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The Impact of High Quality Professional Development On Student Achievement in the State of Missouri

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A dissertation submitted to the Education Faculty of Lindenwood University
in partial fulfillment of the requirements for the degree of

Doctor of Education

School of Education

DECLARATION OF ORIGINALITY

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work here at Lindenwood University and that I have not submitted it for any other college or university course or degree here or elsewhere.

Full Legal Name: Lisa M. Christiansen

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This dissertation has been approved as partial fulfillment
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ABSTRACT

The purpose of this study was to discover the relationship between high quality professional development and student achievement in the state of Missouri as measured by the Missouri Assessment Program (MAP). The ultimate goal of high quality professional development is to provide tools for educators which increase student achievement. In the state of Missouri, the Regional Professional Development Centers are primary providers of high quality professional development. This study specifically focuses on the relationship between the high quality professional development activities offered by the Missouri Regional Professional Development Centers and its relationship to student achievement. The Missouri Assessment Program results of the school districts served by the Missouri Regional Professional Development Centers were compared to the percentage of teachers who participated in high quality professional development activities offered through the Missouri Regional Professional Development Centers. The purpose of these comparisons were to determine if a statistical significance exists supporting a relationship between the percentage of teachers who have participated in high quality professional development activities offered

through the Missouri Regional Professional Development Centers and student achievement as measured by the MAP.

The data in this study was analyzed using an Excel© spreadsheet. A Pearson Product Moment Correlation was used to determine the degree of association between high quality professional development activities offered through the Missouri RPDC regions and MAP indices in the areas of Communication Arts, Math, and combined indices of Communication Arts and Math. The results were analyzed and compared by individual Missouri RPDC regions to determine no significant relationship exists between high quality professional development activities offered through the Missouri Regional Professional Development Centers and student achievement as measured by the MAP.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

KEY TO ABREVIATIONS

AYP	Adequate Yearly Progress
AFT	American Federation of Teachers
CCR	Center for Collaborative Research
CPRE	Consortium for Policy Research in Education
ER&D	Educational Research and Dissemination
DESE	Department of Elementary and Secondary Education
MAP	Missouri Assessment Program
NCLB	No Child Left Behind
NSDC	National Staff Development Council
RPDC	Regional Professional Development Center
SIN	School Improvement Network

Chapter One - Introduction

Background of the Problem

The No Child Left Behind Act (NCLB, n.d.) includes four tenets for reform. One of these tenets refers to treating education more scientifically while using high-quality research at all levels of educational decision making. Thus, high quality professional development should include research-based decision making (Hirsh, 2002). After the broader staff development community learned about professional learning, the original National Staff Development Council created Standards for Staff Development in 1995 (NSDC). Staff development standards were created in order to provide a direction for designing a professional development experience which ensures that educators acquire the necessary knowledge and skills needed to teach (NSDC). The NSDC determined staff development should be results driven, standards based, and job-embedded. The NSDC Standards were revised in 2001 to included context standards, process standards, and content standards (NSDC, 2006). Context standards describe *where* learning is applied and the environment in which improved academic performance is expected. Process standards refer to *how* the learning

occurs. Content standards refer to *what* is learned (NSDC). Sparks (2001) indicates it is the opinion of the NSDC that context, process, and content standards are the essential elements of professional development which all educators should know.

Guskey and Sparks (1996) recommend considering the effectiveness of staff development throughout the staff development process. During early planning of staff development activities school leaders should begin discussions considering what student learning they seek and what changes need to be made to get the results they want (Guskey & Sparks). The next step is to determine what types of staff development are necessary to make these improvements and how the success of the staff development be evaluated. Building successful professional development programs requires a joint effort among schools, communities, and educational policy makers (Metta-Gallagher, 2006).

Theoretical framework of the study.

In order to establish all students in the state of Missouri are taught by highly-qualified teachers, Missouri teachers should participate in high-quality professional development (DESE, 2006). The Missouri professional development guidelines for student success is developed to

ensure that teachers are supported in their on-going efforts to improve instruction so that each student may achieve to their potential in the public schools of Missouri (Division of Quality and Urban Education, 2007). The Missouri Regional Professional Development Centers' (RPDC) purpose is to build the capacity of educators and schools to maximize student performance through high quality professional development. The Missouri RPDC regions work collaboratively with Missouri school districts in order to provide facilitation and support services. These services focus on enhancing the quality of teachers and administrators for the purpose of educational planning and programming in order to raise student achievement (RPDC, 2007).

Statement of the Problem

What is the impact of high quality professional development offered through the nine Missouri Regional Professional Development Centers on student achievement in the state of Missouri as measured by the Missouri Assessment Program (MAP)?

Purpose of the Study

The purpose of this study is to determine if student achievement is impacted by high quality professional development activities offered through the nine Missouri

RPDC regions. The staff development standards are based on the National Staff Development Council's (NSDC) view that the primary purpose of staff development is to increase student achievement through improved professional learning experiences for all school employees who impact student learning (Sparks, 2001). The NSDC's revised standards for staff development reflect what the NSDC and the broader staff development community have learned about professional learning since the original standards in 1995. The NSDC standards were revised in 2001 to include context standards, process standards, and content standards. The goal of all three NSDC standards includes staff development that improves the learning of all students. The NSDC standards were developed to provide direction for designing professional development to ensure that educators acquire the necessary knowledge and skills to increase student achievement (NSDC, 2006).

Independent variable.

The independent variable of this study is the percent of teachers who participate in high quality professional development activities offered by the nine Missouri RPDC regions.

Dependent variable.

The dependent variable of this study is student achievement as measured by the 2007-2008 MAP indices in the areas of Communication Arts and Math within the nine Missouri RPDC regions.

Null hypothesis.

High quality professional development activities offered by the nine Missouri RPDC regions do not impact student achievement in the state of Missouri, as measured by the MAP.

Alternative hypothesis.

High quality professional development activities offered by the nine Missouri RPDC regions impact student achievement in the state of Missouri, as measured by the MAP.

Research Questions

The following research questions will be examined in order to discover the relationship between high quality professional development within the nine Missouri RPDC regions and student achievement.

1. What percent of teachers participate in high quality professional development activities within the nine Missouri RPDC regions?

2. Is there a relationship between high quality professional development and student achievement within the nine Missouri RPDC regions?

Definition of Key Terms

For the purpose of this study, the following are the definitions of terms used.

High quality professional development:

1. actively engages teachers in planning, skills, and information over time,
2. is directly linked to improved student learning so that all children may meet,
3. is directly linked to district and building school improvement plans, be at the Comprehensive School Improvement Plan level,
4. provides time and other resources for learning, practice, and follow-up,
5. is supported by district and building leadership, and provides teachers with the opportunity to give the district feedback on the effectiveness of participation in professional development activities (NSDC, 2006).

Missouri Assessment Program (MAP). The MAP is an annual set of mandatory standardized tests administered to students in the state of Missouri. Student progress

toward state-developed academic goals is measured by the MAP. Grades 3-8 and 10 are administered Mathematics assessments, grades 3-8 and 11 are administered the Communication Arts assessments, and Science assessments are administered to grades 5, 8, and 11 (DESE, 2006).

No Child Left Behind (NCLB). Federal legislation originating in 2001 which mandated educational reform holding states and individual school districts accountable for student achievement (NCLB, n.d.).

Student achievement. Standards-based reform relies heavily upon testing and assessment as the measurement for student achievement. Thus, student achievement can be defined in terms of how well children perform on standardized tests (Rothman, 1995).

Limitations and Assumptions of the Study

MAP indices. This quantitative study is limited to the 2007-2008 MAP indices in the areas of Communication Arts and Math for grades 3, 4, 5, 6, 7, 8, 10, and 11 of school districts within the nine Missouri RPDC regions. The combined 2007-2008 MAP Communication Arts and Math indices in grades 3, 4, 5, 6, 7, 8, 10, and 11 of each school district will also be compiled in this study. It is assumed the MAP was administered by

each school district in accordance with the MAP administration instructions, training, and procedures.

High quality professional development participation. The percentage of teachers who have participated in high quality professional development activities is limited to the teachers of school districts served in each of the nine Missouri RPDC regions. The percentage of teachers who have participated in high quality professional development activities will be obtained from each of the nine Missouri RPDC Regional Directors. This study will be limited to the reliability of the data provided by each of the nine Missouri RPDC Regional Directors.

Design of the Study

Sampling.

MAP indices in the areas of Communication Arts and Math for grades 3, 4, 5, 7, 8, 10, and 11 will be compiled within the following nine Missouri RPDC regions: Heart of Missouri RPDC, Southeast RPDC, Kansas City RPDC, Northeast RPDC, Northwest RPDC, South-Central RPDC, Southwest RPDC, St. Louis RPDC, and Central RPDC. The percentage of teachers who participated in high quality professional development opportunities within the nine Missouri RPDC regions will be compiled.

Data collection.

The MAP indices for Communication Arts and Math for grades 3, 4, 5, 6, 7, 8, 10, and 11 will be collected from the Missouri Department of Elementary and Secondary Education (DESE, n.d.) data for the 2007-2008 school year. The percentage of teachers who have participated in high quality professional development opportunities provided by the nine Missouri RPDC regions will be collected from the data provided by the Directors of the nine Missouri RPDC regions for the 2007-2008 school year.

Data analysis.

MAP indices in the areas of Communication Arts and Math for grades 3, 4, 5, 6, 7, 8, 10, and 11 will be compared to the percentage of teachers who have participated in high quality professional development opportunities within the nine Missouri RPDC regions. A Pearson Product Moment Correlational Research Design will be utilized to measure the relationship between the percentage of teachers who participated in HQPD through the Missouri RPDCs within the school districts served by the Missouri RPDCs and student achievement as measured by MAP indices. The data will be analyzed using an Excel© spreadsheet.

Summary

Hirsh (2002) stated that effective decision making requires leaders to become informed consumers of educational research. Decision makers at all levels must study research that supports the claims made by advocates of various staff development programs and approaches (Hirsh). Metta-Gallagher (2006) indicated the role of the teacher should be expanded to include teacher-teacher interactions, peer reviews, and teacher research. Schools should take the first step toward integrating professional development programs into the day-to-day activities of all educators. Guskey and Sparks (1996) state, “Although there is a strong and direct relationship between staff development and improvements in student learning, efforts to clarify that relationship have met with little success” (p. 1).

Chapter Two – Review of Literature

Introduction

This chapter presents a review of literature addressing the history of professional development, professional development theories, professional development reform, student achievement and professional development, professional development in Missouri and current trends in area of professional development. Past and current research explores the theory of professional development and the impact it has on student achievement.

History of professional development.

The American Federation of Teachers (AFT) implemented the Educational Research and Dissemination (ER&D) Program in 1981. The ER&D is a union sponsored, research-based professional development program created by the AFT in collaboration with practitioners and researchers in order to improve teaching practices and student achievement through the use of research (American Federation of Teachers, n. d.). Members of the AFT view professional development as a continuing process of individual and collaborative research for the purpose of improving teaching practices. Professional development should empower

educators to make decisions, solve problems, connect theory, and identify student outcomes. The American Federation of Teachers values continuous, high quality professional development as being essential to meeting the goal of high standards of learning for all students.

When investigating the history of professional development, as it relates to education, Dennis Sparks is a major contributor. He is considered an expert in the fields of effective teaching, staff development, and teacher stress (School Improvement Network, n. d.). The School Improvement Network (SIN) is a North America provider of professional development for teachers and administrators. The School Improvement Network provides professional development resources and consultants to educators (School Improvement Network). Sparks has been the executive director of the National Staff Development Council (NSDC) since 1984 (Sparks, 2005). The NSDC is the largest non-profit professional organization supporting staff development and school improvement (NSDC, n. d.). The NSDC is committed to ensuring the success of all students through staff development while engaging educators in effective professional learning everyday which increases student achievement. High quality professional development programs are essential to creating schools in which all

students and staff members are learners who continually improve their performance (NSDC). The NSDC standards fall into three categories which include context, process, and content standards (Sparks, 2001). Sparks describes context standards as the point where learning will be applied, process standards include how learning will occur, and content standards refer to what is learned. Sparks' list of accomplishments include educational consultant, teacher, school counselor, coordinator of an alternative school, author, and column writer for the newsletter, *Results,* published by the NSDC (Sparks, 2005). Sparks completed his Ph.D. in counseling at the University of Michigan in 1976 and has taught at the university level. Sparks believes planning and policy decisions developed by school improvement committees, professional development communities, school boards, and administrators can lead teachers and principals toward powerful forms of professional learning.

Past and current professional development research is published in the Consortium for Policy Research in Education (CPRE) policy briefs. The CPRE is funded by the U. S. Department of Education's Office of Educational Research which operates two separate, but interconnected research centers (Corcoran, 1995). The CPRE Policy and

Finance Centers are part of a nationwide network including research and development centers based at various universities. The mission of these centers is to increase the academic performance of American students through useful and sound research (Corcoran, 1995). The goals of the CPRE include research on policies fostering high levels of learning for all students regardless of their social or economic status, research leading to a stronger coherence of state and local policies which promote student achievement, and research to determine how policies impact diversity and the connections between student outcomes and resource patterns. Thomas Corcoran served as a senior researcher for CPRE and co-directed CPRE's studies of state policies and approaches to professional development. In 1995, Corcoran recognized efforts to dramatically raise expectations for students and teachers while asking educators to master new skills and responsibilities. These expectations could lead to teachers changing their educational practices. Corcoran reported that teachers would need more time to work with their colleagues to examine the new standards being proposed and to revise curriculum. In the past, state policy makers paid little attention to form, content, or the quality of professional development while leaving these matters to the discretion

of district administrators and the local boards of education (Corcoran). In order for teachers to be adequately prepared to meet future challenges in education, the laissez-faire attitude toward professional development must change. Corcoran strongly believes teachers need opportunities to develop new approaches to teaching, and these activities fall under the general heading of professional development.

President Bush and the nation's governors recognize professional development as a critical role in meeting the goals of educational reform adopted in 1989 (Northwest Regional Educational Laboratory [NWREL], 2001). Secretary Richard W. Riley established the U. S. Department of Education's Professional Development Team in 1994. The mission included examining best research and practices related to professional development and to summarize this knowledge base into principles in order to inform practitioners and policy makers across the country. The mission statement and principles were published in draft form in the Federal Register in December of 1994 (NWREL). The mission of the U. S. Department of Education's Professional Development Team includes the belief that high-quality professional development depends on these principles grounded in the wisdom which leads this

country's educators while having a positive and lasting impact on teaching and learning. The U. S. Department of Education's Professional Development Team identified 10 principles of high-quality professional development: a focus on student learning, organizational improvement, leadership, essential elements of teaching high standards, continuous embedded professional development, collaboration, time, resources, long-term planning, and evaluation of the impact of professional development. These principles reflect what research identifies as best practices for professional development (NWREL).

A major contributor to educational practices including professional development is Robert J. Marzano (Marzano & Associates, n. d.). Marzano's forty year career in education includes working in every U.S. State as well as countries in Europe and Asia. He has helped to translate educational research and theory into practical programs for K-12 teachers and administrators. He is the author of more than twenty books, many articles, more than one-hundred curriculum guides, and educational materials for K-12 students. He is the COE and co-founder of Marzano Research Laboratory in Denver, Colorado. Marzano identifies the following eight key instructional design questions when applying theory into action: What will I do to: help

students interact with new knowledge, practice and deepen their understanding of new knowledge, generate and test hypotheses about new knowledge, engage students, maintain classroom rules and procedures, maintain effective relationships, communicate high expectations, and develop effective lessons organized into a cohesive unit (Marzano, 2003)?

Richard DeFour could be called the father of *Professional Learning Communities* (DeFour, 2004). He was a public school educator for thirty-four years while serving as a teacher, principal, and superintendent. While principal at Adlai Stevenson High School in Lincolnshire, Illinois from 1983 to 1991 and then as superintendent from 1991 to 2002, Stevenson was one of three schools in the nation to win the United States Department of Education Blue Ribbon Award as a model of successful school reform. Stevenson has been cited repeatedly in the popular press as one of America’s best schools (Solution Tree, n. d.). Stevenson (Solution Tree) is recognized in professional literature as an implementer of best practices in education.

Professional development reform.

As a result of the U. S. Department of Education's Professional Development Team's recommended principals, professional development entered a climate of systemic reform in 1994 (Little, 1994). Little represents this reform in five streams which include subject matter (standards, curriculum, and pedagogy), problems of equity among diverse student populations, the use of student assessment, social organization of schools, and the professionalization of teaching. The reform of professional development has educators moving away from textbook-centered or recitation-style teaching to the integrating of subject content and organizing of students' opportunities to learn (Little). According to Cook and Fine (1997), professional development reform requires educators to learn new roles and ways of teaching which translate into a long-term developmental process requiring educators to focus on their own teaching. The continuous problem is where to find time to collaborate and focus on the changes necessary in the face of an already busy teaching schedule. Cook and Fine recognize if schools use early release days or late starts, they must consider issues such as transportation, child care, student activities, negotiated agreements, and state mandates. Schools must be sensitive to public

perception in regards to restructured professional time and communicate their instructional goals (Cook & Fine). Cook and Fine offer the following steps to ensure time for professional development: establish a statewide and/or regional professional development organization, communicate the school goals concerning professional development to the community, involve the school board, discuss the elements of high quality professional development, develop a plan for implementing time for professional development, and assess the effectiveness of the professional development program. The National Staff Development Council's (NSDC) goal states that by 2007 all teachers in all schools should have quality professional learning during their daily teaching (Sparks, 2003a). The year 2007 was selected signaling the NSDC's intention that improvement in professional development will improve student achievement and that our schools deserve the best that educators and communities can give them (Sparks). Cook and Fine suggests the following goals in order to implement professional development reform: move away from past models of professional development, restructure the educator's work day in order to create opportunity for ongoing professional development, assess how current professional development resources are being used, and develop strategies for

communicating to the public how professional development impacts student achievement. Standards-based reform will be determined by the commitment of principals and teachers to determine compelling purposes for their work and the ability to create time dedicated to collaborate about those purposes and how they will be attained (Sparks, 2002).

With his presidential nomination of secretary of education, Arne Duncan faces new challenges in educational reform. Arne Duncan is the former leader of the Chicago Public Schools and has lived through what he calls the unintended consequences of the Bush Administration's No Child Left Behind (NCLB) law (Ramirez, 2009). Duncan supports accountability for student achievement but is of the opinion that the law should be less punitive to schools making improvements. He believes states should adopt more rigorous standards aligned with other leading nations, and he worries that states will dummy down standards as a result of NCLB (Ramirez). Duncan (Ramirez) views school reform as more than a theory: he views it as the cause of his life goal. Duncan is known for using academic data to address weaknesses in schools and closing down poor-performing schools in Chicago to reopen them with new staff. Duncan understands how to use data to improve student performance (Ramirez). He is concerned that states

are over testing but believes the problem could be solved by developing better tests. Duncan is quoted by Ramirez as saying, “If you have great assessments and real-time data for teachers and parents that say these are [the student’s] strengths and weaknesses, that’s a real healthy thing” (p.22). The No Child Left Behind Act was to be renewed in 2007, but Congress did not agree on what improvements to make. Ramirez reports that Duncan is not expected to support change to No Child Left Behind this year. Duncan does, in fact, plan to address the Bush Administration’s No Child Left Behind Act during President Obama’s term (Clark & Ramirez, 2009). Duncan believes schools cannot lie to children and families by telling them they are meeting standards when they are unprepared to be successful in high school and have little chance of attending a good university and being successful.

After President Barak Obama was elected as the president of the United Sates of America, letters began to flow into his office offering wisdom and advice regarding the reform of the public education system (Heinze, 2009). The letters to President Obama shared basically the same sentiment: the nation is in crisis and the long-term solution to our problems is to focus on the education of our next generation of Americans to compete on the global

stage. Heinze's review of these letters reiterated that the U.S. must strive to gain back the status of best-educated nation in the world. Russlynn Alli (2009), Executive Director of the Education Trust-West, points out the current achievement gap holding the potential achievement of America's children as staggering. Latino and African American 12th graders have math and reading skills equal to white 8th graders (Alli). Alli recommends raising expectations for all children and closing the teacher-quality gap by providing professional development in the area of cultural diversity. She suggests that President Obama work to put into place federal policies which reverse this trend by helping districts give effective teachers incentives to stay in the classroom (Alli).

Tom Payzant, former superintendent of the Boston Public Schools, suggests to President Obama a framework for educational reform to include standards-based assessment and on-going professional development (Payzant, 2009). America should no longer settle for different standards and assessments in each state. Payzant recommends national benchmarks which will guide student achievement for all states. Instead of isolation of educators within the public school system, Payzant recognizes an environment of

professional collaboration; data utilized to drive effective instruction, and shared accountability.

Michael Geisen (2009), science teacher in Prineville, Oregon and 2008 National Teacher of the Year, is concerned that the United States has a misguided concept of *achievement* with a narrow definition of aptitude which does not value the diversity and complexity of human intelligence. Geisen views current assessment programs as only measuring a small part of what is important in human life. These assessment programs shape our curriculum, pedagogy, and professional development. Teachers should develop their students' curiosity about the world and allow them to discover concepts allowing them to create something new (Geisen, 2009). Students have different interests and ways of learning suggesting that educators should stop teaching them the same and expecting them to be the same when they have finished their public school education. Geisen recommends public education dig deeply to determine a few broad standards so that students may experience curriculum, instruction, and assessments which are meaningful, flexible, and inspiring. Teachers should be equipped with professional development opportunities that address consistent standards. The knowledge and creativity exists to solve current educational reform issues, but a

leader who will inspire us is needed. Geisen appeals to President Obama to be the inspirational leader for teachers, students, parents, administrators, and community members.

Howard Gardner (2009), Professor of Cognition and Education at Harvard, advises President Obama to ignore the so-called experts who will suggest immediate action in regards to educational reform. Gardner recommends that President Obama should try to understand the demands of today's world and prioritize them in terms of the country's future citizenry. He advises that using a hammer should be avoided when many scalpels are needed in correcting the flaws of No Child Left Behind. Quality cannot be mandated in a democratic society. The President's role is to facilitate the change toward an increase in educational quality. The President should not try to orchestrate the details of education reform where it has traditionally been local change (Gardner). Instead, he should identify model programs and give government support to help schools who want to learn from those models through an increase in relevant professional development. Gardner recommends that America look deeply for solutions around the world but equally within our own nation.

Krista D. Parent (2009), 2007 National Superintendent of the Year, recognizes the need for a leader who will inspire, motivate, and provide the tools and resources the public school system needs to meet the challenge of educating all children. Parent states this has not been the goal of public education in the past and the system was never designed to meet the educational needs of all children. All of the nation's resources must focus on research-based best practices and professional development which targets high quality education for all students. Parent (2009) suggests the following strategies in order to reform public education: intense professional development for school leaders, daily classroom modern-day technologies for all students, high school curriculum focusing on 21st century skills, opportunities for all preschool children to enter kindergarten ready to learn, learning extended beyond the traditional school day, and strategies which recruit, support, and retain the best individuals in the public school system.

Viven Stewart (2009), Vice President for Education, The Asia Society, states that the United States needs to increase the number of graduates and improve its rigor in math and science in order to succeed in the future. When compared to other countries, Stewart claims American

students are ignorant of other cultures and only half of high school students take a year of foreign language. Educators need to participate in professional development including teaching practices which address international instructional skills. In order to be competitive in a global market, business leaders want employees with knowledge of foreign languages and cultures to market products in a global economy (Stewart). Our national educational goals must produce an international literate workforce and informed citizenry. Stewart recognizes current innovative efforts to add global content to local schools' curriculum but states that a national educational reform requires national leadership. President Obama should develop policies which provide states with incentives to benchmark educational standards against other countries so school leaders can understand the global skill set and share best practices from around the world (Stewart). Government educational polices should encourage professional development which provide teachers the capacity to teach the international dimensions of their subjects. Stewart identifies the need to build national capacity in world languages for grades kindergarten through sixth. Federal incentives should be provided for public schools to begin learning foreign languages in elementary

school, provide online language learning, and recruit teachers from diverse communities. The nation's future is multicultural and multilingual. Stewart is of the opinion that public schools can only be more successful in the global economy by laying a foundation of multicultural educational reform which encourages peace and a globally shared tomorrow.

Russo (2009) identifies No Child Left Behind (NCLB), performance pay, charter schools, and national standards as topics which President Obama will have to address during his term. Russo reports the following educational reforms may actually be proposed by President Obama's administration: NCLB relief in the form of waivers, budget process, and differential treatment for schools only missing one or two Adequate Yearly Progress (AYP) subcategories, funding to help districts who have failed to meet AYP in the form of *turnaround support*, funding the development of common state standards encouraging performance ratings closer to the National Assessment Governing Board, universal pre-kindergarten preparation, teacher residency programs, professional development which includes research supported instructional strategies, and facilities support in the form of a school modernization proposal.

Theories of professional development.

A review of theories of professional development in the area of education indicates many changes over the past ten to twenty years. Professional development is the bridge between educators: where they are now and where they will need to be in order to meet educational challenges and the needs of all students. Sparks (2004) views professional development at its best when it is included in a system to improve and integrate recruitment, selection, preparation, initial licensing, induction, ongoing development, support, and advanced certification of educators. High quality professional development refers to rigorous and relevant content, strategies, and organizational support which encourages preparation and career-long development of educators. Sparks (2003b) suggests that professional development is based on leadership development, which includes communication and problem solving skills necessary to promote positive, productive relationships essential to maintain the momentum of reform. Professional development should target and be directly related to teachers' instructional practices (Sparks, 2005b). Sparks describes professional development as a site-based, long-term, ongoing process included in a teacher's work week but not tacked on as an afterthought. It should be curriculum-based

so that it encourages teachers to help their students master the curriculum at a higher level. The future of the nation depends on all students having a positive relationship with their peers and adults. Sparks believes schools should have a clear vision of quality professional development and be able to communicate their vision in a clear manner to various audiences. Powerful professional learning is team-based and embedded in the day-to-day tasks of teaching and learning such as planning lessons, reviewing student work, analyzing data, and honest, reflective conversation. Professional learning should be a seamless part of teaching and not an added burden (Sparks, 2005b). Sparks believes successful school leaders know high quality professional development deepens the teachers' understanding of what they teach, expands their teaching strategies, creates a culture that supports teamwork, and promotes actions that continuously improve teaching and learning. The most powerful forms of professional development require teachers and administrators to blend theoretical and abstract perspectives of the cause-and-effect relationships of teaching (Sparks). Since learning depends on a strong social component, Sparks stresses the importance of intact teams within the schools as centers of professional learning.

Sparks (2005b) describes what it means to clarify fundamental choices, values, and purposes. The future of an organization is shaped through fundamental choices, values, and the purposes chosen. Educational leaders can make fundamental choices leading to a deeper change in themselves and their organization, which leads to an increase in student learning. An example could be a superintendent who has made a strong commitment that all students have competent, caring teachers and will approach all related decisions with that commitment in mind.

To achieve set goals, intentions must be clarified by describing specific details or images to attain those goals and the steps to reach them (Sparks, 2005b). To be effective leaders and human beings, people must tell the truth about what they want in their lives. Sparks recommends that individuals and groups explore their countervailing commitments, examine the *Big Assumptions* that anchor the competing commitment, and design simple, low-risk experiments to determine the validity of their assumptions. Establishing *Stretch Goals* (goals so large they seem impossible to achieve) produces deep changes in beliefs and practices essential to improve the learning of all students and sustain the changes over time. Most goals can be achieved in more than one way. Groups can brainstorm

to identify different ways to meet the same goal. Creative ideas are encouraged, resulting in participants feeling safe to share in the process (Sparks).

To create successful schools there must be engagement in creative work. Creative work energizes and increases the commitment to continuous improvement. Teachers are more likely to reach out to each other and utilize professional literature when administrators encourage sharing effective practices and talents. Sharing *breakthrough thinking* (a change in view regarding a particular subject while viewing that subject in a fresh, more empowering way) can result in creativity that makes a break with the past in a way that is transformative rather than incremental. Sparks (2005a) recommends developing a theory of action and using storytelling to communicate it. Leaders are likely to produce the results they want when they develop and communicate a clear, coherent, and compelling theory of action utilizing stories. The theory of action must be communicated and shared in many places over a long period of time to guide the improvement efforts. Stories about school traditions or individual accomplishments can be used by leaders to articulate the school's goals while linking the old to the new (Sparks).

Eaker, DeFour, and DeFour (2002) state that professional learning should be a part of the culture of the school. School culture is how the school functions on a day-to-day basis (Eaker,et.al 2002). Seymore Sarason (1996) views a change in school culture as,

> "If you want to change and improve the climate and outcomes of schooling–both for students and teachers, there are features of the school culture that have to be changed, and if they are not changed, your well-intentioned efforts will be defeated." (p. 340)

Sparks (2005b) reports that powerful professional development stresses content knowledge and instructional processes that impact student learning. Sparks points out that educators already know more about effective practice and need to consistently employ it in their work. Leadership, teaching, and learning will improve as educators develop habits, which include consistently applying what they already know. Sparks (2005) sums up the key component as, "Teacher to teacher communication about teaching and learning is the most powerful and sustained source of professional learning and instructional learning" (p.49). Professional development is best realized by a study group when the members are committed to improving professional learning, teaching, and leadership. He

believes leaders shape the culture of their organizations and guide the direction for professional learning which is imperative for improving an organization's performance. Leadership that is transformational or authentic encourages fundamental change in individuals, organizations, and society. Transformational and authentic leadership believes individuals can have a profound influence on one another and their organizations through respectful interactions and creative processes (Sparks). Leaders should strive to create a performance-oriented culture that stresses professional learning and collaboration. Sparks suggests that consistent, positive performance is achieved through developing new habits of thought and behavior that serve a school's purposes and values. While demonstrating behaviors that make a positive difference, leaders build a results-driven school culture.

Student achievement and professional development.

Nine out of ten people ranked teacher quality as the most important element in raising student achievement (American Federation of Teachers, n.d.). According to the American Federation of Teachers, professional development, which impacts student achievement, should include, a deep and broad knowledge of content, a strong foundation in pedagogy, knowledge about the teaching and learning

process, current educational research, alignment with standards and curriculum, measurable improvement in student achievement, professional development designed by teachers and experts in the field, and job-embedded practices. Professional development is the link between analysis of student data and instructional change in the classroom. The National Center for Educational Statistics (1994) noted specific areas of increased student achievement when teachers are fully certified, have a master's degree, and participate in professional development. Teachers who have more professional development training are more likely to use teaching practices that are associated with higher reading achievement (Darling, 2000).

Dash (2001) reports that while educators are attempting to determine which educational practices improve student achievement, strong leadership styles are overlooked. Dash proposes that schools work better when they have strong leaders. Schools are losing their leaders at a noticeable rate in the United States and throughout the world. The job of the school leader is becoming more complex each day. The traditional principal carrying the building keys and shuffling a few papers is a thing of the past. Dash designs a process to help develop a comprehensive approach to provide effective professional

development opportunities for school leaders. Mentoring programs for beginning and experienced administrators will not reduce the need for more leaders or make the job of the school leader easier (Dash).

Banchero (2006) reported that a comprehensive study revealed poorly qualified teachers negatively impact student achievement, while teachers ranked as *high quality* increase student achievement. Low income and minority students benefit most from *high quality* teachers. In poor, low economic schools, an average of 44 percent of students passed math, reading, writing, science, and social studies exams. When teachers were *high quality*, the students' average jumped to 56 percent passing their exams (Banchero, 2006). Sparks (2000) states a commonality among schools with improved student achievement includes a deep sense of responsibility for improving student learning. Schools use assessment data to identify strengths and weaknesses of their students to determine the direction of their professional development, plan instruction, and track progress (Sparks).

Research supports that administrative leadership impacts student achievement (Marzano, McNulty, and Waters, 2005). Marzano, McNulty, and Waters state that the principals' direct interactions with students and teachers

(in or out of the classroom) may motivate, inspire, or otherwise influence and increase student achievement. Administrative leaders who ensure that faculty and staff are informed of current research, theories, and best practices in education and make the discussion of these part of the daily school culture, impact student achievement. Marzano, McNulty, and Waters view the administrative leader as the facilitator of on-going evaluation of schools' practices and their impact on student achievement. The administrative leader must stay knowledgeable as to current curriculum, instruction, and assessment practices and support professional development which provides collaboration of these current trends (Marzano, et.al).

Trends in professional development.

Sparks (2004), while interviewing Andy Hargreaves, asked him what the fundamental issues are for professional development. Hargreaves shared that educators have to address whether they are serious about all students having the learning that enables them to reach the highest levels of knowledge. This country's economic future depends on the quality of education. In order to have students with the highest level of knowledge, schools must have highly skilled, qualified teachers (Sparks). Countries such as

Australia, New Zealand, and the United Kingdom are retreating form standardized testing and evaluation. They are recognizing that the standardized, high stakes testing agenda is reducing creativity and flexibility for teachers (Sparks). The idea of standards is important, but communities of teachers using research evidence and shared instructional experiences increase student achievement. Hargreaves is a supporter of professional learning communities (PLC). A PLC is a team of teachers who look at data, evidence, and research in order to improve instruction and student achievement (Sparks). Sparks and Hargreaves (2006) believe the PLC encourages teachers to challenge one another while moving beyond the standards. Learning to teach better and engage in continuous professional development with peers strengthens the PLC. Richard DeFour (2004) would agree with Sparks when he states, “To create a professional learning community, focus on learning rather than teaching, work collaboratively, and hold yourself accountable for results”(p. 6).

DeFour (2004) recognizes that the idea of improving schools by developing professional learning communities (PLC) is in vogue. The PLC term is used to describe everything from grade-level teaching teams, individuals with an interest in education, an entire school district, a

school community, a high school department, a state department of education, or a national professional organization (DeFour, 2004). DeFour fears that despite this well-intentioned school reform effort, the PLC is at risk of losing its intended meaning. DeFour presents three *big ideas* as the core principles of PLCs. The first big idea, and the mission of the PLC, is to ensure that students learn. He proposes a shift from a focus on teaching to a focus on learning. When teachers pledge to ensure the success of each student, a profound change begins to take place (Eaker, DeFour, and DeFour, 2002). As schools move toward developing PLCs, every educator must engage with colleagues in answering three crucial questions: what do we want students to learn, how will we know when each student has learned, and how will we respond when a student experiences difficulty in learning (DeFour)? DeFour addresses how the PLC responds to students who experience difficulty by being timely, directive, and based on intervention rather than remediation. The PLC identifies students who need additional time and support in order to learn. Once identified, struggling students receive help as soon as they experience difficulty (DeFour). The PLC plan requires students to devote extra time and receive additional assistance until they master the necessary

concepts. Any student who falls short of expectations at the end of six weeks, despite the interventions, is required to attend tutoring sessions. Defour stresses the importance of the PLC to require the additional support every student needs in order to educationally succeed.

Building a culture of collaboration is DeFour's (2004) second big idea. Professional learning communities must work together to achieve their collective purpose of learning for all students. Despite research that supports the idea that student achievement is impacted by educators who collaborate, teachers in many schools still work in isolation (Eaker, et.al, 2002). The collaboration characterized by PLCs is a systematic process in which educators work together to analyze and improve their instruction. PLCs are composed of educators working in teams and engaging in an ongoing cycle of questions promoting team learning thus leading to higher levels of student achievement (DeFour). Collaboration for school improvement includes the assurance that everyone belongs to a team focused on student learning. These teams must have time to meet during the workday throughout the school year. The teams focus on questions related to learning and generate lists of essential outcomes, different kinds of assessments, analyses of student achievement, and

strategies for improving student achievement. The teams develop norms to clarify expectations in relation to roles, responsibilities, and relationships among their members (Defour). DeFour stresses the need for PLC teams to adopt goals directly linked with school and district comprehensive school improvement plans. DeFour (2004) identifies barriers to collaborating for school improvement. Schools must stop merely presenting state standards and district curriculum guides as an attempt to guarantee student success. School districts devote time and energy to designing curriculum while paying little attention to the implementation of the curriculum (what teachers teach) and less to the attained curriculum (what students learn) (Marzano, 2003). DeFour (2004) states that educators must move from *what are we expected to teach* to *how will we know when each student has learned?* Roland Barth (1991) wrote,

> “Are teachers and administrators willing to accept the fact that they are part of the problem?…God didn’t create self-contained classrooms, fifty-minute periods, and subjects taught in isolation. We did, because we find working alone safer than and preferable to working together.” (pp.126-127)

Building the collaborative culture of a PLC depends on a group of educators who are determined to work together and will find a way to do so(DeFour).

A focus on results is the third of DeFour's big ideas (DeFour, 2004). Working together to improve student achievement is the daily work of the PLC. Every PLC continually participates in the ongoing process of identifying current levels of student achievement, establishing goals to improve student achievement, working toward achieving the goals, and providing evidence of progress. DeFour describes a typical problem from which teachers suffer as the DRIP syndrome (Data Rich/Information Poor). Professional Learning Communities not only identify rich data but turn the data into useful and relevant information which staff can use to plan instruction. Teachers in isolation can identify the mean, mode, standard deviation, and the percentage of their students who are proficient on given assessments. This data can only become a useful tool in improving instruction when the teacher has a basis for comparison. This comparison can take place when teachers collaborate and share data from common assessments. Educators must begin to look at data as a useful indicator of progress while focusing on continual improvement and results. DeFour suggests looking beyond

using averages to analyze and focus on the academic achievement of each student. Educators should stop focusing on how busy they are and focus on the new initiatives required by the district. Educators should ask how much progress has been achieved toward the identified goals of the district. Sustaining the initiative of the PLC requires hard work and accountability for results fueling continual improvement (DeFour).

On-demand professional learning is a new trend which provides professional learning resources accessed through the internet (School Improvement Network, 2008). On-demand professional learning provides the option for teachers and administrators to instantly find professional support. The on-demand resource, titled *PD 360*, combines structured professional learning with differentiated support to meet specific professional development needs. Short video segments addressing a wide variety of professional learning topics are accessible to educators in a single location. The *PD 360* is presented as a learning community where educators can seek and share learning by collaborating online with other educators. Educators can read and respond to messages using a private or public online forum. Users can upload, share, and download files on topics such as student achievement, assessment, classroom management,

research based interventions, and diversity (School Improvement Network).

The School Improvement Network (2008) claims the content is research-based, supporting results-driven professional development programs. Traditional professional development may focus on theory while on-demand segments show educators how to put theory into practice in the classroom. On-demand professional support is founded in the belief that highly trained educators are the key to student academic achievement. Teachers are less likely to remain isolated in the classroom without support when they have access to *PD 360* (School Improvement Network). The *PD 360* claims to provide better support for teachers, school leaders, coaching, and mentoring at a reasonable cost to the district. Administrators can access professional development activities which include best practices in school leadership. On-demand professional development can enhance workshops by providing educators with review of what they have learned. After educators review what they have learned, coaches can easily provide follow-up. On-demand professional learning is not limited to a specific time and place enabling educators to access professional learning throughout the school year. Job embedded training, scheduling, and executing of professional development

activities can be more cost effective and time saving when utilizing on-demand professional learning. (School Improvement Network).

Past and current research in professional development.

Marzano (2003) refers to the Coleman report as the first high-visibility study of the second half of the 20th century with the position that schools have little impact on student achievement. The findings of the Coleman study indicated schools only counted for 10 percent of the variance in student achievement. Coleman's study was later corroborated by Jencks and colleagues in 1972. Marzano views using the percentage of variance as the measure of a school's impact on student achievement is key to understanding how these findings support the position that schools do make a difference. Since the Coleman report was conducted, statisticians have determined that using percentage of variance as an indicator of a factor's importance is not the most meaningful way of interpreting research findings related to academic achievement. Robert Rosenthal and Donald Rubin developed a more practical way to interpret research results in terms of percentage of explained variance (Marzano). Rosenthal and Rubin placed schools into two broad categories as either effective or ineffective. They also assume the students in the effective

and ineffective schools are given a test on which half the students would be expected to pass and half to fail. In effective schools almost twice the percentage of students would pass the test than in the ineffective schools. Thus, the conclusion drawn form the Coleman report is that effective schools do make a difference in student achievement. Marzano is of the opinion that research supports the effectiveness of schools to impact student achievement and provides clear guidance as to the steps schools can take to enhance student achievement.

Research over the last decade indicates professional development was typically limited to a few in-service days during the school year (Pasley and Weiss, 2006). In order to produce gains in student achievement, professional opportunities for teachers should stress pedagogical skills and content knowledge. Pasley and Weiss have discovered that in order to enhance teaching in the content areas, states and school districts need to put into practice what research has discovered about professional development and instructional improvement. Pasley and Weiss found that the quality of instruction in the classroom improved as teachers' professional development hours accrued to at least 80 hours. Research supports that teachers need at least three hours per week to collectively share

responsibility for student learning (Sparks, 2002). Researchers identify the following strategies to create longer blocks of time for teacher collaboration: double planning periods, combining planning periods with non-instructional time, combining classes for special subjects, and reducing teacher administrative assignments to non-teacher duties. Sparks (2002) summarizes that current research suggests student achievement improves when schools are committed to educators who link professional development and collaboration to the attainment of changes in instruction based on data driven goals. Professional development must serve fundamental choices and unleash the creativity existing within all schools (Sparks).

The Center for Collaborative Education (CCE) provides educational research in the area of professional development of educators (Atkinson, French, and Rugen, 2007). Atkinson, French, and Rugen state that current research supports small schools when comparing student performance of small schools to large schools. In order for large schools to experience the benefits of smaller schools, Atkinson, French, and Rugen identify four conditions which are present in smaller schools. Schools must be small enough for students and faculty to know each other in order to have a personalized learning environment.

A unified vision of teaching and learning must be in place that includes the community and drives teaching, learning, and assessment. The autonomy of a unified learning community must exist while still benefiting from the resources a large district has to offer. Schools need to be held accountable for student achievement, assessment, and a quality education for all students. The CCE research identifies accountability as the driving force in small schools which improves student performance. Staff in small schools are more likely to be held accountable for student performance (Atkinson, et.al).

Research in the small-school movement by the CCE has led to the development of principles used to develop a vision and assess progress in effective small schools (Atkinson, French, and Rugen, 2007). School goals must apply to all students while equitable and easily accessed. The central goal teaches students to think critically. Student teacher ratios are no more than 80:1 at the secondary level and 20:1 at the elementary level. Teachers and students know each other on a personal learning level. Learning is focused on a limited number of essential skills and areas of knowledge. Students are coached by their teachers to take responsibility for their learning. Students demonstrate mastery and competencies in a variety

of ways. Small schools include trust, respect, and caring for all. Principals and teachers work together as professional, collaborative communities demonstrating a sense of commitment to student achievement. Decisions are made as a shared governance as close to the learner as possible.

An audit of the Duval County, Florida, professional development literacy programs revealed students had significant gains in reading test scores when their teachers were trained in those programs (Hanowar, 2008). The student reading test scores rose by half a point on the state test. The Schultz Center for Teaching and Leadership provided the literacy program training. The Schultz Center for Teaching and Leadership was formed in 2002 using state grants and private funds with the vision of providing training for educators in Baker, Clay, Duval, Nassau, and St. John’s counties. The programs are modeled to support formative assessments, student work which drives instruction, supportive classroom procedures, and using the classroom environment to reinforce literacy. The audit is the first of a multiyear study of professional development programs in Duval County and the latest in growing evidence that suggests high quality teacher professional development can lead to gains in student achievement. The Community

Training and Assistance Center, a Boston based education research group, conducted the audit of the Duval County professional development reading programs. William J. Slotnik (Honawar), executive director of the Community Training and Assistance Center, stated, “Professional development is not a soft input as some suggest. When done to a high level of quality, there is high relationship between the hours of professional development and student growth in reading” (p. 9). The research was based on surveys, interviews, and focus groups of teachers, administrators, and other staff members. They compared the time teachers spent in professional development literacy courses to the growth in achievement of the teachers’ students in grades four through eight (Honawar). Honawar recognizes a few past studies have correlated professional development with student achievement when the programs are considered to be of high quality.

A study conducted by the Educational Testing Service in 2000 linked an increase in student math test scores with teachers’ professional development training in higher order thinking skills. The Schultz Center recognizes the very specific needs teachers have in the area of professional development. They design workshops, online training, and collaborative groups in order to provide high quality

professional development. The Schultz Center will heed the recommendations of the audit to include coordinating with the district to build better data bases and provide follow-up support for educators. The intended goal of the audit is to identify the best strategies to blend teaching of subject matter and content with effective teaching strategies which increase student achievement.

Professional development in Missouri.

The Missouri Department of Elementary and Secondary Education (DESE) provides Professional Development Guidelines for Student Success (DESE, n. d.). The mission, mandates and regulations for professional development (DESE, 2006) include, “Supporting teachers in their efforts to improve instruction so that each student may achieve at higher levels in the public schools” (p.3). The Missouri Regional Professional Development Centers are a result of the Missouri mandates and regulations for professional development. This mission stresses the importance of sustaining training in effective classroom practices, authentic instruction, instructional leadership, technology, and continued assessment. In order to align local professional development plans with mandated state guidelines the following should be considered: the professional development plan should relate directly to the

Comprehensive School Improvement Plan and the 4th Cycle Missouri School Improvement Program professional development standards; the professional development activities should be consistent with the vision and the goals of the professional development plan; each professional development activity should enhance the educator's skills and content knowledge; each professional development activity should involve active learning processes and lead to improved teaching practices and each professional development activity should help students become more efficient learners (DESE, 2006). The Missouri Professional Development Guidelines for Student Success (2006) states that in order to develop a strong professional development plan teachers, administrators, and school board members must work as a team which is committed to the improvement of instruction and sustained learning. This team must collaborate to determine the best available research in the areas of teaching, learning and leadership. The Missouri Mandates and Regulations include the Excellence in Education Act of 1985 Section 168.405.2 (DESE, 2006) which recognizes the Principal-Administrator Academy as an organizational framework for a wide variety of educational and training programs.

The Outstanding Schools Act of 1993 SB380, Section 7, RSMo (DESE, 2006), allocates one percent of state monies to district Professional Development Committees. The Outstanding Schools Act is very important because it changed the emphasis and the process for professional development. The Excellence in Education Act recognizes the need for teachers to grow professionally while the Outstanding Schools Act emphasizes individual growth, systemic improvement, and increased student achievement (DESE, 2006). The Missouri Mandates and Regulations (DESE, 2006) states the following:

> "…such funds shall be spent…for purposes determined by the professional development committee after consultation with the administrators of the school district and approved by the local board of education as meeting the objectives of a school improvement plan of the district that has been developed by the local board." (p.8)

All professional development activities must be tied to the Comprehensive School Improvement Plan, thus professional development must have a specific, clear focus for school improvement which impacts student achievement (DESE, 2006).

The Missouri Regional Professional Development Centers are a result of the Missouri mandates and regulations for

professional development (DESE, n. d.). There are nine Missouri Regional Professional Development Centers (RPDC) which include, Region 1 – Southeast RPDC, Region 2 – Heart of Missouri RPDC, Region 3 – Kansas City RPDC, Region 4 – Northeast RPDC, Region 5 – Northwest RPDC, Region 6 South Central RPDC, Region 7 – Southwest RPDC, Region 8 – St. Louis RPDC, and Region 9 – Central RPDC (DESE, n. d.).

Summary

In summary, a review of the history, trends, reform, and research as it relates to professional development and student achievement indicates the following conclusions: High quality, school-based professional learning, and collaborative work deepens understanding, transforms beliefs, and provides goal focused actions (Sparks, 2005a). Powerful professional learning happens daily in the core tasks of teaching and encourages positive, productive relationships with colleagues and students (DeFour, 2004). Quality relationships among adults in schools is a predictor of student learning. Schools in which everyone learns and performs at high levels (students and staff alike) requires professional development focused on continuous conversations (Sparks, 2002). Powerful professional development stresses content knowledge and instructional processes which increase student learning.

Professional development must make cognitive demands on teachers and administrators using higher-level intellectual skills (Marzano, McNulty, and Waters, 2005). The goals and methods of professional development must match the goals and methods teachers use with their students. In order to bridge the knowing-doing gap, teachers must consistently apply what they already know (Sparks, 2005a).

Chapter Three - Method

Introduction

This correlational research study was designed to compare quantitative data in order to determine if there is a relationship between high quality professional development (HQPD) offered through the nine Missouri Regional Professional Development Centers (RPDCs) and student achievement measured by the Missouri Assessment Program (MAP).

Purpose of the study.

The purpose of this study is to determine if student achievement is impacted by high quality professional development activities offered through the nine Missouri RPDC regions.

Research questions.

The following research questions were examined in order to discover the relationship between HQPD offered through the RPDCs and student achievement.

1. What percent of teachers and administrators participate in high quality professional development within the ninety school districts served by the Missouri RPDCs?

2. Is there a relationship between high quality professional development and student achievement within the ninety school districts in the RPDCs?

Sample.

MAP indices in the areas of Communication Arts and Math for grades 3, 4, 5, 7, 8, 10, and 11 were to be compiled within the following nine Missouri RPDC regions: Heart of Missouri RPDC, Southeast RPDC, Kansas City RPDC, Northeast RPDC, Northwest RPDC, South-Central RPDC, Southwest RPDC, St. Louis RPDC, and Central RPDC. The percentage of teachers who participated in high quality professional development opportunities within the Missouri RPDC regions were compiled. The directors of the nine Missouri RPDC regions were contacted in order to collect the number of teachers who had participated in high quality professional development activities in each district served by the RPDCs. Data was received by eight of the nine Missouri RPDC regions. The name of the region which was unable to provide data was not identified in the study.

Design of the Study

Methodology.

This is a correlation study comparing quantitative data including the percentage of teachers who have participated in HQPD offered by the Missouri RPDCs and MAP indices of the Missouri schools served by the Missouri RPDCs. The variables include the percentage of teachers who have participated in HQPD offered through the Missouri RPDCs for the school year 2007-2008 and the 2007-2008 Communication and Math MAP indices of school districts served by the Missouri RPDCs.

Research setting and participants.

The 2007-2008 MAP indices in the areas of Communication Arts and Math for grades 3, 4, 5, 7, 8, 10, and 11 were compiled for the school districts served by the nine Missouri RPDCs. The percentage of teachers were calculated for the Missouri school districts served by the Missouri RPDCs who participated in high quality professional development activities offered by eight of the nine Missouri RPDCs during the school year 2007-2008.

Data collection procedures and instruments.

The MAP indices for Communication Arts and Math for grades 3, 4, 5, 6, 7, 8, 10, and 11 were collected from the Missouri Department of Elementary and Secondary Education

(MDESE, 2008) data for the 2007-2008 school year. The MAP indices for each of the Missouri schools served by the Missouri RPDCs were divided into three separate data. An average of the MAP indices was calculated for Communication Arts, Math, and a combined average was calculated for Communication Arts and Math for each of the Missouri school districts within the Missouri RPDC regions.

The number of teachers who have participated in high quality professional development opportunities provided by the Missouri RPDCs were collected with the cooperation of the nine Missouri Regional Professional Development Center Directors. The number of teachers and administrators per district was retrieved from DESE (2008). A percentage of teachers and administrators who participated in Missouri RPDC high quality professional development activities was calculated by comparing the number of teachers and administrators who participated in high quality professional development activities offered through the Missouri RPDCs and the number of teachers per school district.

Analytic Procedures

Design procedure.

A Pearson Product Moment Correlational Research Design was utilized to measure the relationship between the percentage of teachers who participated in high quality professional development activities offered through the Missouri RPDC regions within the school districts served by the Missouri RPDCs and student achievement as measured by MAP indices. The data was analyzed using an Excel© spreadsheet.

Administration procedure.

Data was collected through accessing the Department of Elementary and Secondary Administration for the state of Missouri website (DESE, 2008). The data included the 2008 Communication Arts and Math MAP indices for school districts in the state of Missouri. Missouri school district MAP indices is limited to the 2007-2008 MAP indices in the areas of Communication Arts and Math for grades 3, 4, 5, 6, 7, 8, 10, and 11 of school districts within the Missouri RPDC regions. The combined 2007-2008 MAP Communication Arts and Math indices in grades 3, 4, 5, 6, 7, 8, 10, and 11 of each school district were also compiled by an average of each school district MAP Communication Arts indices and Math indices. The number of

teachers in each school district who participated in high quality professional development activities offered through the Missouri RPDC regions was compiled by contacting the nine Missouri RPDC directors. Data was received by eight of the nine Missouri RPDC regions. The number of teachers who participated in high quality professional development activities offered through the Missouri RPDC regions was limited to the school districts served by the Missouri RPDC regions. The number of teachers in each school district was retrieved from the Department of Elementary and Secondary Administration for the state of Missouri website (DESE, 2008). A percentage of teachers who participated in high quality professional development activities offered through the Missouri RPDC regions was determined by dividing the number of teachers in each school district with the number of teachers who participated in high quality professional development activities offered through the Missouri RPDC regions. An Excel© spreadsheet was utilized to determine the percentage of teachers who had participated in high quality professional development offered through the Missouri RPDC regions.

The percentage of teachers who participated in high quality professional development activities offered through the Missouri RPDC regions and the average of MAP indices

for Communication Arts, Math, and a combined average of Communication Arts and Math indices, were compiled within an Excel© spreadsheet. The percentage of teachers who participated in high quality professional development activities offered through the Missouri RPDC regions was compared to the average of MAP indices in the areas of Communication Arts, Math and the combined indices of Communication Arts and Math average. The data was analyzed using an Excel© spreadsheet.

Treatment of the data.

The data was collected, compiled and entered into a computer using an Excel© spreadsheet. The data was analyzed using the statistics program SPSS (Version 110.1) within an Excel© spreadsheet. This program was used to determine if a statistical significance exists between the percentage of teachers who have participated in high quality professional development activities offered through the Missouri RPDC regions and student achievement as measured by the MAP.

Summary

The methods of the study were guided by the research questions in order to discover the relationship between high quality professional development activities offered through the Missouri RPDC regions and student achievement as measured by the MAP. The research focused on the

Missouri school districts served by the Missouri RPDC regions.

Chapter Four - Results

Introduction

Purpose of the study.

The purpose of this study was to determine if student achievement is impacted by high quality professional development activities offered through the Missouri RPDC regions. The staff development standards are based on the National Staff Development Council's (NSDC) view that the primary purpose of staff development is to increase student achievement through improved professional learning experiences for all school employees who impact student learning (Sparks, 2001). This quantitative correlational study is designed to determine the degree of association (Creswell, 2008) between high quality professional development activities offered by the Missouri RPDC regions and student achievement as measured by the Missouri Assessment Program (MAP).

Sample.

The sample included the MAP (Missouri Assessment Program) indices in the areas of Communication Arts and Math for grades 3, 4, 5, 7, 8, 10, and 11 were compiled within eight of the nine Missouri RPDC regions. The

percentage of teachers who participated in high quality professional development opportunities within the Missouri RPDC regions was compiled. The directors of the nine Missouri RPDC regions were contacted, using a phone script, in order to collect the data which included the number of teachers who had participated in high quality professional development activities in each district served by the RPDCs. Each director received a letter of informed consent in regards to the intent of the study. Data was received by eight of the nine Missouri RPDC regions. The name of the region which was unable to provide data was not identified in the study. The independent variable of this study is the percent of teachers who participate in high quality professional development activities offered by the Missouri RPDC regions. The dependent variable of this study is student achievement as measured by the 2007-2008 MAP indices in the areas of Communication Arts and Math within the Missouri RPDC regions.

Treatment of data.

The data was collected, compiled, and then entered into an Excel© spreadsheet. The data was analyzed by using an Excel© spreadsheet. This Excel© program was used to determine if a statistical significance exists between the percentage of teachers who have participated in high

quality professional development activities offered through the Missouri RPDC regions and student achievement as measured by the MAP.

Results and analysis of data.

The following data relates to the research questions posed in this study. Question one focused on the percent of teachers who participated in high quality professional development activities offered within the Missouri RPDC regions. The number of teachers who participated in high quality professional development activities offered through the Missouri RPDC regions was obtained from the directors of eight of the nine Missouri RPDC regions. Question two focused on the relationship between high quality professional development and student achievement within the Missouri RPDC regions.

Data was collected through accessing the Department of Elementary and Secondary Administration for the state of Missouri website (DESE, 2008). The data included the 2008 Communication Arts and Math MAP indices for school districts in the state of Missouri. Missouri school district MAP indices is limited to the 2007-2008 MAP indices in the areas of Communication Arts and Math for grades 3, 4, 5, 6, 7, 8, 10, and 11 of school districts within the Missouri RPDC regions. The combined 2007-2008

MAP Communication Arts and Math indices in grades 3, 4, 5, 6, 7, 8, 10, and 11 of each school district were also compiled by an average of each school district MAP Communication Arts indices and Math indices. The number of teachers in each school district who participated in high quality professional development activities offered through the Missouri RPDC regions was compiled by contacting the nine Missouri RPDC directors. Data was received by eight of the nine Missouri RPDC regions. The number of teachers who participated in high quality professional development activities offered through the Missouri RPDC regions was limited to the school districts served by the Missouri RPDC regions. The number of teachers in each school district was retrieved from the Department of Elementary and Secondary Administration of the state of Missouri website (DESE, 2008). The percentage of teachers who participated in high quality professional development activities offered through the Missouri RPDC regions were determined by dividing the number of teachers in each school district with the number of teachers who participated in high quality professional development activities offered through the Missouri RPDC regions. An Excel© spreadsheet was utilized to determine the percentage of teachers who had participated in high

quality professional development offered through the Missouri RPDC regions.

The percentage of teachers who participated in high quality professional development activities offered through the Missouri RPDC regions and the average of MAP indices for Communication Arts, Math, and a combined average of Communication Arts and Math indices were compiled within an Excel© spreadsheet. The percentage of teachers who participated in high quality professional development activities offered through the Missouri RPDC regions was compared to the average of MAP indices in the areas of Communication Arts, Math and the combined indices of Communication Arts and Math average. The data was analyzed using an Excel© spreadsheet. This program was used to determine if a statistical significance exists between the percentage of teachers who have participated in high quality professional development activities offered through the Missouri RPDC regions and student achievement as measured by the MAP.

The following tables compare the percentage of teachers who participated in high quality professional development (HQPD) activities offered by the Missouri RPDC regions and the average of the Communication Arts (CA), Math (MA) and combined indices of school districts served

by the Missouri RPDC regions. A Pearson Product Moment Correlation was used to determine the degree of association between the two variables (Creswell, 2008). The variables were analyzed and compared by individual Missouri RPDC regions. Significance is determined to be measured at the .50 moderate correlation.

Pearson product moment correlations.

Table 1

Correlation Results Comparing the Percentage of Teachers Who Participated in HQPD and 2007-2008 MAP Indices of the Schools Served by Missouri RPDC Region 1

MA	CA	MA & CA Combined
0.0462	0.2131	0.104

Note. Significance is measured at the .50 moderate correlation

Table 1 illustrates the results of the data analysis which compares the percentage of teachers who have participated in high quality professional development activities offered by the Region 1 RPDC to student achievement as measured by the 2007-2008 Math, Communication Arts, and combined Math and Communication Arts indices. All three Pearson Product Moment Correlations indicate a less than .50 correlation resulting in no significant relationship. When analyzing the less than

significant correlations, the relationship between high quality professional development activities offered by the Region 1 RPDC and the Communication Arts indices average is the strongest correlation at 0.2131.

Table 2

Correlation Results Comparing the Percentage of Teachers Who Participated in HQPD and 2007-2008 MAP Indices of the Schools Served by Missouri RPDC Region 2

MA	CA	MA & CA Combined
0.0536	0.1340	0.0327

Note. Significance is measured at the *.50 moderate correlation*

Table 2 illustrates the results of the data analysis which compares the percentage of teachers who have participated in high quality professional development activities offered by the Region 2 RPDC to student achievement as measured by the 2007-2008 Math, Communication Arts, and combined Math and Communication Arts indices. All three Pearson Product Moment Correlations indicate a less than .50 correlation resulting in no significant relationship. When analyzing the less than significant correlations, the relationship between high quality professional development activities offered by the

Region 2 RPDC and the Communication Arts indices average is the strongest correlation at 0.1340.

Table 3

Correlation Results Comparing the Percentage of Teachers Who Participated in HQPD and 2007-2008 MAP Indices of the Schools Served by Missouri RPDC Region 3

MA	CA	MA & CA Combined
0.0220	0.0122	0.0058

Note. Significance is measured at the *.50 moderate correlation*

Table 3 illustrates the results of the data analysis which compares the percentage of teachers who have participated in high quality professional development activities offered by the Region 3 RPDC to student achievement as measured by the 2007-2008 Math, Communication Arts, and combined Math and Communication Arts indices. All three Pearson Product Moment Correlations indicate a less than .50 correlation resulting in no significant relationship. When analyzing the less than significant correlations, the relationship between high quality professional development activities offered by the Region 3 RPDC and the Math indices average is the strongest correlation at 0.0220.

Table 4

Correlation Results Comparing the Percentage of Teachers Who Participated in HQPD and 2007-2008 MAP Indices of the Schools Served by Missouri RPDC Region 4

MA	CA	MA & CA Combined
0.0112	0.2334	0.0254

Note. Significance is measured at the *.50 moderate correlation*

Table 4 illustrates the results of the data analysis which compares the percentage of teachers who have participated in high quality professional development activities offered by the Region 4 RPDC to student achievement as measured by the 2007-2008 Math, Communication Arts, and combined Math and Communication Arts indices. All three Pearson Product Moment Correlations indicate a less than .50 correlation resulting in no significant relationship. When analyzing the less than significant correlations, the relationship between high quality professional development activities offered by the Region 4 RPDC and the Communication Arts indices average is the strongest correlation at 0.2334.

Table 5

Correlation Results Comparing the Percentage of Teachers Who Participated in HQPD and 2007-2008 MAP Indices of the Schools Served by Missouri RPDC Region 5

MA	CA	MA & CA Combined
0.0441	0.2144	0.0850

Note. Significance is measured at the *.50 moderate correlation*

Table 5 illustrates the results of the data analysis which compares the percentage of teachers who have participated in high quality professional development activities offered by the Region 5 RPDC to student achievement as measured by the 2007-2008 Math, Communication Arts, and combined Math and Communication Arts indices. All three Pearson Product Moment Correlations indicate a less than .50 correlation resulting in no significant relationship. When analyzing the less than significant correlations, the relationship between high quality professional development activities offered by the Region 5 RPDC and the Communication Arts indices average is the strongest correlation at 0.2144.

Table 6

Correlation Results Comparing the Percentage of Teachers Who Participated in HQPD and 2007-2008 MAP Indices of the Schools Served by Missouri RPDC Region 7

MA	CA	MA & CA Combined
0.0732	0.3430	0.1340

Note. Significance is measured at the *.50 moderate correlation*

Table 6 illustrates the results of the data analysis which compares the percentage of teachers who have participated in high quality professional development activities offered by the Region 7 RPDC to student achievement as measured by the 2007-2008 Math, Communication Arts, and combined Math and Communication Arts indices. All three Pearson Product Moment Correlations indicate a less than .50 correlation resulting in no significant relationship. When analyzing the less than significant correlations, the relationship between high quality professional development activities offered by the Region 7 RPDC and the Communication Arts indices average is the strongest correlation at 0.3430.

Table 7

Correlation Results Comparing the Percentage of Teachers Who Participated in HQPD and 2007-2008 MAP Indices of the Schools Served by Missouri RPDC Region 8

MA	CA	MA & CA Combined
0.0322	0.1362	0.0426

Note. Significance is measured at the *.50 moderate correlation*

Table 7 illustrates the results of the data analysis which compares the percentage of teachers who have participated in high quality professional development activities offered by the Region 8 RPDC to student achievement as measured by the 2007-2008 Math, Communication Arts, and combined Math and Communication Arts indices. All three Pearson Product Moment Correlations indicate a less than .50 correlation resulting in no significant relationship. When analyzing the less than significant correlations, the relationship between high quality professional development activities offered by the Region 8 RPDC and the Communication Arts indices average is the strongest correlation at 0.1362.

Table 8

Correlation Results Comparing the Percentage of Teachers Who Participated in HQPD and 2007-2008 MAP Indices of the Schools Served by Missouri RPDC Region 9

MA	CA	MA & CA Combined
0.0391	0.0250	0.0101

Note. Significance is measured at the *.50 moderate correlation*

Table 8 illustrates the results of the data analysis which compares the percentage of teachers who have participated in high quality professional development activities offered by the Region 9 RPDC to student achievement as measured by the 2007-2008 Math, Communication Arts, and combined Math and Communication Arts indices. All three Pearson Product Moment Correlations indicate a less than .50 correlation resulting in no significant relationship. When analyzing the less than significant correlations, the relationship between high quality professional development activities offered by the Region 9 RPDC and the Communication Arts indices average is the strongest correlation at 0.0250.

The following figures represent a comparison of eight of the nine Missouri RPDC regions and student achievement as measured by the Math, Communication Arts, and combined

Math and Communication Arts indices. It should be noted that a limitation of the study included data available from eight of the nine Missouri RPDC regions.

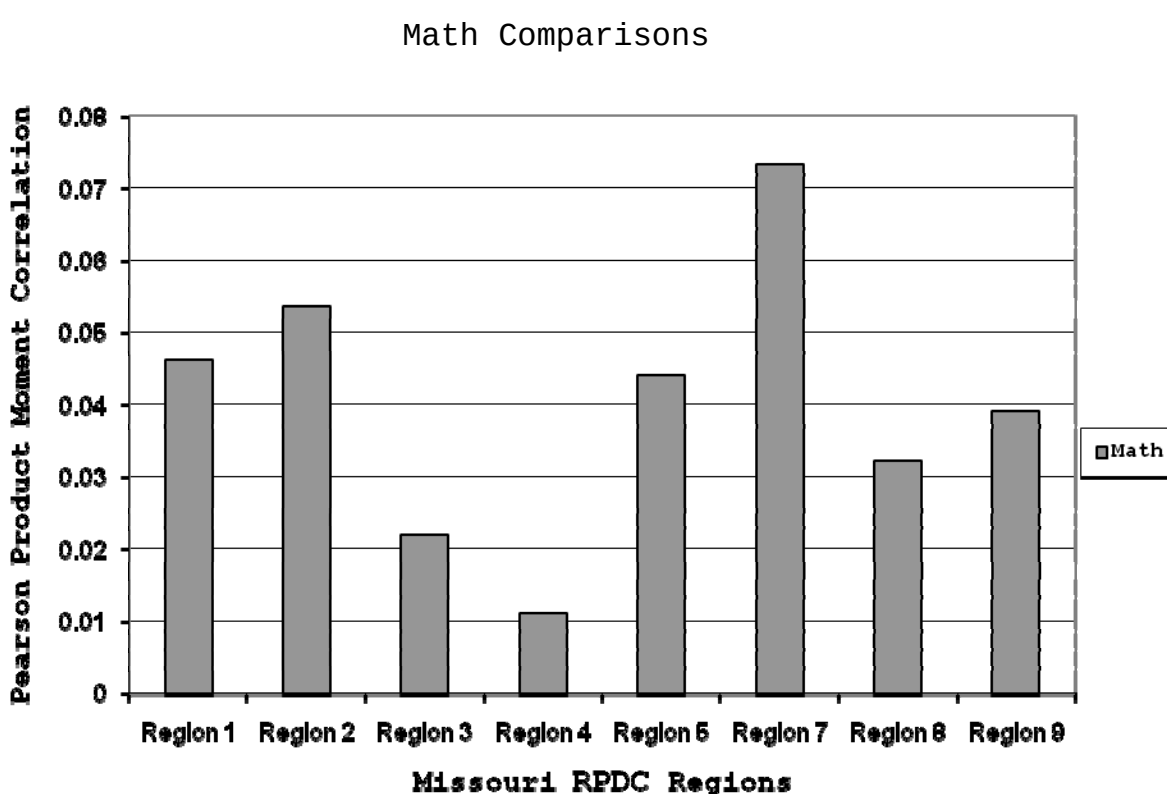

Figure 1. A comparison of the Pearson Product Moment Correlations of HQPD and Math MAP Indices among 8 of 9 Missouri RPDC Regions

Note. HQPD = High Quality Professional Development Significance is measured at the .50 moderate correlation.

Figure 1 illustrates the results of the data analysis which compares the percentage of teachers who have participated in high quality professional development

activities offered by eight of the nine Missouri RPDC regions to student achievement as measured by the 2007-2008 Math indices. All eight Pearson Product Moment Correlations indicate a less than .50 correlation resulting in no significant statistical relationship. When comparing the relationship between high quality professional development activities offered by eight of the nine Missouri RPDC regions and the Math indices averages, Region 7 is the strongest correlation at 0.0732. While a Pearson Product Moment Correlation of 0.0732 indicates an insignificant statistical correlation, the null hypothesis was accepted. High quality professional development activities offered by eight of the nine Missouri RPDC regions do not impact student achievement in the state of Missouri, as measured by the MAP.

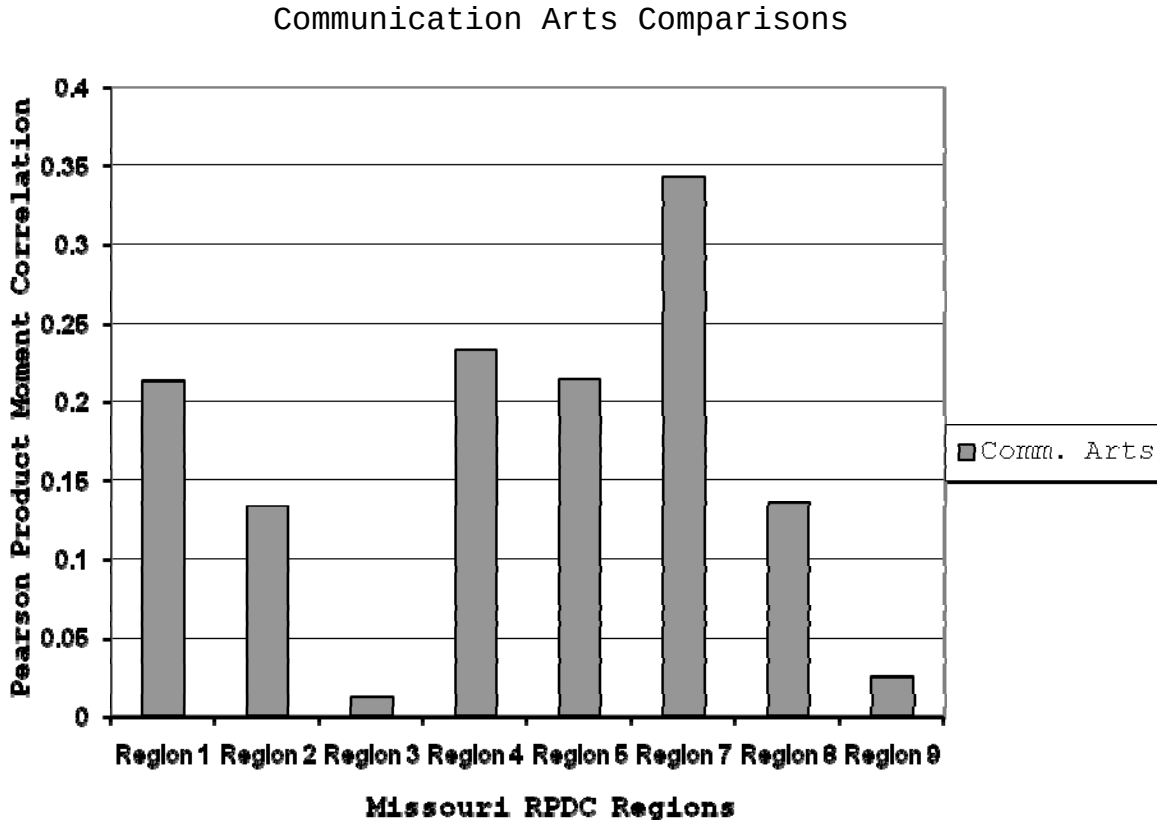

Figure 2. A comparison of the Pearson Product Moment Correlations of HQPD and Communication Arts MAP Indices among 8 of 9 Missouri RPDC Regions

Note. HQPD = High Quality Professional Development Significance is measured at the .50 moderate correlation.

Figure 2 illustrates the results of the data analysis which compares the percentage of teachers who have participated in high quality professional development activities offered by eight of the nine Missouri RPDC regions to student achievement as measured by the 2007-2008 Communication Arts indices. All eight Pearson Product

Moment Correlations indicate a less than .50 correlation resulting in no significant statistical relationship. When comparing the relationship between high quality professional development activities offered by eight of the nine Missouri RPDC regions and the Math indices averages, Region 7 is the strongest correlation at 0.343. While a Pearson Product Moment Correlation of 0.343 indicates a moderately weak statistical correlation (Creswell, 2008) the null hypothesis was accepted. High quality professional development activities offered by eight of the nine Missouri RPDC regions do not impact student achievement in the state of Missouri, as measured by the MAP.

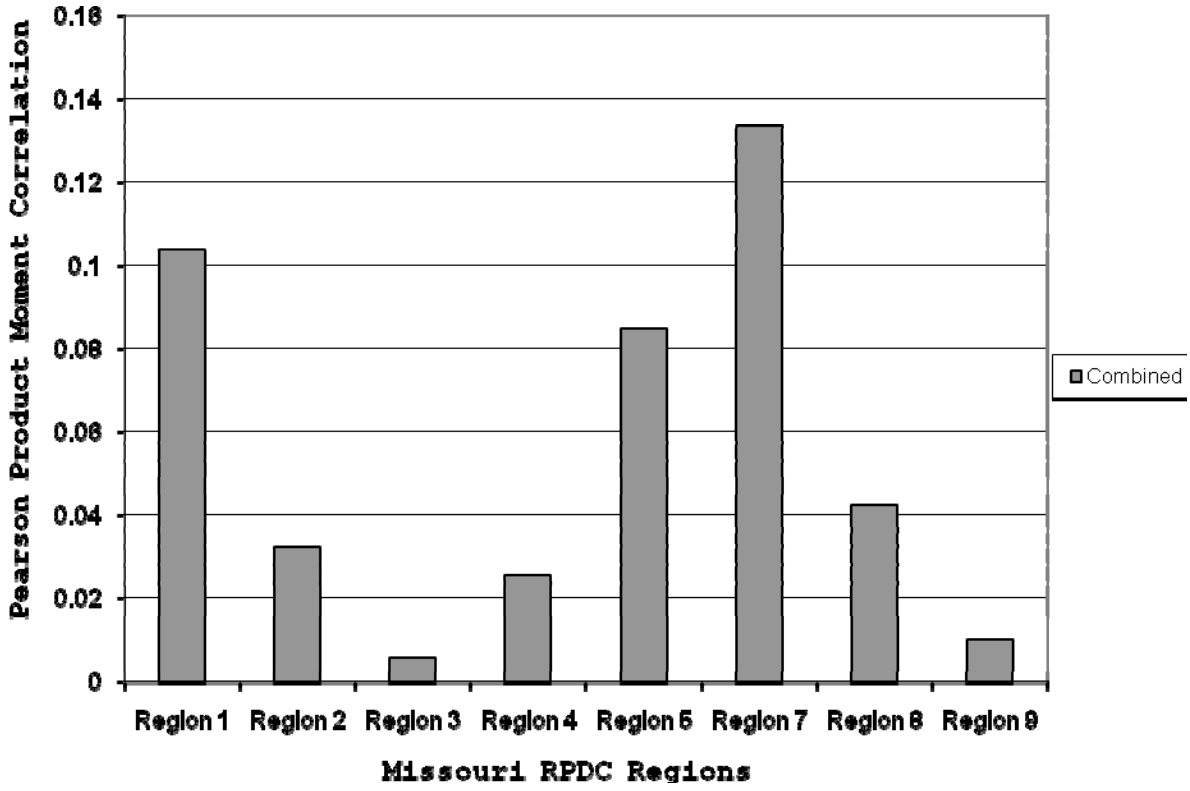

Figure 3. A comparison of the Pearson Product Moment Correlations of HQPD and Math MAP Indices among 8 of 9 Missouri RPDC Regions

Note. HQPD = High Quality Professional Development Significance is measured at the .50 moderate correlation.

Figure 3 illustrates the results of the data analysis which compares the percentage of teachers who have participated in high quality professional development activities offered by eight of the nine Missouri RPDC regions to student achievement as measured by the 2007-2008 combined Math and Communication Arts indices. All eight

Pearson Product Moment Correlations indicate a less than .50 correlation resulting in no significant statistical relationship. When comparing the relationship between high quality professional development activities offered by eight of the nine Missouri RPDC regions and the combined Math and Communication Arts indices averages, Region 7 is the strongest correlation at 0.134. While a Pearson Product Moment Correlation of 0.134 indicates an insignificant statistical correlation, the null hypothesis was accepted. High quality professional development activities offered by eight of the nine Missouri RPDC regions do not impact student achievement in the state of Missouri, as measured by the MAP.

Summary

This correlational research study was designed to compare quantitative data in order to determine if there is a relationship between high quality professional development offered through the nine Missouri Regional Professional Development Center (RPDC) regions and student achievement measured by the Missouri Assessment Program (MAP). The results of this quantitative study imply that there is no correlation between the percentage of teachers who have participated in high quality professional development activities offered by eight of the nine

Missouri RPDC regions and the district averages of MAP indices including Communication Arts, Math, and Communication Arts and Math Combined in grades 3, 4, 5, 6, 7, 8, 10, and 11.

Chapter Five - Discussion

Introduction

The purpose of this study was to determine if student achievement is impacted by high quality professional development activities offered through the Missouri Regional Professional Development (RPDC) regions. This correlational research study was designed to compare quantitative data in order to determine if there is a relationship between high quality professional development offered through the nine Missouri Regional Professional Development Center (RPDC) regions and student achievement measured by the Missouri Assessment Program (MAP). The sample included the MAP (Missouri Assessment Program) indices in the areas of Communication Arts and Math for grades 3, 4, 5, 7, 8, 10, and 11 and were compiled within eight of the nine Missouri RPDC regions. The percentage of teachers who participated in high quality professional development opportunities within the Missouri RPDC regions were compiled. The directors of the nine Missouri RPDC regions were contacted in order to collect the data including the number of teachers who had participated in high quality professional development activities in each

district served by the RPDC regions. Data was received by eight of the nine Missouri RPDC regions. The name of the region which was unable to provide data was not identified in the study. The independent variable of this study is the percent of teachers who participate in high quality professional development activities offered by the Missouri RPDC regions. The dependent variable of this study is student achievement as measured by the 2007-2008 MAP indices in the areas of Communication Arts and Math, within the Missouri RPDC regions.

The percentage of teachers who participated in high quality professional development activities offered through the Missouri RPDC regions was compared to the average of MAP indices in the areas of Communication Arts, Math and the combined indices of Communication Arts and Math average. The data was analyzed using an Excel© spreadsheet. This program was used to determine if a statistical significance exists between the percentage of teachers who have participated in high quality professional development activities offered through the Missouri RPDC regions and student achievement as measured by the MAP. A Pearson Product Moment Correlation was used to determine the degree of association between the two variables (Creswell, 2008). The variables were analyzed and compared by individual

Missouri RPDC regions. Significance is determined to be measured at the .50 moderate correlation.

Implications for effective schools.

The results of this quantitative study imply that there is no correlation between the percentage of teachers who have participated in high quality professional development activities offered by eight of the nine Missouri RPDC regions and the district averages of MAP indices including Communication Arts, Math, and Communication Arts and Math Combined in grades 3, 4, 5, 6, 7, 8, 10, and 11. These results indicate a difference in the impact of high quality professional development activities offered through eight of the nine Missouri RPDC regions on student achievement as measured by the Math and Communication Arts MAP indices. These results clearly indicate that no statistical significance exists between the impact of high quality professional development offered through eight of the nine Missouri RPDC regions and student achievement as measured by the MAP. However, the results indicate a stronger impact of high quality professional development activates offered through eight of the nine Missouri RPDC regions in the area of Communication Arts MAP indices when compared to Math MAP indices. These results may indicate that high quality professional development

activities offered through eight of the nine Missouri RPDC regions has a slightly stronger impact on student achievement in the area of Communication Arts when compared to Math.

Recommendations.

Recommendations for further research could include a quantitative study designed to compare the relationship between the time dedicated to on-going professional development and student achievement as measured by a group achievement test over at least five years. Further research could include identifying professional development opportunities school districts have participated in for the past five years compared to trends in student achievement. Research which includes a closer look at professional development activities, programs, and scientific based instructional strategies provided within the school districts in the state of Missouri with MAP indices of greater than 750 could provide more insight into the relationship of high quality professional development and student achievement. The directors of the nine Missouri RPDC regions were contacted in order to collect the data including the number of teachers who had participated in high quality professional development activities in each district served by the RPDC regions. Since data was

received by eight of the nine Missouri RPDC regions, future studies could include the region which did not provide data for the study. Future studies measuring student achievement will have to take into account the changes proposed in the Missouri Assessment Program and possible changes in No Child Left Behind (n. d.).

Summary

Future efforts to provide high quality professional development must be team based and embedded in the day-to-day tasks of learning, planning lessons, analyzing data, reviewing student work, and “honest” conversation (Sparks, 2005a). Dennis Sparks (2005b) sums up the heart of this study by stating, “Students pass through our schools only once and are the ultimate beneficiaries of the quality teaching and supportive relationships such professional learning can produce in every classroom and throughout the school community”(p 59).

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Appendix A

Letter of Informed Consent

Informed Consent

Letter of Informed Consent

Dear Participant,

This letter is an invitation to participate in a correlational study addressing the high quality professional development opportunities offered through the nine Missouri Regional Professional Development Centers. I am conducting this study as part of my doctoral requirements in Education Administration at Lindenwood University. Should you choose to participate I will contact you by phone to gather the data from you.
Researcher: Lisa M. Christiansen Lindenwood University, Doctoral Candidate, (417-743-4860), christel@clever.k12.mo.us

Dissertation Supervisor: Dr. Sherry R. DeVore, Lindenwood University, SDevore@lindenwood.edu; Dr. Terry Reid, Lindenwood University, treid@lindenwood.edu

Purpose of the Study: The purpose of this study is to determine if student achievement is impacted by the high quality professional development offered through the nine Missouri Regional Professional Development Centers. This study is a correlational research study designed to compare quantitative data in order to determine if there is a relationship between high quality professional development offered through the Southwest Regional Professional Development Center and student achievement measured by the Missouri Assessment Program.
Questions to be investigated:

1. What percentage of teachers participate in high quality professional development within the nine Missouri Regional Professional Development Centers?
2. Is there a correlation between high quality professional development and student achievement within the nine Missouri Regional Professional Development Centers?

Procedures: As the director of your regional development center you have been selected to assist the researcher in collecting data from your final year end status report. The nine Missouri Regional Professional Development Center Directors will be contacted by phone in order to collect the data which includes the percentage of teachers and administrators who have participated in high quality professional development opportunities within each of the nine Missouri Regional Professional Development Centers.

Confidentiality: Any information derived from your participation in the study is considered confidential. Your name or any identifiable information will not appear in print.

Risks and Benefits: There are no known risks associated with your participation in this study.

If it is your decision to participate in this study, please sign and return the enclosed consent form. Please retain a copy of this letter and you're written consent for future reference. I will be happy to answer any questions you may have, as well as share the study's findings upon the completion of my dissertation project.

Sincerely,

Lisa M. Christiansen
103 South Public Avenue
Clever, Missouri 65631
Doctoral Candidate
Lindenwood University

Informed Consent

I, _____ have read the letter of Informed Consent and agree to participate in the study entitled, "A Study of the Impact of High Quality Professional Development on Student Achievement in the State of Missouri" that is being conducted by Lisa M. Christiansen. I understand that:

- My responses will be used for the purpose of dissertation research and future publications.
- My participation is voluntary and may be withdrawn at any point in the process without negative consequence.
- My identity and that of my employing institution will be protected at all times throughout the process as well as in all reports of the research.

I have read the information above, and any questions I posed have been answered to my satisfaction. I voluntarily agree to participate in this study.

_____

Signature of Participant Date

Appendix B

Phone Script

Phone Script

Hello, this is Lisa Christiansen, I am contacting you in regards to the research I am conducting through Lindenwood University. My research is an attempt to determine if high quality professional development impacts student achievement. As a Missouri Regional Development Center Director I am asking your assistance in collecting data from your year end final status report. I am attempting to determine the percentage of teachers who have participated in high quality professional development opportunities offered through your Regional Professional Development Center.

If you are interested in obtaining the results of this study I will be happy to provide them to you via e-mail.

Thank You for your time and support.

VITA

Lisa Marie Christiansen currently serves as the special services director for the Clever RV School District in Clever, Missouri. Her career in education spans 27 years including 23 years teaching special needs students in grades kindergarten through twelfth grades and another 4 years in education administration. Specific expertise includes addressing the needs of students with severe emotional and behavioral disorders.

Educational achievements include a Bachelor of Science Degree in Education from the University of Missouri – St. Louis, a Master of Science Degree in Education from Southwest Missouri State University, and a Specialist Degree in Education Administration from Lindenwood University. Current professional accomplishments are performing graduate studies since 2002 and a current adjunct professor at Lindenwood University since 2004.