department of Education or their local educational agency that they believed improved student achievement.

Number 40 of the online survey was an open-ended question that allowed participants an opportunity to provide specific examples of how technology has enhanced their professional development experiences. Of the 119 statements given, 88 (73%) were
categorized by the researcher as positive statements. One insightful response from a participant said,

difficult question...technology is a highly effective tool of instruction but it is just that--a tool, not a final solution....some professional development experiences have been free of technology but have been highly effective and others have incorporated it but failed miserably concerning the goals of the p.d.-----it all comes down to the presenter...i [sic] have found online experiences to fall well short of face-to-face training experiences.

Thirty-one (27%) were categorized as negative statements. Of these, it is interesting to note the comments that stated, “we haven't used technology much to enhance professional development,” and “technology has not played a part in any professional development experiences in my area.” Some of these statements were short comments like “not applicable” or “N/A.” These comments were not included in the analysis. Overall, most of the participants were able to provide examples where they participated in professional development that was enhanced by the use of technology as a delivery system.

Summary

Overall, the data analysis revealed that there was no significant relationship between the independent variables identified for this study (grade level taught, years of teaching experience, license class level, and experience with PLCs) and the participants’ perceptions of the effectiveness of their professional development experiences in raising student achievement. Furthermore, results showed that the majority of participants agreed that their professional development activities had improved student achievement and that
the use of technology had enhanced their professional development experiences.

However, analysis of the participants’ responses in relation to research questions two, three, and four revealed areas of possible concern in relation to participant satisfaction with the professional development opportunities provided to them by MDE and their local school district, current professional development activities complying with the eight characteristics of professional development (MDE, 1998), as well as the seven standards for professional learning (Learning Forward, 2011). All of these results and possible implications for further research will be discussed in the next chapter.
CHAPTER V
DISCUSSION

Introduction

This study sought to find a correlation between teachers’ perceptions of the effectiveness of their professional development experiences in raising student achievement and four factors (grade level taught, years of teaching experience, teacher license level, and experience with professional learning communities). It also possessed qualitative components that sought to reveal how well teachers value their professional development opportunities in Mississippi including their impressions concerning the effects those opportunities had on student achievement and the use of technology as a delivery system for professional development. This chapter provides a comprehensive summary and discussion of the research findings, limitations during the study, recommendations for future policy and practice, recommendations for future research, and concluding remarks.

Summary

It was the goal of this study to give further insight on the elements needed to construct a high-quality professional development program that produces a desire in teachers to advance their skill levels and increase their knowledge and understanding of how children learn. The researcher hopes that this study will spark future inquiry into establishing an education learning environment in Mississippi where teachers consistently explore the reasoning behind their instructional practice and seek to improve as professionals. Additionally, it was the researcher’s anticipation that by valuing teachers’ input of program development, they will feel invested in the process of
developing their professional development programs and take ownership of their own continuous education and training. If teachers trust that administrators and researchers listen to their opinions about professional development, their cognitive outlooks and attitudes will change toward participating in professional development activities. Lastly, the researcher hoped to provide a snapshot of the effectiveness of current professional development practices in Mississippi that would highlight possible areas of disproportion including the use of technology to enhance professional learning delivery.

Discussion

The findings from this study revealed that professional development opportunities in Mississippi have some promising elements that are aligned with effective practices (Danielson, 2008; Garet et al., 2001; Marzano, 2003; Reeves, 2008). Overall, it is the researcher’s perception, based on the findings, that educational leaders in Mississippi do an adequate job with providing professional learning opportunities. However, this study also revealed some areas in professional development practices in Mississippi that need improvement.

It is important to note that none of the factors (grade level taught, years of teaching experience, teacher license level, and experience with professional learning communities) had a significant relationship to the perceptions of the participants. Their opinions were derived solely from their experiences with professional development regardless of their categorical limitations. This is key for discussing the findings revealed from the research questions.

The conclusion made from the first question is that the majority of teachers who participated in this study perceive that their professional development experiences have
had an effect on student achievement. This is an encouraging statistic. Many times educational leaders working to provide effective professional development receive only the negative feedback from their program efforts. As Mississippi moves forward, it’s important to know that past endeavors have not been in vain.

In contrast, however, the conclusion made from the second research question provides a different picture. Mississippi teachers who participated in the study, are almost equally divided with their views related to their satisfaction of the professional development opportunities provided to them by MDE and their local school districts. This is where the inequitable opportunities among the 152 public school districts become evident. The bottom line is that all Mississippi teachers are not provided the same opportunities for professional growth. This fact is grounded in the archaic belief system about the vitality of professional growth that plagues some of our school districts. Many school leaders still view professional development as a so-called add-on component to the state’s educational system, thus, producing non-effective professional development opportunities for their teachers.

The results from the third research question showed that while the majority of the professional development experiences of the participants do possess most of the characteristics of effective professional development identified in Mississippi’s professional development model, there are two that need improvement. Characteristic number 2 targets the concept of involving the learner in identifying his or her professional growth needs and having input with professional learning development and implementation. The second characteristic where school leaders need to focus improvement efforts is identified in the area of continuous and ongoing follow-up and
support for further learning. Both these characteristics are built upon the foundation that effective professional learning is a never-ending process where the continuous growth of teachers’ skill and knowledge is sought.

The fourth research question found three discrepancies with Mississippi’s current professional development practices in relation to the Standards for Professional Learning (Learning Forward, 2011). The first area identified was in relation to the standard, Learning Communities. This standard addresses the need for learning communities committed to continuous improvement, collective responsibility, and goal alignment (Learning Forward, 2011). Statement number 17 specifically addressed the concept of professional learning communities. The findings indicate a lack of equitable opportunities for study participants to engage in professional development opportunities orchestrated through PLCs. The second area of concern was with the standard, Data. Statement number 27 targeted the concept of collecting data about professional development activities using well-designed evaluations. The majority of the participants of this study have the perception that their schools do not effectively meet this standard. This coincides with the concept of teacher input addressed earlier in this discussion. The final area of concern in relation to Learning Forward’s (2011) standards was with the standard, Implementation. Statement number 31 focused on the concept of teachers receiving continuous support over time. The majority of the study participants disagreed that they received this element of effective professional learning. This coincides with the concept of continuous and ongoing follow-up and support for further learning also addressed earlier in this discussion.
Limitations

The following limitations were present in this study:

1. The population was limited to members of Mississippi Professional Educators who received the organization’s online newsletter and to the one school district willing to participate in the study.

2. The study was limited to the participants’ perceptions of their professional development experiences. It did not measure the direct effect professional development has on student achievement.

3. The sample size was small.

Recommendations for Policy and Practice

Mississippi educators are showing great promise in true educational reform. Moreover, the Mississippi Department of Education is currently making great advancements in the area of teacher professional learning. The Commission on School Accreditation approved the adoption of the Standards for Professional Learning (Learning Forward, 2011) on April 18, 2012. Their recommendation to the State Board of Education was presented at the May 18th board meeting. The board’s approval at this meeting began the Administrative Procedures Act (APA) process (P. Vanderford, personal communication, April 25, 2012). At the end of this process, the State Board of Education will make a decision on the adoption of these standards. In addition, many school districts throughout the state, such as Brookhaven Public Schools, recognize the need for a strengthened professional development program and have already adopted these standards as the foundation for an effective plan of professional learning that produces a positive effect on student achievement.
However, adoption is only the beginning. School leaders must recognize what current research, including this study, reveals about the vitality of ongoing, embedded professional learning that is data-driven and content specific and is guided by a common vision sustained in a cognitive approach to continuous learning. Educators must begin to work collectively to build a learning environment that promotes a culture consumed with the power of gaining new knowledge for the betterment of student achievement. It is in this type of learning environment that educators will find success in implementing new ideas, concepts, and curricula. It is in this atmosphere that schools will find success in implementing the Common Core State Standards and providing an exemplary education for their 21st century students.

For public education in Mississippi to move forward, all stakeholders must revisit their philosophies concerning the professional development of Mississippi teachers. The value of continuous learning for all educators must take precedence in all educational reform efforts. The idea that enhanced teacher knowledge and skill will boost student academic achievement should echo through every state and local professional development plan.

The results of this study could be used to assist state and local school leaders in developing a professional development policy that meets the learning needs of classroom teachers. In addition, all educators could use the implications of this research to reflect upon their own beliefs toward professional development.
Recommendations for Future Research

The results from this study present several opportunities for further research to be conducted in regards to professional development. The following list identifies various characteristics that could be explored:

1. The population of this study could be widened to encompass K-12 public school teachers throughout the United States.

2. This study could be conducted using a modified Likert-type scale where the choice, “neither agree or disagree” is offered. This would greatly impact results.

3. Data could be collected from school administrators as to their perceptions of the effectiveness of the professional opportunities they provide.

4. A more in-depth focus could be placed on the characteristics of effective Professional Learning Communities (PLCs).

5. A qualitative study could be conducted addressing the motivational factors present in successful learning communities that are fueled by cognitive coaching.

6. An analysis of the technology used in professional learning opportunities could be conducted in an effort to discover possible best practices for technology integration into professional learning.

7. A comparative study could be conducted between elementary and secondary grades in an effort to discover differences and similarities among their professional learning opportunities.

8. A comparative study could be conducted analyzing various professional learning opportunities for Common Core State Standards provided by the States that are members of Partnership for Assessment of Readiness for College Careers (PARCC).
9. A qualitative study could be conducted that would address teachers’ perceptions of their school administrator as their professional learning facilitator.

10. A correlation study could be conducted that seeks to find a direct effect between the implementation of professional learning communities and student achievement.

Conclusion

There is no doubt that classroom teachers are the defining factor for raising student achievement and creating school improvement (Hattie, 2003; Marzano, 2003). Because of this factor, school leaders across the state as well as the nation should strive to implement embedded professional learning opportunities that will inspire and support teachers to continuously seek growth as professional educators. Additionally, they should work continuously to model the effective professional learning practices discussed in this study to produce learning opportunities for teachers that will impact student achievement. Furthermore, school leaders should strive to incorporate technology as a delivery method with the goal of promoting its use and understanding by the professional learner. This is a must to help teachers transition to the use of technology when instructing the 21st century learner.

Based on the findings of this study, it is the desire of the researcher that all educational leaders across the state of Mississippi will embrace the Standards for Professional Learning (Learning Forward, 2011) as the conceptual foundation for professional development preparation and planning. Specifically, it is the researcher’s hope that all of Mississippi’s educators will begin implementing professional learning communities. This method of professional learning meets the demands required for
creating effective professional development. It is imperative that teachers’ professional growth be supported within the structure and foundation of the school environment.

Professional learning communities offer the framework and foundation for promoting professional growth of teachers and creating sustainable school improvement required to successfully implement the new direction Mississippi educators are taking with the adoption of Common Core State Standards.
INSTITUTIONAL REVIEW BOARD APPROVAL LETTER

INSTITUTIONAL REVIEW BOARD
118 College Drive #5147 | Hattiesburg, MS 39406-0001
Phone: 601.266.6820 | Fax: 601.266.4377 | www.usm.edu/irb

NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

The risks to subjects are minimized.
The risks to subjects are reasonable in relation to the anticipated benefits. The selection of subjects is equitable.
Informed consent is adequate and appropriately documented.
Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.

Appropriate additional safeguards have been included to protect vulnerable subjects. Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the “Adverse Effect Report Form”.

If approved, the maximum period of approval is limited to twelve months.
Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 12022902
PROJECT TITLE: An Examination of Mississippi Public School Teachers' Perceptions of the Effectiveness of Their Professional Development Experiences in Raising Student Achievement
PROJECT TYPE: Dissertation
RESEARCHER/S: Daniel Martin Rushing
COLLEGE/DIVISION: College of Education & Psychology
DEPARTMENT: Educational Leadership & School Counseling
FUNDING AGENCY: N/A
IRB COMMITTEE ACTION: Expedited Review Approval
PERIOD OF PROJECT APPROVAL: 03/26/2012 to 03/25/2013

Lawrence A. Hosman, Ph.D.
Institutional Review Board Chair
APPENDIX B

TEACHER PROFESSIONAL DEVELOPMENT SURVEY

Disclaimer
This survey is intended for K-12 teachers who are currently employed by a Mississippi public school. If you do not fit this description, please cease from answering any questions and exit the survey at this time.

This is a voluntary survey and responses will be kept anonymous. All participants' confidentiality and anonymity will be maintained throughout this study.

Section One
Please choose the best answer to the following questions.

1. What grade level(s) do you teach?
   _____ Elementary (K-5) _____ Middle (6-8) _____ High School (9-12)

2. How many years of classroom teaching experience do you have including this year?
   _____ 0-5 _____ 6-10 _____ 11-15 _____ 16-20 _____ 21+

3. What is your Mississippi license class level?
   _____ Class A _____ Class AA _____ Class AAA _____ Class AAAA

4. How experienced are you with Professional Learning Communities (PLCs)?
   _____ Extremely _____ Very _____ Moderately _____ Slightly _____ Not at all

Section Two
Please choose the response that best describes your perception of each statement in relation to your professional development experiences.

5. My professional development activities are student-centered.
   □ Strongly disagree □ Disagree □ Neither agree or disagree □ Agree □ Strongly agree

6. My professional development activities address my instructional needs.
   □ Strongly disagree □ Disagree □ Neither agree or disagree □ Agree □ Strongly agree

7. My professional development activities introduce new instructional strategies.
   □ Strongly disagree □ Disagree □ Neither agree or disagree □ Agree □ Strongly agree
8. I collaborate with other teachers at my school to identify our professional learning needs.

   □ Strongly disagree  □ Disagree  □ Neither agree or disagree  □ Agree  □ Strongly agree

9. I am involved in developing learning opportunities for teachers at my school.

   □ Strongly disagree  □ Disagree  □ Neither agree or disagree  □ Agree  □ Strongly agree

10. My professional development activities focus primarily on specific curriculum and operational issues at my school.

    □ Strongly disagree  □ Disagree  □ Neither agree or disagree  □ Agree  □ Strongly agree

11. My professional development activities allow me to work collaboratively with my peers to address individual needs.

    □ Strongly disagree  □ Disagree  □ Neither agree or disagree  □ Agree  □ Strongly agree

12. My professional development activities involve on-going support and follow-up from school administrators.

    □ Strongly disagree  □ Disagree  □ Neither agree or disagree  □ Agree  □ Strongly agree

13. My professional development activities include input from external sources.

    □ Strongly disagree  □ Disagree  □ Neither agree or disagree  □ Agree  □ Strongly agree

14. My professional development activities encourage me to routinely assess the effectiveness of new knowledge and skills.

    □ Strongly disagree  □ Disagree  □ Neither agree or disagree  □ Agree  □ Strongly agree

15. My professional development activities allow me to modify instructional ideas and practices to meet the needs of individual students.

    □ Strongly disagree  □ Disagree  □ Neither agree or disagree  □ Agree  □ Strongly agree

16. My professional development activities enhance student learning.
Section Three
Please choose the response that best describes your perception of each statement in relation to your professional development experiences.

17. My professional development activities occur within Professional Learning Communities (PLCs).

18. My professional development activities promote a sense of shared responsibility for student learning among school faculty.

19. My professional development activities are aligned with school goals.

20. My school leaders promote continuous learning for students, faculty, and themselves

21. My school leaders value the link between professional learning and increased student learning.

22. My school leaders develop effective learning opportunities that produce continuous improvement.

23. Resources for my professional development activities are prioritized to meet learning needs.
24. Resources used for professional development at my school increase educator effectiveness.

☐ Strongly disagree  ☐ Disagree  ☐ Neither agree or disagree  ☐ Agree  ☐ Strongly agree

25. My school uses data to define learning goals for professional development.

☐ Strongly disagree  ☐ Disagree  ☐ Neither agree or disagree  ☐ Agree  ☐ Strongly agree

26. My school collects data about the effectiveness of professional learning on student achievement.

☐ Strongly disagree  ☐ Disagree  ☐ Neither agree or disagree  ☐ Agree  ☐ Strongly agree

27. My school uses well-designed evaluations to collect information about my professional development activities.

☐ Strongly disagree  ☐ Disagree  ☐ Neither agree or disagree  ☐ Agree  ☐ Strongly agree

28. My professional development activities combine theory, research, and practice to achieve their intended outcomes.

☐ Strongly disagree  ☐ Disagree  ☐ Neither agree or disagree  ☐ Agree  ☐ Strongly agree

29. My professional development activities help me gain a deeper comprehension of new ideas.

☐ Strongly disagree  ☐ Disagree  ☐ Neither agree or disagree  ☐ Agree  ☐ Strongly agree

30. My professional development activities promote collaboration during the learning process.

☐ Strongly disagree  ☐ Disagree  ☐ Neither agree or disagree  ☐ Agree  ☐ Strongly agree

31. My professional development activities include providing me continuous support over time.

☐ Strongly disagree  ☐ Disagree  ☐ Neither agree or disagree  ☐ Agree  ☐ Strongly agree
32. My professional development activities use constructive feedback from formative assessments throughout the learning and implementation process.

☐ Strongly disagree ☐ Disagree ☐ Neither agree or disagree ☐ Agree ☐ Strongly agree

33. My school uses performance standards to specify what teachers need to know and do to be effective.

☐ Strongly disagree ☐ Disagree ☐ Neither agree or disagree ☐ Agree ☐ Strongly agree

34. My professional development activities use student learning outcomes to modify instructional practices.

☐ Strongly disagree ☐ Disagree ☐ Neither agree or disagree ☐ Agree ☐ Strongly agree

35. My professional development activities are part of a coherent set of opportunities that support a shared vision for continuous growth and improvement.

☐ Strongly disagree ☐ Disagree ☐ Neither agree or disagree ☐ Agree ☐ Strongly agree

36. My professional development activities have improved student achievement.

☐ Strongly disagree ☐ Disagree ☐ Neither agree or disagree ☐ Agree ☐ Strongly agree

37. I am satisfied with my professional development opportunities provided by the Mississippi Department of Education and my local school district.

☐ Strongly disagree ☐ Disagree ☐ Neither agree or disagree ☐ Agree ☐ Strongly agree

38. Please describe a professional development experience that improved the academic achievement of your students.

Section Four
The following statements target the use of technology in professional development opportunities.

Please choose the response that best describes your perception of each statement in relation to your professional development experiences.

39. Technology has enhanced my professional development experiences.
☐ Strongly disagree ☐ Disagree ☐ Neither agree or disagree ☐ Agree ☐ Strongly agree

40. Please explain how technology has enhanced your professional development experiences.
APPENDIX C

REQUEST PERMISSION FROM MISSISSIPPI PROFESSIONAL EDUCATORS TO
CONDUCT THE ONLINE SURVEY

Kelly Riley
Executive Director
Mississippi Professional Educators
629 N. Jefferson St.
Jackson, Mississippi 39202

Ms. Riley:

I am the 7th and 8th grade principal for the North Pike School District and presently in the doctoral program at USM. Currently, I'm in the preliminary stages of writing my dissertation. My research topic addresses Mississippi public school teachers' perceptions of their professional development experiences in relation to improving student achievement. The goal of this project is to determine how Mississippi teachers view the relevance of their professional development experiences in producing a positive influence on student achievement.

Once my dissertation committee approves my research proposal and permission is granted to conduct the study by the Institutional Review Board (IRB) of The University of Southern Mississippi, I plan to use a researcher-created online survey to collect data from elementary, middle, and high school teachers from across the state.

I am writing you to request use of your online newsletter to communicate to MPE members about voluntary participation in this study as well as provide a link directly to the survey. In return for MPE's assistance, I would like to share any significant results of the study with MPE as well as grant permission for publication if deemed informative.

If you have any questions concerning my dissertation research or if there is a procedure I need to follow to gain permission for my request, please contact me by email at Daniel.Rushing@eagles.usm.edu or by phone at 601-395-0498. This project will be reviewed by the Human Subjects Protection Review Committee, which will ensure that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6820.

Thank you for your attention to my request. Any assistance is greatly appreciated.

Respectfully,
Daniel Rushing
January 4, 2012

Daniel Rushing  
515 Gene Street  
Magnolia, MS  39652

Dear Mr. Rushing:

Please accept this correspondence as approval for you to gather data from members of the Mississippi Professional Educators (MPE) via a research-based online survey. It is my understanding that you are utilizing this survey to collect data regarding Mississippi public school teachers’ perceptions of their professional development experiences in relation to improving student achievement. Our staff will be happy to announce your survey in our weekly email to our membership.

Founded in 1979, MPE is Mississippi’s premiere and largest professional organization for educators. MPE serves more than 10,500 teachers, administrators and support personnel in pre-K through graduate education in both public and private institutions. Our top priority is the education of children.

MPE is pleased to assist you in your endeavors. Please do not hesitate to contact me if I may provide additional assistance.

Kelly L. Riley  
Executive Director
APPENDIX E

REQUEST FOR VOLUNTARY PARTICIPATION WITH ONLINE SURVEY

Informed Consent Letter

Dear Colleague,

I am conducting research through the University of Southern Mississippi on Mississippi public school teachers’ perceptions of their professional development experiences in relation to effecting student achievement. Research continues to show that classroom teachers have the greatest impact on student performance. Therefore, their perceptions concerning professional learning should be valued when establishing effective professional development opportunities. Because of this reason, I am requesting your assistance by completing an anonymous online survey addressing your perceptions of your professional development experiences. A link to the survey is provided below.

The survey consists of 40 questions divided into four sections. It should take approximately 10 to 15 minutes to complete. Your participation is completely voluntary and no information will be used to identify you, your school, or school district. Your responses are completely anonymous. The data collected will be reviewed only by those involved in conducting the study. After the project is complete, all data will be stored in a locked filing cabinet for five years and then destroyed afterward. Confidentiality and anonymity of the participants’ identities are of the utmost importance to this study.

In appreciation of your voluntary participation, you will have a chance to enter a drawing to win a one year MPE professional membership (a $120.00 value). Simply fill out the requested information after you complete the survey. The drawing will occur after data collection is complete.

If you have any questions, please contact me by phone at 601-395-0498 or email at Daniel.Rushing@eagles.usm.edu. This project has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6820.

Please click on the link below and follow the instructions to complete the survey.

https://www.surveymonkey.com/s/QQHLPT6

Thank you for your consideration,

Daniel Rushing
515 Gene St.
Magnolia, MS 39652
REQUEST PERMISSION FOR PARTICIPATION FROM SCHOOL SUPERINTENDENTS

Project Title: An Examination of Mississippi Public School Teachers’ Perceptions of the Effectiveness of Their Professional Development Experiences in Effecting Student Achievement

Researcher: Daniel Rushing

This email is being sent to inform you about my research study being conducted in affiliation with The University of Southern Mississippi and request permission from you to contact teachers in the [Name of School District] concerning voluntary participation.

The purpose of this study is to gather information from certified teachers concerning their perceptions of the effectiveness of their professional development experiences in raising student achievement. Results of the study could be used to help plan effective professional development opportunities for teachers in Mississippi.

The study consists of gathering responses from Mississippi public school teachers to a researcher-made online survey. The survey consists of 40 questions divided into four sections. It should take approximately 10 to 15 minutes to complete. Participation is completely voluntary and no information will be used to identify participants, their school, or school district. Their responses are completely anonymous. The data collected will be reviewed only by those involved in conducting the study. After the project is complete, all data will be stored in a locked filing cabinet for five years and then destroyed afterward. Anonymity of the participants’ identities is of the utmost importance to this study.

Please respond to this email if permission is granted to contact teachers in the [Name of School District] concerning this study. If permission is granted, I will email you the informed consent letter with the link to the online survey that can be forwarded to the teachers in your district.

If you have any questions, please contact me by phone at 601-395-0498 or email at Daniel.Rushing@eagles.usm.edu. This project has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6820.

Sincerely,
Daniel Rushing
From: Lee Childress  
<lchildress@corinth.k12.ms.us>  
To: Danny Rushing <drushing@npsd.k12.ms.us>  
Subject: Re: Request Permission For Participation

Daniel,

Thank you for your request. I will be glad to forward the information to teachers to complete. Please send me the consent letter and link. I will return the letter and forward the link. Good Luck with your study.

Lee
APPENDIX H

REQUEST FOR VOLUNTARY PARTICIPATION WITH SURVEY

Informed Consent Letter

Dear Colleague,

I am conducting research through the University of Southern Mississippi on Mississippi public school teachers’ perceptions of their professional development experiences in relation to effecting student achievement. Research continues to show that classroom teachers have the greatest impact on student performance. Therefore, their perceptions concerning professional learning should be valued when establishing effective professional development opportunities. Because of this reason, I am requesting your assistance by completing an anonymous online survey addressing your perceptions of your professional development experiences.

The survey consists of 40 questions divided into four sections. It should take approximately 10 to 15 minutes to complete. Your participation is completely voluntary and no information will be used to identify you, your school, or school district. Your responses are completely anonymous. The data collected will be reviewed only by those involved in conducting the study. After the project is complete, all data will be stored in a locked filing cabinet for five years and then destroyed afterward. Confidentiality and anonymity of the participants’ identities are of the utmost importance to this study.

In appreciation of your voluntary participation, you will have a chance to enter a drawing to win either a Mississippi Professional Educators one-year membership or a Visa gift card (both a $120.00 value). Simply fill out the requested information after you complete the survey. This will be basic contact information needed for the drawing and cannot be tied to your survey responses. The drawing will occur after data collection.

If you have any questions, please contact me by phone at 601-395-0498 or email at Daniel.Rushing@eagles.usm.edu. This project has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6820.

Please click on the link below and follow the instructions to complete the survey.

https://www.surveymonkey.com/s/6S22ZW6

Thank you for your consideration,

Daniel Rushing
515 Gene St.
Magnolia, MS 39652
REFERENCES


Hattie, J. (2005). *What is the nature of evidence that makes a difference to learning?*


Mississippi Legal Code of 1972 ch. 017 § 8. Title 37: Education: Comprehensive in-service staff development plans.


