

THE PERCEIVED INFLUENCE OF THE STARR TEACHER PROGRAM ON
PROFESSIONAL GROWTH OF PROGRAM PARTICIPANTS
AND SUBSEQUENT CAREER ROLES

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AND SUBSEQUENT CAREER ROLES**

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ABSTRACT

Purpose of the study. The purpose of the study was to analyze the impact of the Select Teachers As Regional Resources (STARR) program on the former STARR participants' personal empowerment, professional growth and the influence on subsequent career roles. The method of the analysis was mixed, utilizing both quantitative and qualitative analysis. A quantitative survey of former STARR participants, who completed the program by 2006, was conducted, with survey data to determine (a) if any relationships existed between selected demographic variables of teachers who have participated in the STARR program and the participants' current self-perceived empowerment and (b) if differences existed in the self-perceptions about empowerment for the participants in the STARR program prior to beginning participation in the program, immediately after the completion of the program, and currently. A mixed study using both qualitative and quantitative analysis was conducted to determine the degree participants in the STARR program described beneficial experiences from the program, influences of the program on their professional development, and the influences of the program on their subsequent career roles.

Results of the study. The study found correlational relationships between selected demographic variables of the former STARR teachers and the self-perceived current School Participant Empowerment Scale (SPES) factors of empowerment. The demographic variable of “highest degree” had a positive correlation with the SPES factor “decision making.” “Decision making,” “professional growth,” and “impact” had negative correlations with “years of experience as a teacher.” The responding STARR participants all perceived a significant positive change for each of the SPES factors for the time interval “prior to STARR” and “immediately after STARR.” The perceptions for the time interval “immediately after STARR” to “currently” were significant for three of the six factors. For the time interval from “prior to STARR” to “currently,” five of the six factors increased significantly. For all significant differences, the perceptions at the later time interval were rated higher than the earlier time intervals except for the factor of “self-efficacy” for the time interval of “immediately after STARR” to “current.”

The open-ended responses from the participants clearly implied that the STARR program had a profound impact on their professional skills and confidence. The STARR program opened doors to new careers and leadership opportunities.

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CHAPTER 1

Background of the Study

Introduction

Professional development is necessary for educators to develop expertise in the field of education (Guskey & Huberman, 1995) to keep abreast of the changing knowledge base, changing student needs, and changing research based teaching methods (Darling-Hammond, 1997; Hawley & Valli, 1999). Teacher professional development involves activities which develop higher professional competence, promote positive personal and professional attitudes, and increase teacher knowledge and teaching skills for improving student success (Britton, Raizen, Paine, & Huntley, 2000; Darling-Hammond, 1997; Fullan, 2003; National Commission on Teaching and America's Future, 1996). Since the mid-1990's, teacher professional development has gained significant attention as a means of dealing with some of the concerns of the American educational system (Guskey & Huberman; Parsad, Lewis & Farris, 2001). "The designation of 'teacher education and professional development' as one of the National Educational Goals in the mid-1990's, is genuine recognition that well-prepared teachers are essential to educational reform efforts" (Dilworth & Imig, 1995, p. 1; Short, 1998). Professional development is required to create well prepared teachers, or highly qualified teachers (No Child Left Behind, 2001). The standards movement has created a need over the past few years for teacher learning and research based professional development (Willis, 2002). Educational reform requires changes in each level and across relationships

in schools, districts, and state (Fullan, 2003). The state level can make a difference, but strategies for standards, assessments, curriculum and professional development must be in place (Fullan).

Teacher professional development is exemplified by a variety of ever-changing programs including pre-service teacher development, in-service teacher education, continuing staff development, continuing education, mentoring programs, and summer teacher workshops (Bredeson & Scribner, 2001; Darling-Hammond, 1997; Guskey 1995). These forms of professional development for educators are designed to meet needs ranging from new teacher induction (Darling-Hammond, 1997) to forming the foundation for individual teacher growth and collegial support resulting in more authentic approaches to teaching and learning (Blase & Blase, 2001). These programs are designed to support teachers' continued training and ongoing acquisition of knowledge throughout their professional teaching careers (Darling-Hammond, 1997; Guskey, 1995) resulting in better teachers with expertise as an educator (Borko & Putnam, 1995; Guskey & Huberman, 1995; Parsad, Lewis & Farris, 2001). Teacher staff development programs primarily fit into four categories: individual instructional enhancement, training to enhance professional leadership, program development, and collaboration for overall school improvement (Metropolitan Life, 1998). Although the four types of staff development are designed to accomplish different ends, all must be clearly linked to policy objectives (Metropolitan Life).

Research on adult education and effective teaching methods has resulted in numerous ideas and designs for effective teacher professional development programs.

Hawley and Valli (1999) identified eight characteristics of effective teacher professional development based on research studies and national policy reports. The eight characteristics are:

1. Effective teacher professional development includes an analysis of goals which focus on student performance.
2. Effective teacher professional development involves teachers in the planning of the activities.
3. Effective teacher professional development is school based and an integral part of the school.
4. Effective teacher professional development provides teachers with the time to collaboratively solve problems.
5. Effective teacher professional development must be continuous and supported by funding and commitment.
6. Effective teacher professional development must be information rich and evaluative.
7. Effective teacher professional development provides teachers with a theoretical understanding of the information being discussed.
8. Effective teacher professional development must be part of a comprehensive change process (Hawley & Vallie, 1999).

Hawley and Vallie (1999) contend teacher professional development will be more effective if these eight components are considered in planning and included in delivery.

In a study of state mandated educational reform in Connecticut, increased teacher professional development activities resulted in increased teacher quality and increased

student achievement (Fullan, 2003). When teachers believed they could make a difference with their students, they did (Gibson & Dembo, 1984). Empowerment occurs when teachers “develop the competence to take charge of their own growth and resolve their own problems” (Short, 1994a). The term “self-efficacy” can be used interchangeably with the term “empowerment” (Goddard, Hoy & Woolfolk-Hoy, 2000). In describing empowerment, Maeroff (1988) identified three areas of concern for teachers: the need for improved status, increased knowledge, and access to decision making. In further studies, six components of teacher empowerment: decision making, professional growth, status, self-efficacy, autonomy and impact have been identified (Short and Rinehart, 1992). Short and Rinehart (1992) developed an instrument to measure teacher empowerment based on these six components. Teacher empowerment has become a focus of educational reform because empowered teachers are more effective teachers (Rinehart & Short, 1994; Short, 1994a).

A study conducted by the National Center for Educational Statistics (NCES) showed that 80 percent of the professional staff development for public school teachers focused on state or district curriculum and performance standards (Parsad, Lewis & Farris, 2001). Senate Bill 380 or the Outstanding Schools Act of 1993 was Missouri’s answer to education reform (Outstanding Schools Act, 1993). Teacher professional development was one component of the Outstanding Schools Act mandated by the legislature (Outstanding Schools Act, 1993). As one way of addressing professional development, the Select Teachers As Regional Resources (STARR) program was created to provide high quality professional development for teachers and school districts in Missouri (Missouri Department of Elementary and Secondary Education, 2006). Since 1994, teachers have been trained to become STARR teachers, based in Regional

Professional Development Centers (RPDC) around the state of Missouri (Missouri Department of Elementary and Secondary Education, 2006). The two-year program was based on the theory of teachers becoming the professional development experts to teach other teachers (D. Miller, personal communication, October 2007).

Each year a new group of STARR teachers is selected from applicants who are active teachers, from school districts throughout the state. After selection, they are provided professional development workshops throughout the school year, which emphasize authentic instruction educational techniques. After a year of training and practice, each new group of STARR teachers goes on leave, made possible by the funding from the Department of Elementary and Secondary Education, and reports to one of nine Regional Professional Development Centers, (RPDC) (See Appendix A). From these sites STARR teachers are available to conduct seminars in a variety of topics for schools and school districts in the surrounding regions (Missouri Department of Elementary and Secondary Education, 2006). Hundreds of teachers have been trained to be STARR teachers or alternates and scores of teachers and students have been influenced by the professional development programs presented by STARR teachers. (L. Dooling, personal communication, April, 2007).

From 2000-2004, The Missouri Department of Elementary and Secondary Education (DESE) contracted with the Institute for School Improvement at Southwest Missouri State University (now Missouri State University), under the direction of Professor David Hough, to evaluate the impact of the nine Regional Professional Development Centers (RPDC) (Hough & Schmitt, 2000a). As part of the larger study, a focus study was conducted to determine the degree the STARR program was impacting

teaching and learning in schools statewide (Hough & Schmitt, 2000b). The results of Research Report #501 indicated the STARR programs had a positive impact on those teachers and districts that had taken part in programs implemented by the STARR program (Hough & Schmitt, 2000b). The overall positive impact of the STARR program was established by the findings of the Southwest Missouri State University (SMSU) research group; however, not all outcomes of the STARR program were assessed (Hough & Schmitt, 2000b). A researcher in this 2000-2004 study indicated it was obvious that the STARR program had a life changing effect on the STARR teachers themselves, although this effect was not part of the study. The former Missouri Commissioner of Education Robert Bartman stated during a personal interview that the personal development of the STARR participants appeared to be one of the unanticipated positive outcomes derived as a consequence of the program (R. Bartman, personal communication, November, 2007).

An independent study of STARR teacher participants' perception of the STARR program was completed in 2006 (Weingarh, 2006). Weingarh (2006) reviewed surveys administered by DESE and completed by the STARR participants when they completed the STARR program. A sample of 21 former STARR teachers was selected for the Weingarh study which included personal interviews and a written survey. Although the study involved a rather small sample of the STARR participants, the findings revealed that these former STARR participants were positively impacted, both personally and professionally, by their participation in the professional development experiences of the STARR program (Weingarh).

Statement of the Problem

Professional development programs are typically assessed on the basis of the

number of participants or the overall program effectiveness (Guskey & Huberman, 1995). However, other outcomes often arise that are not predicted or planned. The STARR program was designed by the Missouri Department of Elementary and Secondary Education to train teachers to be professional development providers for other teachers (D. Miller, personal communication, October, 2007). The effectiveness of the program to provide meaningful professional development for educators across the state has been positively assessed by the findings of the 2000-2004 research studies contracted by the Missouri Department of Elementary and Secondary Education and conducted by the Southwest Missouri State University Institute for School Improvement (Hough & Schmitt, 2000b). However, outcomes and influences on the STARR teachers themselves has not been fully investigated. The effect of this unique professional development experience on a select sample of STARR teachers and their professional development was analyzed in an earlier study by Weingarth (2006). However, the impact and influences of the STARR program on the STARR participants and their subsequent career roles have not been assessed.

Purpose of the Study

The purpose of the study was to analyze the impact of the STARR program on the former STARR participants' personal empowerment, professional growth and the influence of the program on subsequent career roles. Findings provided insight about the relationships between selected demographic variables of the participants and the empowerment and professional development of the participants. The findings also provided an understanding about the influence of the STARR experience on the personal

empowerment and professional development of the participants as well as the influence of the program on the participants' subsequent career roles.

Research Questions

A survey of former STARR participants, who completed the program by 2006 was conducted in 2007. The purpose of the survey was to determine (a) if any relationships existed between selected demographic variables of teachers who participated in the STARR program and the participants' current self-perceived empowerment, and (b) if differences existed in the self-perceptions about empowerment for the participants in the STARR program prior to beginning participation in the program, immediately after the completion of the program, and currently. A qualitative analysis was conducted to determine the degree former participants in the STARR program described beneficial experiences from the program, influences of the program on their professional development, and the influences of the program on their subsequent career roles.

“Empowered individuals believe they have the skills and knowledge to act on a situation and improve it” (Short, 1994a, p. 488). Empowerment includes “enabling experiences, provided within an organization that fosters autonomy, choice, control, and responsibility” (Short, 1994a, p. 488). The STARR program develops skills, responsibility and fosters autonomy to deliver the programs. The STARR program “empowerment also includes expanding teachers' knowledge base and enabling them to be free to reflect, thus enhancing their confidence about influencing how schools and classrooms will operate” (Osterman & Kottkamp, 1993 p. 7). It is reasonable to use findings about empowerment to study the professional growth of the STARR

participants. This study measured self-perceptions of empowerment with Likert-type questions using the School Participant Empowerment Scale (SPEC) developed by Short and Rinehart (1992). Participants were asked to answer the questions about their capacity for empowerment at three times: (a) before the STARR training, (b) immediately after the STARR experience, and (c) current or at the time of the study.

The survey also included nine open-ended response questions about the STARR training, the STARR experience and subsequent career roles. This data provided anecdotal insight used to interpret the quantitative findings and provide a deeper understanding about the impact of the STARR program on the participants.

The following research questions were examined during the completion of this study:

1. Are there relationships between selected demographic variables of teachers who participated in the STARR program and the participants' current self-perceived empowerment?
2. Are there differences in the self-perceptions about empowerment for the participants in the STARR program prior to beginning participation in the program, immediately after the completion of the program, and currently?
3. To what degree do the former participants in the STARR program describe beneficial experiences from the program, influences of the program on their perceived empowerment, and influences of the program on their subsequent career roles?

Limitations

The following limitations, which focus on methodological issues, apply to this study (Heppner & Heppner, 2004).

1. The findings of this study are limited by the validity and reliability of the instruments used.
2. The study was limited to the perceptions of STARR training participants beginning with those selected in 1994 and ending with those completing the program by 2006. Findings are not generalizable beyond this population.
3. The findings of this study are limited to the self-report nature of the study. The presumption is made that participants will respond to the questions honestly and accurately.
4. The findings of the study are subject to the limitations of survey data collection methods.
5. The findings from the first section of the study were based on Likert-type questions which do not allow participants to construct their own responses.

Definitions

The following definitions represent the meaning of the terms when considering the context of this study.

In this study, the term empowerment was defined as “a process whereby school participants develop the competence to take charge of their own growth and resolve their own problems” (Short, 1994a, p.488).

Leadership, as used in this study, was defined as “the process of influencing others to understand and agree about what needs to be done and how to do it, and the

process of facilitating individual and collective efforts to accomplish shared objectives” (Yukl, 2006, p. 8).

Teacher collaboration, as used in this study, was defined as “activities that bring educators together to share and talk about their work, reduce physical and psychological isolation... encourage staff development, and thereby increase(ed) school effectiveness” (Levine, 1989, p. 62). Collaboration in schools makes effective connections, improves the quality of interpersonal relationships, stimulates professional growth, and enhances organizational effectiveness (Blase & Blase, 2001).

For this study, the general phrase “teacher professional development” was defined as pre-service programs, summer workshops, mentoring programs, training programs, and activities which develop higher professional competence, promote positive personal and professional attitudes, increase teacher knowledge and teach skills for improving student success (Bredeson & Scribner, 2001; Darling-Hammond, 1997).

Outline of the Study

This chapter included an overview of the study, including background information, the statement of the problem, the purpose of the study, the research questions, the limitations of the study, and definitions are included. Chapter 2 is a review of literature relevant to professional development, the STARR program, and teacher empowerment. Chapter 3 provides details about the design of the study, including information about the participants, instrumentation, the procedures for collecting and analyzing the quantitative data and supporting questions. Chapter 4 contains the analysis of quantitative and qualitative data. Chapter 5 includes a discussion of the findings, implications for practice, and recommendations for future research.

Chapter 2

Review of Related Literature

Introduction

Education is constantly changing as new knowledge is discovered about teaching and the processes of learning (Darling-Hammond, 1997). The more educators know about learning, the more likely they can determine what teacher development should be (Guskey & Huberman, 1995). Professional development is necessary for educators to keep abreast of the changing knowledge base, changing student needs, and changing research based teaching methods (Darling-Hammond, 1997; Hawley & Valli, 1999) and to develop expertise in the field of education (Guskey & Huberman, 1995).

Teacher Professional Development

Teacher professional development has become a major component of the education reform movement (Bredeson & Scribner, 2000; Fullan & Miles, 1992; Furtwengler, 1995; Guskey, 1995; National Commission on Teaching and America's Future, 1996; Scribner, 1998). Staff development, pre-service teacher development, in-service teacher education, continuing education, and teacher professional development are some of the terms used to describe a variety of programs designed to support teachers continued training and acquisition of knowledge throughout their professional teaching careers (Darling-Hammond, 1997; Guskey, 1995). Teacher professional development involves activities which develop higher professional competence, promote positive personal and professional attitudes, and increase teacher knowledge and teaching skills for improving student success (Britton et al, 2000; Darling- Hammond, 1997; Fullan,

2003; National Commission on Teaching and America's Future, 1996). States, districts, and individual schools initiate a variety of professional development programs, both formal and informal, based on either the "deficit" model which alleviates a need or inadequacy, or the "growth" model which is characterized by individuals' investigation into topics of choice (Guskey & Huberman, 1995). Venues for teacher professional development typically include such opportunities as pre-service programs, summer workshops, mentoring programs, training programs, and ongoing programs for the experienced teacher (Bredeson & Scribner, 2001; Darling-Hammond, 1997; Little, 1999; Stout, 1996). The plethora of professional development programs available introduces a multitude of factors to consider and problems to address (Dilworth & Imig, 1995). One factor to consider is matching appropriate forms of professional development with teachers' career growth stages (Burke, 1985). Professional staff development activities are needed to help teachers balance the inevitable tension between preparing children for the world of work and viewing education as lifelong learning (Tyack and Tobin, 1993). However, professional development requires time for observation, reading, reflection, dialogue with colleagues, and support for these practices at the district, state, and federal levels (Blase & Blase, 2001; Metropolitan Life, 1998; Willis, 2002).

Historical Perspective

In 1957, the National Society for the Study of Education recommended schools and entire staffs become collaborators in providing in-service education (Tyack & Cuban, 1995). Federal interest was heightened from 1956-1975 as professional development was used to produce a general reformation of America's schools (Ladson-Billings, 1999). During much of the late twentieth century, teacher professional development efforts have

been made without the general direction and coordination required to achieve some clear purpose (Tyack & Cuban, 1995). Education, for the most part, has remained resistant to change (Tyack & Cuban, 1995).

During the past fifty years, researchers, professional development providers, and school district personnel have confronted a variety of professional development issues (Darling-Hammond, 1997). Educational professional development of the 1960's concentrated on curriculum reform (Stout, 1996). By the 1970's, professional development had moved on to pedagogical reforms strongly represented by the work of Madeline Hunter (Ladson-Billings, 1999). In response to a growing concern over the achievement of U.S. students, teacher professional development in the 1980's focused on performance, accountability and assessment issues (Darling-Hammond, 2000). During the 1990's much of the professional development activities have been in the areas of multicultural education and violence reduction to meet a changing society and address student needs (Wasley, 1999). Professional development was often delivered in disconnected, non-collaborative, stand-alone workshops (Stout, 1996). Now state and local policy have responded to federal public mandates to recapture excellence in education by using staff development to produce school improvement (Dilworth & Imig, 1995; Guskey & Huberman, 1995). At the beginning of the twenty-first century much of the work in professional development focused on the goals of improving student and school performance (Darling-Hammond & McLaughlin, 1999; Willis, 2002).

In the 1980's, teachers focused their attention on research about adult development, or "the shifts in focus and interest we undergo as we age" (Christensen, Burke, Fessler & Hagstrom, 1983, p. 1). The attention of educators focused on teachers'

stages of career development and the implications for teacher professional development (Christensen, et al). Researchers found there were distinct differences in adults' learning and developed the theory of career- stages (Christensen, et al). Many researchers identified stages of career development categorized according to the evolving characteristics, strengths, and needs for formal and informal education (Burke, 1985). The teachers' career' development stages are designated as the early years, from induction to the third year; the middle years, from the fourth year to the twentieth year; and the later years, from the twentieth year until retirement (Christensen, et al). Researchers found these career stages address distinct differences in personal and professional needs and "found that certain forms of in-service education are more effective at one stage than another" (Christensen, et al, p. 1).

One of the most persistent findings from research on school improvement is the relationship between professional development and school improvement (Darling-Hammond & McLaughlin, 1999). The results of more than two hundred studies indicate that teachers who have more background in their content areas and have greater knowledge of teaching and learning are more successful with students (Darling-Hammond & Sykes, 1999). Professional development should be targeted and directly related to helping students master the curriculum at higher levels (Willis, 2002). During the 1993-1994 school year, more than 50 percent of full-time public school teachers participated in professional development activities with methods for teaching specific subject content being the most common topics (National Center for Educational Statistics, 1996). The number of states that have mandated professional teacher development programs has increased greatly since the early 1980's with the majority of

the U.S. states currently requiring some type of professional development program (Darling-Hammond, 2000; Furtwengler, 1995). Still, the current amount of teacher professional development available remained inadequate to meet the needs of teachers at the end of the 20th century (Kennedy, 1999; Ladson-Billings, 1999; Willis, 2002).

Although professional development for teachers meets a variety of needs, there are primarily four types of teacher professional development:

1. Individual instructional enhancement
2. Training to enhance professional leadership such as training for department heads and mentors (DuFour, 2001).
3. Program development such as a group of teachers working together to establish scope and sequence of curriculum
4. Group focus on overall school improvement or collaboration to produce school based change (Metropolitan Life, 2003).

Although the four types of staff development are designed to accomplish different ends, all must be clearly linked to policy objectives. None of these types are better than others (Metropolitan Life). However by mixing the types of professional development, a clear direction is not easily achieved and assessment becomes more difficult (Metropolitan Life). A lack of evaluation models have emerged for understanding staff development effectiveness (Fenstermacher & Berliner, (1983). If return on investment becomes the decision criteria, then level of progress in school improvement will be the measure, and higher quality experiences will be required (Metropolitan Life, 2003). Collecting data about successful professional development is rarely research based and usually based on participant opinion (Willis, 2002).

The current educational system in the United States continues to draw heavily from the theories of scientific management developed by Frederick W. Taylor (Novick, 1996). The concepts of efficiency and accountability have flowed to all parts of the American educational system. “In the best tradition of scientific management, the classroom has frequently been portrayed as a factory and children regarded as products to be produced as efficiently and systematically as possible” (Novick, p. 3). In the area of teacher professional development, the theories of scientific management resulted in the paradigm that teacher development is something that can be taught as individual parts (Crawford, 1995). Once teachers are taught these individual skills, teachers are then expected to go out into the classroom and combine these parts to become a good teacher (Crawford, 1995; Novick, 1996). The scientific management theories when applied to professional development have often led to classroom isolation where the teacher feels responsible for everything (Applewhite, 1999; Scribner, Cockrell, Cockrell, & Valentine, 1999). Professional expertise consists of teachers expanding their instructional repertoires, responding more flexibly to classroom circumstances and taking responsibility for the welfare and growth of both students and their professional colleagues (Leithwood, Begley & Cousins, 1992). However, the acquisition of knowledge and instructional strategies is not enough (Leithwood et al). A strong commitment to invest in various forms of teacher development must exist (Blase & Blase, 2001). The development of professional expertise seems to have an important relationship with such development (Leithwood et al).

Most American schools are oriented toward most teachers working on their own professionally (Darling-Hammond & McLaughlin, 1999). Teachers often consider their

classrooms as their individual kingdoms where they can succeed or fail in relative isolation (Darling-Hammond, 1993; National Education Commission on Time and Learning, 1994; Hawley & Valli, 1999). Isolation is cited as one of the main reasons that teachers leave the profession (Applewhite, 1999).

With the arrival of the technology age, online professional development programs and opportunities have become available (Novick, 1996). Teacher professional development courses are offered through the internet from educational institutions and private companies (Shelton & Jones, 1996). Technology makes professional development available for anyone with a computer (McKenzie, 2001). Technology individualizes professional development by allowing access to professional development programs twenty-four hours a day for a topic chosen by the individual (Bruffee, 1999; McKenzie, 2001). The advancement of information technology, coupled with the changes in society, are creating a new paradigm of education (Reigeluth, 1999). Videotaped lessons, internet resources and digital libraries are all useful resources for developing a knowledge base of best teaching practices and professional development (Willis, 2002). Online collaborative opportunities include teacher chat rooms, list serves, and networked curriculum-based web sites (Bruffee, 1999). Collaborative teaching efforts can be fostered by using technology to link remote sites to make expertise and resources available to all (Reigeluth, 1999). In a year-long study of students and faculty at two universities, the most common models for teaching and learning at a distance, including professional development, were instructor-to-instructor online collaboration and student-to-student online collaboration (Harris, 2000). Although technology use for collaboration is effective, cost and access prohibits its use by all (Harris, 2000).

Effective professional development is expensive (Novick; Stout, 1996). Funding is inadequate for providing comprehensive teacher professional development for all teachers (Applewhite, 1999; Darling-Hammond & McLaughlin, 1996; Novick, 1999). Although an increasingly growing number of states are now mandating teacher professional development, few of these programs are fully funded (Britton et al, 2000). For those districts cutting budgets, professional development is usually the first item to be cut (Applewhite, 1999). One of the main reasons greater investments have not been made in professional development is that teachers, the primary beneficiaries of the programs, have had few positive things to say about professional development activities in which they have participated (Hawley & Valli, 1999; Knight, 2000; Fullan, 2003). Fullan and Miles (1992), found that thousands of workshops and conferences with promise, led to no significant change in practice when teachers returned to their classroom.

Teacher professional development requires considerable amounts of time for understanding new concepts, learning new skills, developing attitudes, conducting research, collaborating with peers, and reflecting for full comprehension (Darling-Hammond, 1993; National Education Commission on Time and Learning, 1994). Many educators agree that time is one of the critical issues in teacher professional development (Abdal-Haqq, 1996; Fullan & Miles, 1992; Novick, 1996). Some researchers feel that any amount of time teachers are pulled out of the classroom and away from the students is detrimental to the learning process; however, a comprehensive teacher professional development program cannot be held during one hour after school workshops (Guskey & Huberman, 1995). Other researchers feel that professional development activities must be held outside the school day with some programs being held on weekends and during the

summer in order to be effective (Fullan & Miles, 1992). The most effective teacher professional development is site-based, ongoing and part of the regular work week (Willis, 2002).

Nationally, the increasing teacher shortage has put additional pressures on professional development programs. States have begun to issue emergency hiring permits and to lower teacher certification requirements to help ease the shortfall of teachers (Darling-Hammond, 2000; Fetler, 1997). As a result, an increasing number of new teachers are teaching courses in areas in which they are not fully prepared to teach (Darling-Hammond, 2000). In 1990-91, 39% of students received instruction from under-qualified teachers in life science or biology, 56% in physical science, and more than half in history or world civilization (Fetler, 1997). The increasing demand for teachers in the upcoming years will continue and will place increasing demands on professional development (Darling-Hammond, 2000). In 1985, 2.55 million elementary and secondary teachers worked in the United States. By the year 2010, 3.35 million teachers will be needed (Gerald & Hussar, 2000). “Most predictions place the demand for new hires above 2 million during the next decade, or more than 200,000 teachers a year, far exceeding the number of potential teachers produced by colleges of education” (Latham, Gitomer & Ziomek, 1999, p. 23). Currently 30% of the new teachers leave teaching within five years of entry and even higher attrition rates exist in the most disadvantaged districts which offer the fewest supports and professional development (Darling-Hammond & McLaughlin, 1999).

A new consensus about professional development seems to have evolved from four research-based developments (Darling-Hammond & Sykes, 1999). First, research

has shown a solid link between school improvement and professional development (Darling–Hammond, 2000). Second, educators must have higher levels of performance expectations for students (Novick, 1996; Guskey, 2000). Third, a wide gap exists between how people learn and how teachers teach and make assessments (Burke, 2000; Fetler, 1997; Willis, 2002). Finally, a widespread belief exists among teachers that current professional development activities are ineffective and do not meet the teachers’ needs (Hawley & Valli, 1999; Martinez, 2001; Willis, 2002). According to a Metropolitan Life Survey of the American Teacher (1986), 75% of teachers would like to have influenced the design and implementation of staff development programs, but only 30% felt they had input or influence on their own professional development.

In 2000, the National Center for Educational Statistics conducted a study of teacher preparation and professional development trends. The study also analyzed changes in preparation and professional development which had occurred since the last study conducted in 1998 (Parsad, Lewis & Farris, 2001). Findings indicated the more time spent in professional development activities, the more likely the participant would say professional development improved their teaching (Parsad et al). There was a positive relationship between perception of improved teaching and increased hours in professional development. “Teachers who participated for more than 8 hours were more likely than those who spent 1 to 6 hours to report that participation improved their teaching a lot” (Parsad et al, p. 2).

Characteristics of Effective Professional Development

Hawley and Valli (1999) identified eight characteristics of effective professional development drawn from both research studies and national policy reports. The authors

concluded that professional development efforts were more likely to result in effective change if the following eight components were included (Hawley & Valli, 1999).

First, teacher professional development must include an analysis of goals that focus on student performance (Hawley & Valli, 1999). Currently professional development is dominated by one-shot workshops that are intended to give teachers a quick insight into things that administrators feel the teachers should know (Ladson-Billings, 1999). Often these decisions are made with little consideration given to curricular issues or student needs (Lowenberg-Ball & Cohen, 1999). Professional development must be tied to specific student needs in order for educators to plan effective professional development (Novick, 1996).

Second, effective professional development involves teachers in the planning of the activities (Darling-Hammond, 2000). If teachers are not actively involved in the planning of their professional development, they are more likely to become cynical and detached from school improvement efforts (Guskey, 1995). Professional development planning that involves teachers will “increase the likelihood that individuals will feel and be free to engage in reflective practice and experimental learning” (Smylie, 1995, p. 99 as in Hawley & Valli, 1999, p. 140). More than 40 years following the first studies on educational professional development, teachers are frequently the targets of reform but still have relatively little control over professional development decisions (Darling-Hammond & Sykes, 1999; Short, 1998).

Third, research has shown that effective professional development is school-based and is an integral part of the operations of the school (McKenzie, 2001; Hawley & Valli, 1995). School-based professional development does not rule out off-site professional

development activities. The most effective professional development, however, takes place at the school when the topic of the program is based on issues that the school faces (Fullan, 2003).

Fourth, professional development must provide teachers with the time to collaboratively solve problems (Abdal-Haqq, 1996; Fullan, 1993; Guskey & Huberman, 1995). Lack of time for professional development is consistently mentioned as a significant reason for the lack of professional development (Darling-Hammond, 1999; Abdal-Haqq). Teacher isolation is a major professional concern (Britton, et al, 2000; Collins, 1999; Darling-Hammond; Novick, 1996). Collaborative professional development will help alleviate isolation and address school-wide concerns that cannot be corrected on an individual basis (Hawley & Valli, 1999). Collaborative approaches provide for alternative perspectives and help develop a supportive culture that values learning, growth, and encourages and facilitates change (Blase & Blase, 2001). Frequency of participation in collaboration with other teachers was “generally positively related to teachers’ beliefs about the extent to which the activity improved their classroom teaching” (Parsad, Lewis & Farris, 2001, p 2). Also, participating in decision making increases teacher’s status and power, including decisions concerning professional development. Collegial problem solving focused on instructional improvement leads to a myriad of rewards for teachers (Blase & Blase; Leonard & Leonard, 2003).

Fifth, effective professional development must be continuous and supported by funding and commitment (Abdal-Haqq, 1996; Darling- Hammond, 1999; Fullan, 2003). One of the primary weaknesses of professional development is the fact the sessions are often one-shot efforts with little application of learning (Guskey & Huberman, 1995;

Stout, 1996). “Researchers have consistently found that for teachers to facilitate higher order thinking in children, they too must have ample opportunities to construct their own understandings and theories” (Novick, 1996, p. 7). Professional development activities should be on going and should occur on multiple occasions that allow teachers to reflect on practices and challenges of implementation (Darling-Hammond & McLaughlin, 1995; Guskey & Huberman, 1995).

Sixth, effective professional development must be information rich and based on a variety of evaluations of strengths and needs (Darling-Hammond & Ball, 1997). Professional development should draw information from a variety of sources both from inside the school and from outside experts (Darling-Hammond & Ball; Nelson, 1998). Colleagues and other teachers can be powerful sources for effective professional development (Darling-Hammond & Ball). Professional development programs should evaluate the success and needs of the schools, teachers and students (Darling-Hammond, 2000; Nelson, 1998; Scribner, 1998). Access to knowledge about learning and teaching is a vital component to effective professional development (Darling-Hammond; Little, 1999; Nelson; Scribner).

Seventh, professional development should provide teachers with a theoretical understanding of the information being discussed (Darling-Hammond, 2000). Teachers often say they do not apply knowledge they have learned in professional development activities because they do not understand the content or they do not understand the reason change is being made (Ewing, 1999; Monson & Monson, 1997). Professional development by itself does not effect change; professional development must engage

teachers' beliefs, experiences and habits before change will occur (Darling-Hammond & Sykes, 1999).

Eighth, professional development must be part of a comprehensive change process (Fullan, 2003; Novick, 1996). Guskey (1995) cautions that there is "no easier way to sabotage change efforts than to take on too much at one time...the magnitude of change persons are asked to make is inversely related to their likelihood of making it" (p. 119). Planning for professional development should be extensive, but the implementation should be made by taking a variety of small steps (Hawley-Valli, 1999; Darling-Hammond & Sykes, 1999).

Staff development or teacher professional development, while a powerful tool for improvement of classroom instruction, can be much more (Blase & Blase, 2001). Professional development can form the foundation for teacher growth and collegial support that results in new, more authentic approaches to teaching and learning (Blase & Blase, 2001; Willis, 2002). The most promising professional development is based on educators analyzing what works in the classroom, sharing with other educators and collaborating together (Willis, 2002).

Teacher Collaboration

Teacher collaboration involves activities that bring educators together to share and talk about their work, reduce physical and psychological isolation, and buttress the processes of adult growth (Levine, 1989). Collaboration activities also encourage staff development and increase school effectiveness (Levine). Collegiality of collaborative ongoing professional development is one of the solutions to alleviate the sense of isolation inherent to the teaching profession (Abdal-Haqq, 1996; Furtwengler, 1995; Levine, 1989:

Nelson, 1996; Short & Echevarria, 1999; Willis, 2002). Blase and Blase (1989) found that collaboration improved the quality of interpersonal relationships, stimulated professional growth, and enhanced organizational effectiveness. Positive trends in professional development included mutual respect and orientations toward collaboration and learning from our most successful teachers (Peterson & Deal, 1999; Willis; Parsad, Lewis & Farris, 2001). Professional development teams, research-based inquiry groups, and study groups are types of teacher professional development based on collaboration (Willis, 2002; Leonard & Leonard, 2003). “Formal professional development and collaboration with other teachers are key mechanisms for providing teachers with ongoing training opportunities” (Parsad, et al). The need for collaboration in education has been important for professional development efforts and in mandated state and federal education reform movements (West, 1990).

“The ability to collaborate, on both a large and small scale, is one of the core requirements of post modern society...without collaborative skills and relationships, it is not possible to learn and to continue to learn as much as you need in order to be an agent for social improvement” (Fullan, 2003, pp.17-18). Collaboration produces psychological growth, which is required before professional growth can occur (Blase & Blase, 2001). Collaborative learning approaches differ from individual learning approaches in the variety of perspectives considered; amount of relevant information available; support of reflection, learning and growth; and by encouragement of others to support change (Osterman & Kottkamp, 1993). School capacity is directly linked to teachers’ knowledge, skills, dispositions and their ability to collaborate (Holbein & Reigner, 2007). “Teacher learning is most likely when teachers collaborate with professional peers, both within and

outside of their schools” (King & Newman, 2000, p. 576). Collaboration is based on the environment in schools which values and develops collegiality as a strategy for making effective connections or shared governance (Blase & Blase, 2001). Shared-governance schools are based on the fundamental characteristics of teacher collaboration and mutuality (Blase & Blase). There are several different approaches, policies and procedures involved in shared governance. One model does not fit all needs or all circumstances (Blase & Blase). Collaboration with other teachers may revolve around joint work, such as team teaching or mentoring; and teacher networks, such as school-to-school or school-to-university partnerships (U. S. Department of Education, 2005).

The new teacher mentoring program, required by most states, is a professional development program designed specifically for new teachers and is based on collaboration (Furtwengler, 1995). Mentoring is a collaborative opportunity for a generative, nurturing relationship between veteran, experienced teachers and novice, young educators who need contact and guidance (Levine, 1989). Adult learning theory suggests that generativity is the “interest in establishing and guiding the next generation or whatever...may become the absorbing object of a parental kind of responsibility” (Levine, 1989, p. 62). Mentoring programs meet the generative interests of the experienced teacher by the design and familial relationship which often develops. The older generation is passing on their wisdom and knowledge to the younger generation (Levine, 1989). Mentoring programs vary greatly but are designed for developing a professional and often personal relationship between the novice teacher and the experienced master teacher (Furtwengler, 1995; Holbein and Reigner, 2007). Mentoring programs remove the isolation that historically has been a part of beginning teacher

experiences (Fetler, 1997; Martineau, 2001; Zernike, 2001). The best mentoring programs are continual and ongoing, with regular meetings and observations encouraged (Brennan, Thames, & Roberts, 1999). Mentoring is one of the most common forms of professional development collaboration (National Center for Educational Statistics, 2005). Although mentoring programs are characterized by pairing an inexperienced teacher with a veteran teacher other collaborative relationships can be successful (Holbein & Reigner).

“Collaboration can occur between and among all teachers...where veteran teachers and novices working together, provide feedback to one another in a risk-free environment” (Holbein & Reigner, 2007, p 44). Collaborative learning approaches differ from individual learning approaches in the variety of perspectives considered, amount of relevant information available, the quality of learning and growth experienced, and the support of ongoing reflection (Osterman & Kottkamp, 1993). Encouragement of others to support change is particular to teacher collaboration and crucial for its success. (Osterman & Kottkamp).

In 1990, Lieberman and Miller identified the key concepts for developing successful teacher collaboration as:

1. a culture of support for inquiry; norms of collegiality, openness, and trust
2. opportunities and time for disciplined inquiry
3. teacher learning of content in context
4. reconstruction of leadership roles
5. networks, collaborations, and contexts (Guskey & Huberman, 1995).

Successful teacher collaboration efforts require time for collaboration, recognition of individuals and support of administration (Blase & Blase 1998). According to Blase and Blase (1998), “Open communications and sharing appear to be the foundation for collaborative work on school improvement” (p. 62). When teachers support each other through peer observations, study groups, collaborative planning and a variety of collaboration opportunities, they energize each other and enhance each other’s teaching skills (Holbein & Reigner, 2007). Teachers who collaborate “are able to learn from one another, thus creating momentum to fuel continued improvement” (DuFour & Eaker, 1998, p. 27).

A rich literature on adult learning and human development supports teachers’ need for a wide array of opportunities to observe, read, practice, reflect, and work collaboratively with peers (Novick, 1996). During collaboration teachers are allowed to be creative and avoid standard solutions resulting in “increased problem solving efforts, group work, and interpersonal trust” (Blase & Blase, 2001, p. 24). In successful schools, teachers work together to plan, design, research, and evaluate educational materials and programs (Levine, 1989). Teachers collaborate and “teach each other what they know about teaching, learning, and leading” (Levine, 1989, p. 61). Collaboration among groups of teachers is one of the best forums for instructional improvement (Blase & Blase, 2001). Teacher collaboration and cooperation in learning create the opportunity for high achievement, positive relationships, and psychologically healthy people (Johnson & Johnson, 1989).

Teachers must be given opportunities for professional development in order to become more knowledgeable about current pedagogy and must be given opportunities to

develop collegiality with other teachers (Fetler, 1997; Willis, 2002). Collaboration and collegiality “efforts can enhance a school’s climate and increase professional effectiveness” (Levine, 1989, p. 61). When there are groups of individuals with a shared culture, they are more likely to take risks than the individuals would if working alone by themselves (Guskey & Huberman, 1995). “Group dynamics theory suggests that if a public commitment to change is made...there will be follow-through” (Guskey & Huberman, 1995, p. 215). Teachers who are involved in democratic, collaborative activities increase teachers’ ability and desire to continue with collaboration in the future (Blase and Blase, 1994).

Collaboration and intellectual stimulation are results of professional development which are needed to produce collective action for school improvement (Brown, 1993). The past decade has seen a tidal wave of proposals designed to reform education (Loewenberg-Ball & Cohen, 1999). Since the mid-1990’s, teacher professional development has gained significant attention as a means of dealing with some of the concerns of the American educational system (Guskey & Huberman, 1995). The current restructuring efforts emphasize “teacher empowerment, active involvement of teachers in decision making, and shared governance- that is, control of and influence by teachers over events affecting teachers themselves” (Blase & Blase, 2001, p. 4). The concept of process is vital to understanding the paradigm shift from the professional development climate prior to the current era of mandated teacher professional development programs (Darling-Hammond, 1997).

STARR Program

As policy makers look for ways to improve student performance, more and more states are looking toward increased professional development as a way to meet state goals (Darling-Hammond, 2000). Teacher professional development has become a major component of the education reform movement (Bredeson and Scribner, 2001; Fullan & Miles, 1992; Furtwengler, 1995; Guskey & Huberman, 1995; National Commission on Teaching and America's Future, 1996; Scribner, 1998). States, districts, and individual schools have initiated a variety of programs, both formal and informal, designed to increase teacher knowledge and teacher retention. Programs range from pre-service, mentoring programs and new teacher induction programs to ongoing programs for the experienced teacher (Bredeson & Scribner, 2001; Darling-Hammond, 1997; Little, 1999; Stout, 1996). Although research shows the concept of professional development is recognized as the most vital component of education reform, professional development programs are still not available for all teachers (Britton et al, 2000). Appropriate funding is the major drawback to implementing comprehensive professional development programs for all teachers (Applewhite, 1999).

As part of the education reform movement of the 1990's, Missouri legislature passed Senate Bill 380, or the Outstanding Schools' Act which established programs to provide high quality professional development for teachers and school districts in Missouri (Outstanding Schools Act, 1993). The Missouri Department of Elementary and Secondary Education (DESE) created one original program, the Select Teachers As Regional Resources (STARR) to address the problem of funding professional development programs for Missouri teachers throughout the state (R. Bartman, personal communication, November, 2007). This STARR program was

developed by DESE to provide equal opportunities for all Missouri school districts to provide quality professional development opportunities to teachers (Bartman, 2007). Based on the premise of teachers teaching teachers, this unique professional development opportunity is a statewide professional development effort for Missouri schools created in accordance with the provisions of the Outstanding Schools Act (1993) or Senate Bill 380 (MO Department of Elementary and Secondary Education, 2006). The key elements of this act aim to: (a) develop a new funding formula for school districts to receive state moneys; (b) provide grant incentives for new school technology; (c) adopt high academic standards for Missouri students; (d) develop Curriculum Frameworks; (e) align local curriculums to the Show-Me Standards; (f) develop a new Missouri assessment program; and (g) provide high quality professional development programs for teachers (Outstanding Schools Act, 1993).

The Select Teachers As Regional Resources, STARR, program addresses the need for enhanced professional development programs for teachers throughout the state of Missouri (D. Miller, personal communication, October, 2007). This two-year program is designed to train STARR teachers during monthly development sessions in authentic instructional strategies (Missouri Department of Elementary and Secondary Education, 2006). It begins with training during the program's first year while the STARR teacher is still teaching in his or her school district and can practice the instructional strategies (D. Miller, personal communication, October, 2007). During the second year of the program, the STARR teachers serve as professional development consultants and travel to schools within their assigned Regional Professional Development Centers (RPDC). A substitute is hired by the school district and is paid by DESE to replace the STARR teacher during his/her year in the field as a teacher teaching teachers (MO Department of Elementary and Secondary Education, 2005).

For the history and details of the STARR program, personal interviews were conducted with Robert Bartman, the former Missouri Commissioner of Education; Robert Bell, former Director of Professional Development and the Director of the STARR program at its inception; Doug Miller, Coordinator of Professional Development at DESE; and Linda Dooling, current Director of Professional Development and the STARR program. According to Robert Bell, the Commissioner of Education in Missouri conceived the idea of a professional development program led by teachers for teachers, in 1993. Dr. Bartman recalled attending a national council where he first heard about an educational program in Kentucky which was funded by the Kentucky State General Assembly. The Kentucky program had the specific purpose of hiring classroom teachers to help with professional development for other teachers. Dr. Bartman thought a similar program would have great promise for Missouri's educational reform movement as outlined by The Outstanding Schools Act (Outstanding Schools Act, 1993) and passed into law by the Missouri State Legislature in 1993.

Dr. Bartman (2007) believed the model of teachers being trained to deliver professional development for other teachers would alleviate one common complaint lodged against the Department of Elementary and Secondary Education (DESE) in Missouri. The public often criticized the DESE employees for being out of the classroom too long and for being removed from the real world of education. In essence, the public did not view DESE employees as credible resources for professional development provided to teachers and schools to improve education. Dr. Bartman (2007) determined the employees in the Kentucky program could become recipients of the same criticism if those teachers were out of the classroom for too many years delivering professional

development. Commissioner Bartman envisioned a program model for Missouri that would continually be training teachers to become the specialists, utilizing these teachers to help with professional development and then allowing them to go back to their home schools. The envisioned program would allow a constant stream of fresh teachers into the program with none being out of the classroom for more than a year. Dr. Bartman also wanted the programs to reside in universities, to embed an additional advantage of making the experienced teachers available as resources for prospective teacher classes.

According to Dr. Bartman, members of DESE and the State Board of Education were concerned about spending so much money to impact so few teachers. Ultimately, the money was appropriated under the Outstanding Schools Act, with Annette Morgan, chairman of the House Education Committee, persuading the House to set aside money for professional development. In 1993, one million dollars were set aside as the working capital for what would become the STARR program (Bartman, 2007). According to Dr. Miller (2007), fifteen years after the STARR program became a reality, the program is still a line item funded by House Appropriations on a yearly basis. According to Dr. Bartman (2007), “For the STARR program to continue to be funded is a testament to its constituency.”

When the STARR program began, Celeste Ferguson, the Director of Teacher Education at the Department of Elementary and Secondary Education in 1993, was charged with advertising for and employing a director to lead the program (Bartman, 2007). This director would be directly responsible to Dr. Miller, Dr. Ferguson and the Commissioner Bartman. Robert Bell, recently retired Assistant Superintendent from the Rockwood School District, was hired to be the director of the new program. Dr. Bell did

the ground work and researched best practices, teaching strategies and what training needed to be included in the program (Miller, 2007). Determining that everything could not be accomplished in one year, Dr. Bell designed the two-year program for Missouri teachers based on his findings. Dr. Bell fashioned the program in which teachers would receive professional development training during a school year and the following summer (Bartman, 2007). The following year, the teacher would be on leave from the home school district and would provide professional staff development for other teachers and school districts within the specified area. Following the year on leave, the teacher would return to his or her district as a highly trained educator. First and foremost, the program design provided the DESE with a means to meet the needs for statewide educational improvement. Practicing teachers and school districts needing assistance would benefit by having teachers trained in authentic instruction available to conduct training for other teachers. Second, the housing of the program in the university location would provide an additional advantage as the STARR teachers learned from the university resource and also became a resource for the university's teacher training program. Finally the program would develop highly trained teachers who would return to their school districts as experts in teaching strategies to help with professional development that in turn improved instruction and impacts student achievement. According to Dr. Bartman (2007), the program was simply "good teachers out helping good teachers get better."

While the STARR program provides professional development activities at no cost to school districts, the school districts are required to copy materials as needed and to make the arrangements for time, facility and audience (Dooling, 2007). At times the STARR teachers work with individual teachers and model specific teaching behaviors or

conduct a workshop for a designated population, i.e. math teachers, high school faculty, etc. (Miller, 2007). The individual school or district usually selects after school or early release days for STARR presentations. Sometimes faculty members are compensated for the time spent in the professional development efforts, but usually the time is a requirement without compensation. When STARR presentations take place during the school day or on early release days, the teachers receive their usual salary, since they are not working any additional time. On some occasions substitute teachers are paid by the districts, so faculty members can participate in the STARR programs. Any extra employee compensation for salary or extra-duty pay is covered by the individual districts, not the STARR program. According to Dr. Miller (2007), even with these costs, utilizing the STARR program is still cost effective for the districts since professional development by presenters with the amount of training and expertise the STARR teacher presenters have would normally be too expensive for a school district. The STARR program provides professional classroom-tested training to help teachers use authentic instruction, performance-based assessment and Missouri's new academic performance standards (Miller, 2007).

The Missouri Department of Elementary and Secondary Education launched the STARR program during the spring of 1994. After a year of preparation, the 27 teachers selected to participate in the program are based at each of the nine university sites or Regional Professional Development Center, RPDC, during the school year. Traveling to various school sites near their university base, they provide in-service for teachers throughout the state of Missouri.

Educational change and successful professional development must be based on knowledge gained and embedded in the everyday work with students (Novick, 1996). The STARR program is based on knowledge gained and practiced in the classrooms, is designed according to effective professional development, and allows the teachers to develop their teaching skills as the new knowledge is embedded in the everyday work with students (Miller, 2007). Successful professional development programs for teachers allow for reflection and time needed to process and practice new theories and strategies learned. The STARR program allows for reflection during the first year of the program while the STARR teachers are still in their classrooms. This period of teaching while learning allows the STARR participants to develop expertise and personal efficacy which provides a reference for their future presentations (Bartman, 2007).

The programs included in the STARR teacher training include proven learning strategies and high quality professional development programs based on data and years of experience (D. Miller, personal communication, October, 2007). The programs also address new discoveries in the learning field or developments in an existing program. One example of the new discoveries and developments would be the inclusion of an additional intelligence in the Theory of Multiple Intelligences according to Howard Gardner. Dr. Gardner and other researchers originally included seven intelligences; later the researchers added two additional intelligences. When *Frames of the Mind* was published in 1983 eight intelligences were included: visual, mathematical, linguistic, logical, spatial, musical, interpersonal, and intrapersonal (Gardner, 1993). In 1995, researchers determined the naturalist characteristics met all the criteria to be considered an intelligence. The naturalist was added as a ninth intelligence and the STARR training

was changed in 1996 to include the most current research information at the time (Gardner, 2003). The topic of brain research and the implications for learning are constantly changing as new discoveries are made (Gardner, 2003). The STARR resource information is often amended to add newspaper, magazine, or research findings to include the most up to date and accurate information available (MO Department of Elementary and Secondary Education, 2006).

According to Weasmer and Woods (1998), three basic criteria are necessary for successful professional development:

1. time provided to become more knowledgeable about current pedagogy and to develop collegiality with other teachers
2. program built upon integrity and designed for diligence
3. program produces efficacy.

The STARR program training combines all three of these basic criteria for successful professional development (Miller, 2007).

Teachers must be given opportunities for professional development to become more knowledgeable about current pedagogy and opportunities to develop collegiality with other teachers (Weasmer & Woods, 1998). The STARR program provides the opportunities for professional development through an ongoing program with an established group of highly motivated teachers (Bartman, 2007). The STARR teachers develop a strong sense of collegiality and collaboration among the members as they work together and learn about current pedagogy and research driven learning techniques (Hough & Schmitt, 2000b).

The STARR program is built upon integrity (Miller, 2007). The STARR teachers are chosen after a comprehensive application and interview process. The applicants are selected through a process involving personal interviews and recommendations (Bartman, 2007). Those chosen for the STARR program represent a select group with the aptitude for becoming a resource for others and an interest in extensive personal professional development (Miller, 2007). The entire selection process from background checks to recommendations and interviews gave the program and DESE credibility (Bartman, 2007).

The programs chosen for the STARR teachers are also of the highest quality and integrity (Miller, 2007). Training programs are based on proven and research-driven educational programs and are often presented by the author or creator of the programs (MO Department of Elementary and Secondary Education, 2005).

The STARR program is designed to produce diligence or thoroughness. The STARR teachers meet for training sessions at least two days of a month during the school year and for several training sessions throughout the summer. This ongoing training allows for continued development and support for the new information being acquired (Miller, 2007). The time in between training sessions allows the STARR teachers to practice the learning strategies and techniques in their own classrooms (Dooling, 2007). The ability to practice and perfect their teaching strategies produces the final component of efficacy (Bartman, 2007).

The STARR program produced teachers trained to be experts in authentic instruction (MO Department of Elementary and Secondary Education, 2005). The premise of the program, to produce teachers teaching teachers, produced teacher-leaders

in the process (Missouri Department of Elementary and Secondary Education, 2006; Weingarh, 2006).

Teacher Leadership

Teachers have a few opportunities to develop the skills they need to become effective leaders (Katzenmeyer & Moller, 2001). Schools of the past, present, and future needed, and will continue to need, competent school leadership (Leithwood, Begley & Cousins, 1992). “If education in general, and schools in particular, are seen as tools for social change, educational leaders are assumed to be among the most critical artisans” (Leithwood, Begley & Cousins, 1992, p. 5). Topics of educational research have changed focus over the years from school improvement, effective principals, and most recently, the process for developing expert school leadership (Leithwood et al). Leaders intentionally exert influence on organizational members to effect the organization (Yukl, 2006). According to Yukl, “Leadership is the process of influencing others to understand and agree about what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives” (p. 8). The educational reform efforts of the last two decades have changed from a focus primarily on developing principals who are instructional leaders in the schools to professional development that increases teacher-leadership (Smylie & Brownlee-Conyers, 1992). Teachers have taken on roles such as departmental chairs and leading building and district advisory committees, in addition to their roles as leaders of their classrooms (Smylie & Brownlee-Conyers, 1992). Teachers pursue leadership for the desire to improve their quality of teaching and learning for students, not for the achievement of authority or leadership roles (Devaney, 1987). Because teachers know firsthand what is needed to improve

student learning, promoting and supporting teacher leadership is crucial to any educational reform effort (Dozier, 2007). During periods of change there must be a continual investment in the education and development of people because it is the skills of employees that result in change and create the true competitive edge (Joiner, 1987). Developing teacher-leadership skills requires specialized training programs and will not occur without school support (Blase & Blase, 2001).

In February 2003, the Center for Teacher Leadership at the Virginia Commonwealth University School of Education conducted an online survey of 300 of the most accomplished teachers in the United States about their readiness for leadership roles (Katzenmeyer & Moller, 2001). The 179 who responded represented exemplary teachers from 37 different states (Katzenmeyer & Moller). The findings had important implications for promoting and supporting teacher leadership. Ninety-seven percent saw themselves as leaders but eighty-two percent claimed they had not received training for their leadership roles (Dozier, 2007). The success or failure of teacher-leaders has most often depended on context and on the experience and personal characteristics of the teacher (Katzenmeyer & Moller), but good teachers still need training to lead colleagues effectively (Dozier). The STARR program is based on the model of teachers teaching teachers (MO Department of Elementary and Secondary Education, 2005). The program is designed to develop expertise in the STARR participants, so they in turn can instruct other teachers (MO Department of Elementary and Secondary Education).

The teacher-leader role is one of empowerment (Blase & Blase, 2001). To empower others who might otherwise be separated from decision making is powerful (Huffington, 2007). The teacher-leader role has many positive outcomes. The role usually

results in decreased isolation, which is typically experienced by a classroom teacher. Decreased isolation is a direct outcome from the opportunities to collaborate and work with others (Leonard & Leonard, 2003). Other positive results of being in a teacher-leader role included increased knowledge and skills, as well as increased self confidence and professional growth (Blase & Blase). Most of the positive results are the direct products of collaborating with others and having the opportunity to learn and observe new methods and techniques (Blase & Blase).

Negative aspects can also accompany the teacher-leader role (Devaney, 1987). Teacher-leadership roles require increased commitments of time and effort which can impact the teacher's ability to be effective in the teacher or leader roles (Devaney). Co-workers can resent the designation of teacher-leader, which can result in resentment and hostility towards those in the position of teacher-leader (Devaney). These obstacles have often resulted in the teacher-leader making the decision to leave teaching and move into administration (Boyd-Dimock & McGree, 1995).

The learning process satisfies many people's needs for achievement, giving them a feeling of increased self-worth and a positive outlook about the change taking place (Joiner, 1987). Joiner's description of the development of individuals in business is indicative of the development of leadership in education (Joiner). Any highly competitive organization undergoing change needs employees who are well trained, who possess specialized skills, and who can learn many new skills (Joiner). A learning environment is rewarding, exciting, and motivating (Joiner). When change is no longer a threat, it becomes an opportunity for personal growth (Joiner). Whether in business or education, an organizational environment where everyone is continually learning and developing

new skills is a win-win proposition (Joiner). Research indicates “that individuals who receive greater opportunities and get more meaningful assignments throughout their careers will be more likely to develop and grow professionally, eventually becoming leaders in their own right” (Bass & Avolio, 1994, p.11). To lead others through the turmoil caused by change requires a leader who is convinced that employees can and will contribute to the accomplishment of objectives (Joiner). During periods of change, a continual investment must be made in the education and development of people which results in change and creates the true competitive edge (Joiner). In education, as in business, employee commitment is needed for personal growth and satisfaction to occur and leaders to develop (Joiner).

Empowerment

The extent to which teachers perceive they have an effect or influence on educational programs is empowerment (Short & Rinehart, 2002). The term empowerment has changed over the years from the obsolete definition to gain power or assume power over to a later definition of investing formally with power or authority (Bolin, 1989). Today in education the term empowerment is used to mean “investing in teachers the right to participate in the determination of school goals and policies, and the right to exercise professional judgment about the content of curriculum and means of instruction” (Bolin, 1989, p. 82). To empower participants with new knowledge, skills, and attitudes is the goal of professional development (Guskey, 2000).

In early research on empowerment, Maeroff (1988) recognized areas of need for teachers: increased knowledge, improved status and involvement in decision making. Empowered teachers take charge of their own growth and solve their own problems

(Short & Rinehart, 1992). Short and Rinehart (1992) made further developments when they identified six factors of teacher empowerment: decision making, professional growth, status, self-efficacy, autonomy and impact. Short and Rinehart (1992) developed an instrument, the School Participant Empowerment Scale (SPES), to measure teacher empowerment based on the six factors.

In a study on the Reading Recovery program, Rinehart and Short (1994) found that teacher-leaders in the program perceived themselves as being empowered in decision making, professional growth, self-efficacy, autonomy and impact. The focus of the study, The Reading Recovery program, is similar to the STARR program in the format of requiring a year of training for teacher-leaders. In both of the programs, teaching methods and practice for mastering the techniques are incorporated into the training (Missouri Department of Elementary and Secondary Education, 2005; Rinehart & Short). The two programs do have some basic differences. The Reading Recovery teacher-leaders return to their home school to lead the Reading Recovery program, while the STARR teachers are on leave for one year while conducting professional development for other teachers and school districts in their RPDC district (Rinehart & Short, Missouri Department of Elementary and Secondary Education). In both programs, empowerment of members with resources needed to perform their roles is encouraged (Ogawa & Bossert, 1995). According to Blase and Blase (2001), teachers can empower themselves through reflective actions that mirror their claims to expertise about instructional matters. The Reading Recovery program and the STARR program both develop expertise through training and reflection (MO Department of Elementary and Secondary Education, 2005;

Rinehart & Short). Empowerment is naturally, rather than officially, achieved (Blase & Blase, 2001).

Short and Rinehart identified three tiers of teacher empowerment. First, teachers develop expertise and become problem solvers. When this expertise is recognized by administrators, teachers are encouraged to increase their role in decision making (Rinehart & Short, 1994). Empowerment would naturally develop (Blase & Blase, 2001). The second tier of teacher empowerment occurs when specialized programs are incorporated into the school curriculum. These types of programs can become organizations within organizations (Rinehart & Short). The Reading Recovery program and the STARR program could both be considered in this category. The third level of empowerment is mandated by school districts or state legislatures. Examples could include state mandated site management or empowerment under required school improvement mandates. Teachers are required to take on responsibility and power, but it is not by choice. Teachers are often unprepared and are not ready to take on the responsibility and leadership required in the third tier of empowerment (Rinehart & Short). Most teacher empowerment would be of the type achieved in tier one (Rinehart & Short).

In schools, encouragement of teacher development and recognition of their good work and ideas are important for teacher empowerment (Blase & Blase, 2001). Teachers are willing to take responsibility and increase commitment when they are involved in planning and decision making (Short & Greer, 1997). Blase and Blase (2001) interviewed more than 800 teachers and found factors which really work in empowering teachers to be their best. The authors identify critical reflection using a relevant knowledge base as

necessary to empowering teachers (Blase & Blase, 2001). Positive results include improved self-esteem, increased confidence, commitment, innovation, autonomy, and reflection (Blase & Blase). According to Nonaka and Takeuchi (1995), to make learning optimal, information must be experienced individually or internalized to become tacit knowledge. However, internalization can also occur by re-experiencing other people's experiences or knowledge (Nonaka & Takeuchi, 1995). Using meaningful dialogue and collective reflection increases empowerment and the probability for other individuals to internalize information they have not experienced (Nonaka & Takeuchi; Short & Greer, 1997). The extent that teachers believe they work in an environment that supports, nurtures, and stimulates their growth and development should encourage their perceptions of empowerment and satisfaction (Wu & Short, 1996).

Time to learn about the latest pedagogy and time to develop collegiality with other teachers are necessary to develop a teacher's sense of purpose and enthusiasm for the profession (Blase & Blase, 2001). Schools must support teachers' involvement in learning, caring, and inquiring communities (Sergiovanni, 1994). With support from administrators, teachers will become empowered and are more likely to effect true change in our schools (Weasmer and Woods, 1998). The more time teachers participate in collaborative activities with other teachers, the more positive changes occur in the classroom (Parsad, Lewis and Farris, 2001, p.3). Results of a study by Wu and Short (1996), found that schools should create environments which support greater empowerment. When schools create environments where "teachers gain competence, expand their professional stature, and grow to believe that they have the capacity to act in ways that bring about student learning" there will be an impact on job satisfaction and

commitment (Wu & Short, 1996). When teacher performance and job satisfaction improve, student achievement and school effectiveness will be the results (Wu & Short). Empowerment is a basic element of school reform (Gonzales & Short, 1996).

In recent years, professional development was focused on reforming education, not just individual classrooms (Bredeson and Scribner, 2000; Fullan & Miles, 1992; Furtwengler, 1995; Guskey, 1995; National Commission on Teaching and America's Future, 1996; Scribner, 1998). In response to a growing concern about the achievement of U.S. students, teacher professional development in the 1980's was focused on performance, accountability and assessment issues (Darling-Hammond, 2000; Elmore & Busey, 1999). Since the mid-1990's, teacher professional development has gained significant attention as a means of dealing with some of the concerns of the American educational system (Dilworth & Imig, 1995). The addition of 'teacher education and professional development' to the National Educational Goals (added to the original seven in the mid-1990's) is genuine recognition that well-prepared teachers are essential to educational reform efforts (Dilworth & Imig, 1995). With the increasing demands that teachers face, a need of unprecedented proportions exists for teacher professional development (Corcoran, 1995; Smylie & Conyers, 1991).

Missouri was a part of this trend when legislatures passed the Outstanding Schools Act (1993) or Senate Bill 380 (MO Department of Elementary and Secondary Education, 2006). The Select Teachers As Regional Resources (STARR) program was developed by the Missouri Department of Elementary and Secondary Education (DESE) as a means to provide free quality professional development opportunities to teachers (L. Dooling, personal communication, April, 2007; MO Department of Elementary and

Secondary Education, 2006). This unique professional development opportunity was based on the premise of teachers teaching teachers (L. Dooling, personal communication, April, 2007). The two-year program was designed to train STARR teachers during monthly training sessions in authentic instruction strategies (Missouri Department of Elementary and Secondary Education, 2005).

The Institute for School Improvement at Southwest Missouri State University, under the direction of Professor David Hough, was contracted to evaluate the STARR program levels of impact on teachers' professional development as well as the impact on teaching and learning during a four year period. The results of Research Report #501 indicated that the STARR teachers had a positive impact on teachers and districts that had taken part in programs implemented by the STARR program, however not all outcomes of the STARR program were assessed (Hough & Schmitt, 2000b).

Summary

Teacher professional development has gained significant attention as a means of addressing some of the concerns of the American educational system and bringing about school improvement. Professional development is necessary for teachers to keep abreast of the changing knowledge base, changing student needs, and changing research based teaching methods. Staff development, pre-service teacher development, in-service teacher education, continuing education, and teacher professional development are some of the terms used to describe a variety of programs designed to support teachers' professional growth. Professional development promotes positive personal and professional attitudes and increases knowledge and teaching skills for improving student success. Teacher

expertise, professional growth, teacher-leadership, and empowerment are some of the personal outcomes of professional development.

The historical background of teacher professional development was examined from the curriculum reform of the 1960's, and scientific management, to the current education reform movement. Federal and state mandates include teacher professional development as a major factor for improving teacher quality resulting in student success. This review of literature explored the elements of professional development including time, cost, delivery, purpose and characteristics. The eight characteristics of effective professional development described by researchers Hawley and Valli provide the context for this study of professional development.

A review of related literature was presented in this chapter to provide a framework for the study. The professional development constructs of collaboration and teacher-leadership were reviewed. Collaboration with other teachers was cited as a pre-requisite to accumulating knowledge necessary for successful professional development. Collaborative approaches to professional development and teaching are most successful for developing positive teacher relationships and yielding high student achievement.

The teacher-leader role develops increased knowledge and skills as well as increased self confidence and professional growth. Teacher-leader roles include departmental chairs and building and district advisory committees in addition to roles as leaders of the classroom. Teachers often pursue teacher-leadership for the desire to improve their quality of teaching and improve learning for students, not for the achievement of authority or leadership roles. Teacher-leader roles require extra training to be able to teach or lead other teachers.

The professional development constructs of collaboration and teacher-leadership provide the contexts for empowerment in this study. To empower participants with new knowledge, skills, and attitudes is one of the goals of professional development. The extent to which teachers perceive they have an effect or influence on educational programs is labeled “empowerment.” Empowerment is needed for personal growth and satisfaction to occur. Empowerment is an enabling experience which allows an individual to display existing competencies and develop new competencies. Short and Rinehart created the School Participant Empowerment Scale (SPES) based on six factors: decision making, professional growth, status, self-efficacy, autonomy, and impact. The research on empowerment conducted by Short and others provides the theoretical underpinnings for this study about the Select Teachers As Regional Resources (STARR) program.

The STARR program is a statewide professional development program created in 1993 in accordance with the Missouri Outstanding Schools Act or Senate Bill 380. The Missouri Department of Elementary and Secondary Education (DESE) created STARR to provide free, high quality professional development for teachers and schools districts. The two-year program is based on the format of teachers teaching teachers in authentic instructional strategies. The STARR teachers work in collaborative teams based at nine Regional Professional Development Centers around Missouri. Previous studies determined the STARR program was successful for providing professional development in Missouri.

CHAPTER 3

Method

Rational

Professional development is necessary for educators to keep abreast of the changing knowledge base, changing student needs, and changing research based teaching methods (Darling-Hammond, 1997; Hawley & Valli, 1999). Effective professional development activities develop expertise in the field of education, promote positive personal and professional attitudes, and increase teacher knowledge and skills for improving student success. Teacher professional development is one of the main components of the education reform movement.

In accordance with the 1993 Missouri Outstanding Schools Act, the Missouri Department of Elementary and Secondary Education (DESE) created the Select Teachers As Regional Resources (STARR) program. STARR is a statewide professional development program designed on the premise of teachers teaching teachers. Following one year of training, the STARR teachers spend a second year providing free, high quality professional development for teachers and schools districts. Previous studies established the STARR program as a successful professional development program in Missouri.

The impact of the STARR program on the former STARR participants has not been established. A survey was developed by the researcher to provide data about the impact of the STARR program on STARR participants' perceived personal

empowerment, professional growth and the influence of the program on subsequent career roles. Analyzing the quantitative measures of the STARR demographics and the School Participant Empowerment Survey (SPES) may reveal significant relationships with implications for professional development and specifically for the STARR program. Analyzing the open-ended questions will provide qualitative results to support the findings and provide evidence of the STARR program's influence on subsequent career roles.

Purpose of the Study

The purpose of the study was to analyze the impact of the STARR program on the former STARR participants' personal empowerment, professional growth and the influence of the program on subsequent career roles. Findings provided insight about the relationships between selected demographic variables of the participants and the empowerment and professional development of the participants. The findings also provided an understanding about the influence of the STARR experience on the personal empowerment and professional development of the participants as well as the influence of the program on the participants' subsequent career roles.

The method of analysis was mixed utilizing both quantitative and qualitative analysis. A quantitative survey of former STARR participants who completed the program by 2006 was conducted to determine (a) if any relationships existed between selected demographic variables of teachers who have participated in the STARR program and the participants' current self-perceived empowerment, and (b) if differences existed in the self-perceptions about empowerment for the participants in the STARR program prior to beginning participation in the program, immediately after the completion of the

program, and currently or at the time of this study. A qualitative analysis of nine open-ended questions was completed to determine the degree participants in the STARR program described beneficial experiences from the program, influences of the program on their professional development, and the influences of the program on their subsequent career roles.

Research Questions

The following research questions were examined during the completion of this study:

1. Are there relationships between selected demographic variables of teachers who have participated in the STARR program and the participants' current self-perceived empowerment?
2. Are there differences in the self-perceptions about empowerment for the participants in the STARR program prior to beginning participation in the program, immediately after completion of the program, and currently?
3. To what degree do the former participants in the STARR program describe beneficial experiences from the program, influences of the program on their perceived empowerment, and influences of the program on their subsequent career roles?

Null Hypotheses

The following hypotheses were tested in this study:

H_{01} : There are no significant relationships between the demographic variables of teachers who have participated in the STARR program and the participants' current self-perceived empowerment.

Ho₂: There are no significant differences in the self-perceptions about empowerment for the participants in the STARR program prior to beginning participation in the program, immediately, after completion of the program, and currently.

Population

This study examined the influence of professional development programs, specifically the STARR program, upon empowerment and the subsequent careers of former STARR participants. More than 300 teachers have received training to become Select Teachers As Regional Resources (STARR) since the beginning of the program in 1994. This study included former STARR participants who completed their training and have been out of the program for at least two-years, or since 2006. The STARR teachers represent teachers with at least three years experience who have applied and been chosen to represent one of nine Regional Professional Development Centers located throughout the state of Missouri.

Procedure

Quantitative data for this study were analyzed using the Statistical Package for the Social Sciences software, Version 11.5. For hypothesis one, correlational relationships were conducted between the demographic variables and self-perceptions of current empowerment factors. Hypothesis two was analyzed by conducting a paired sample T-test to test over-all significant differences and the specific differences among the teacher reported self-perceptions for factors and items of the School Participant Empowerment Scale (SPES) for the time periods of prior to the STARR program, immediately after the STARR program, and currently.

Research question three was qualitative and consisted of nine open-ended questions. Participants were asked to describe (a) beneficial experiences during the STARR program, (b) important outcomes from the experiences, (c) personal leadership development as a result of the program, (d) influences of the program on subsequent career choices, (e) career goals obtained since the program, and (f) other professional outcomes attributed to the STARR program.

Instruments

STARR Participant Survey

A survey was developed by the researcher to provide data about the impact of the STARR program on the participants' perceived personal empowerment, professional growth and the influence on subsequent career roles. The STARR Participant Survey included demographic questions, items from the School Participant Empowerment Scale (SPES) and nine open-ended questions about their experiences and subsequent career roles (Appendix B). The STARR Participant Survey required the respondents to reflect upon their empowerment at three different time frames: (a) prior to STARR participation, (b) immediately after STARR participation, and (c) at the current time, meaning when the survey was completed. The former STARR participants completed the 60 item survey online at www.SurveyMonkey.com.

School Participant Empowerment Scale

Teacher empowerment was measured by the School Participant Empowerment Scale (SPES) developed by Short & Rinehart, (1992). The SPES consists of a 38 item Likert-type instrument with five-point rating scale: 1=strongly disagree, 2=disagree, 3 neutral, 4=agree, and 5=strongly agree. Cronbach's coefficient alpha reliabilities for the

subscales measuring the dimensions were reported as: decision making, .79; professional-growth, .66; status, .84; self-efficacy, .83; autonomy, .83; and impact, .91. Alpha reliability for the total scale was .94 (Short & Rinehart, 1992).

According to Short (1991), *decision making* relates to teachers participation in critical decisions that directly affect their work. Decision making includes decisions involving budgets, teacher selection, scheduling, curriculum, and other program areas. Teachers must feel that their involvement is genuine and their opinion will have an impact on the final decision. Teachers feel ownership and commitment when participating in problem solving or decision making (Short, 1994a).

Professional growth relates to teachers' perceptions that the school in which they work provide them with opportunities to grow and develop professionally, to learn continuously, and to expand one's own knowledge and skills through the work life of the school (Short, 1991). Efforts to increase teachers' professional growth build teacher commitment and improve instruction through increased teacher skill and expertise (Short, 1994a).

Status refers to teachers' perceptions that they have professional respect and admiration from colleagues (Short, 1991). As a part of status, teachers must also feel that others respect their knowledge and expertise (Short, 1994a). Teacher status has been undermined by low salaries and the public's declining faith in education (Maeroff, 1988). The bureaucracy of daily activities required in education often erodes teachers' perceptions of status (Short, 1994a).

Self-efficacy refers to teachers' perceptions that they have the skills and ability to help students learn, are competent in building effective programs for students, and can

effect changes in student learning (Short, 1991). Self-efficacy increases as individuals acquire self-knowledge and the belief that they are personally competent and have mastered the skills necessary to affect desired outcomes. Teacher feelings of self-efficacy are closely related to student achievement. (Short, 1994a).

Autonomy refers to teachers' beliefs that they control certain aspects of their work life (Short, 1991). Autonomy is a sense of freedom to make decisions including those concerning scheduling, curriculum, textbooks, and instructional planning (Short, 1994a).

Impact refers to teachers' sense that they have an effect and influence on school life, what they are doing is worthwhile, they are doing it in a competent manner, and they are recognized for their accomplishments (Short, 1991). Impact includes the growth teachers achieve as a result of parent respect and community support (Lightfoot, 1986). Receiving compliments and recognition for accomplishments are important to teachers' sense of impact (Short, 1994a).

Procedures

Initial contact was made with the STARR teacher populations by mail. Addresses for the population were provided by the Director of the STARR program for the Department of Professional Development at the Missouri Department of Elementary and Secondary Education. The initial letter was sent to describe the study, outline expectations, assure confidentiality and invite participation. A copy of the introductory letter can be found in Appendix C. Phone numbers and addresses were provided, so participants could contact the researcher. Participants had the opportunity to indicate to the researcher via e-mail or by mail if they wanted to receive a copy of the survey results.

A survey was developed by the researcher to provide data about the impact of the STARR program on the former STARR participants' perceived personal empowerment, professional growth and the influence on subsequent career roles. The participants completed the STARR Participant Survey online at www.SurveyMonkey.com. The 60 item survey included demographic questions, open ended questions and items from the School Participant Empowerment Scale (SPES) developed by Short and Rinehart (1992).

Following the demographic questions, the first section of the STARR Participant Survey consisted of 38 questions from the SPES measuring the six factors of empowerment (a) decision making, (b) professional growth, (c) status, (d) self-efficacy, (e) autonomy, and (f) impact. The Likert-type questions had five response options: strongly agree, agree, neutral, disagree and strongly disagree. The STARR Participant Survey required the respondents to reflect upon their empowerment at three different times: (a) prior to STARR participation, (b) immediately after STARR participation, and (c) at the current time, meaning when the survey was completed.

The final section of the survey consisted of nine open ended response questions concerning the STARR training, experience and subsequent careers. The STARR participants were directed to answer the questions based upon their perceptions of the training to be a STARR teacher, the STARR experience, and their career after the STARR program. The following questions were asked:

1. What were the most beneficial experiences during the STARR program? Please explain how they influenced you professionally?

2. What was the most important outcome for you as a result of your STARR experience? Please describe.
3. How did your experiences as a STARR teacher develop your leadership capabilities? Please describe.
4. Did your experiences as a STARR teacher influence your subsequent career choices? Please explain.
5. Have you achieved your professional career goals since your STARR experience? Please explain.
6. Was the STARR experience influential in achieving your professional goals? Please explain.
7. Did the STARR teacher experience influence you to pursue continued formal (university coursework) learning? Please describe.
8. Did the STARR program influence your acceptance of new career roles or career paths? Please describe the influence of the STARR program, as appropriate, on each career change.
9. Were there other outcomes in your professional life that you attribute to your STARR experiences? Please explain.

Participants' informed consent was implied by their online response to the survey.

Personal information was requested, but not required, on the return surveys and kept confidential if it was provided. Approval by the University of Missouri Institutional Review Board was required before the study was conducted. Approval from the University of Missouri Institutional Review Board is in Appendix D.

Data Analysis

Upon receipt of the survey results, respondent data were imported into Excel spreadsheets, analyzed for errors, and then transferred into the Statistical Package for the Social Sciences (SPSS), version 11.5. All written communications were filed and secured to maintain confidentiality. All data were secured and coded to protect respondent confidentiality.

Statistical procedures for this study varied according to the hypothesis being tested. For H_{01} , an analysis of correlation was conducted to find a relationship between the selected demographic variables of the former STARR participants and the participants' current self-perceived empowerment.

For H_{02} , a paired sample T-test was conducted to test for significant differences in the self-perceptions of the participants in the STARR program "prior to beginning" participation in STARR and "immediately after completion" of the program; "prior to beginning participation" in STARR and "currently;" and "immediately after completion" of the STARR program and "currently" or at the time of the study.

CHAPTER 4

Presentation and Analysis of Data

Introduction

Professional development has been cited as one of the more important factors associated with school improvement, as it is necessary for educators to keep abreast of the changing knowledge base, changing student needs, and changing research-based teaching methods (Darling-Hammond, 1997; Hawley & Valley, 1999). Appropriate meaningful activities are necessary for teachers to develop expertise in the classroom to grow professionally (Guskey & Huberman, 1995). Teacher professional development has gained significant attention as a means of addressing some of the concerns of the American educational system and as one of the outcomes of the current educational reform movement (Bredeson & Scribner, 2000; Fullan & Miles, 1992; Furtwengler, 1995; Guskey, 1995; Scribner, 1998).

The Select Teachers As Regional Resources (STARR) program was created in 1994 as one component of Senate Bill 380, the Outstanding Schools Act. The STARR program was successfully implemented in the state and has provided free, high-quality, professional development throughout Missouri for the last fourteen years (D. Miller, personal communication, October, 2007). Prior studies and evaluations have established the positive benefits of the STARR program as a successful professional development program (Hough & Schmitt, 2000b; Weingarth, 2006).

The influence and impact of the STARR program on the former STARR participants and their subsequent careers had not been determined. In view of the lack of

such a determination, the STARR Participant Survey (Appendix B) was created. The survey had three parts: demographics, items from the School Participant Empowerment Scale (SPES), and open-ended questions. The study surveyed former STARR participants for their self-perceptions on the SPES at three different times: prior to STARR participation, immediately following the STARR program, and currently, at the time of the study.

Additional open-ended questions addressed the influences of the STARR program on STARR participants' perceived empowerment and influences of the program on subsequent career roles. Few studies have been conducted about the impact of a professional development program on those delivering the professional development. The STARR program has a strong history of being an effective, high-quality professional development program (Hough & Schmitt, 2000b).

In this study, quantitative measures were used to determine correlations between the demographics of the former STARR participants and their self-perceptions about empowerment. A quantitative analysis was also conducted using paired sample T-tests for the self-perceptions on the SPES items at three different times: prior to the STARR program and immediately after the STARR program, prior to the STARR program and currently; and immediately after the STARR program and currently. A qualitative analysis of nine open-ended questions was used to study how professional development programs, specifically the STARR program, impacted the STARR participants and their subsequent careers.

Study Design

The purpose of the study was to analyze the impact of the STARR program on the former STARR participants' personal empowerment, professional growth and the influence of the program on subsequent career roles. Findings provided insight about the relationships between selected demographic variables of the participants and the empowerment and professional development of the participants. The findings also provided an understanding about the influence of the STARR experience on the personal empowerment and professional development of the participants as well as the influence of the program on the participants' subsequent career roles.

A quantitative survey of former STARR participants who completed the program by 2006 was conducted to determine (a) if any relationships existed between selected demographic variables of teachers who have participated in the STARR program and the participants' current self-perceived empowerment, and (b) if differences existed in the self-perceptions about empowerment for the participants in the STARR program prior to beginning participation in the program, immediately after the completion of the program, and currently. A qualitative analysis of perceptions was conducted to determine the degree to which participants in the STARR program described beneficial experiences from the program, influences of the program on their professional development, and the influences of the program on their subsequent career roles. The former STARR participants completed the 60 item survey online at www.SurveyMonkey.com.

The STARR Participant Survey measured teacher empowerment using the items from the School Participant Empowerment Scale (SPES) developed by Short & Rinehart, (1992). The SPES consisted of 38 Likert-type questions with five response options: (a)

strongly agree, (b) agree, (c) neutral, (d) disagree and (e) strongly disagree. The SPES items were divided into six subscales (a) decision making, (b) professional growth, (c) status, (d) self-efficacy, (e) autonomy, and (f) impact. The STARR Participant Survey required the respondents to reflect upon their empowerment at three different points in time: (a) prior to STARR participation, (b) immediately after STARR participation, and (c) at the current time, meaning when the survey was completed.

The second part of the survey consisted of nine open-ended response questions concerning the STARR training, experience and subsequent careers. The STARR participants were asked to answer the questions based upon their perceptions of the training they received as a STARR teacher, the overall STARR experience, and their career roles after the STARR program. The questions asked participants to describe: (a) beneficial experiences during the STARR program, (b) important outcomes from the experiences, (c) personal leadership development as a result of the program, (d) influences of the program on subsequent career choices, (e) career goals obtained since the program, and (f) other professional outcomes attributed to the STARR program.

Research Questions

The following research questions were examined during the completion of this study:

1. Are there relationships between selected demographic variables of teachers who have participated in the STARR program and the participants' current self-perceived empowerment?
2. Are there differences in the self-perceptions about empowerment for the participants in the STARR program prior to beginning participation in the program, immediately after completion of the program, and currently?

3. To what degree do the former participants in the STARR program describe beneficial experiences from the program, influences of the program on their perceived empowerment, and influences of the program on their subsequent career roles?

Null Hypotheses

The following hypotheses were tested in this study:

Ho₁: There are no significant relationships between the demographic variables of teachers who have participated in the STARR program and the participants' current self-perceived empowerment.

Ho₂: There are no significant differences in the self-perceptions about empowerment for the participants in the STARR program prior to beginning participation in the program, immediately after completion of the program, and currently.

The following section of this chapter provides descriptive findings about the former STARR participants and their self-perceived empowerment for the factors of the SPES. The subsequent sections present findings associated with the remaining research questions.

Descriptive Findings

Demographic Data

Over 300 teachers have participated in training in the STARR program since it began in 1994 (L. Dooling, personal communication, April, 2007). From this population, only those teachers serving as STARR participants, not alternates, were contacted by letter and asked to participate in the study. Two-hundred and sixty-eight STARR

teachers, who had completed their training and had been out of the program for at least two-years, or since 2006, were invited to participate. The former STARR participants were asked to complete the 60-item survey online at www.SurveyMonkey.com. Ninety-five participants provided information by completing all or part of the survey. Some difficulties occurred with the online survey for several of the participants. Any respondent who indicated difficulty accessing the online survey was contacted by the researcher by e-mail or by phone. An e-mail message with an embedded e-mail address was sent to the individual participants so they could log on to the survey.

The postal addresses used to contact participants for the study were supplied by DESE. These addresses were from the years the participants were active in the STARR program. In some cases, these addresses were fourteen years old. Seventy letters of invitation to participate were returned as undeliverable. One was returned marked 'Deceased'. When a letter was returned, a web search was conducted for the name of the former STARR participant. Many names were listed online by positions in schools or listings for positions in companies or communities. The former STARR teachers were then contacted by e-mail. A copy of the original letter of invitation was included in the e-mail as an attachment.

The demographic information asked of each respondent included gender, highest educational degree attained, years in the STARR program, teaching level at time of STARR, demographics upon completion of STARR, current age, years as a teacher, and years in education. Some respondents did not answer all questions. Therefore, the number of respondents for the following demographic tables varies slightly.

The demographic findings for gender and education level are shown in Table 1. The majority of the responding STARR participants, 94.4% of the total, were female. The current education level followed a normal distribution. Few respondents, 10.3%, had only a bachelor’s degree in education. The largest percentage of the population, 67.8%, had a master’s degree. Of the respondents, 17.2% had a specialist degree and 4.6% of the respondents had a doctorate.

Table 1
Demographics: Gender and Current Education Level

Category	N	Percent
Gender		
Female	84	94.40
Male	5	5.60
Education Level		
Bachelors	9	10.30
Masters	59	67.80
Specialist	15	17.20
Doctorate	4	4.60

Data about the years and levels of employment at the time of STARR participation are included in Table 2. The respondents identified the years they were participants in the STARR program between 1995-2006 in two-year increments. The largest responses, 15.7%, were from the most recent years, 2004-2006. The smallest responses, 3.4%, were from the years 1998-2000. Most of the responses for the item “years of participation” had 7.8% to 11.2% of the total responses. The levels of employment at the time of selection are also shown in Table 2. Almost 60% of the respondents were elementary teachers, 25% were middle school teachers, and almost 17% were secondary.

Table 2

Demographics: Years of Participation, Level of Employment, and

Demographics After STARR

Category	N	Percent
Years of Participation		
1995-1997	7	7.90
1996-1998	10	11.20
1997-1999	8	9.00
1998-2000	3	3.40
1999-2001	9	10.10
2000-2002	12	13.50
2001-2003	9	10.10
2002-2004	10	11.20
2003-2005	7	7.80
2004-2006	14	15.70
Level During STARR		
Elementary	52	58.40
Middle	22	24.70
Secondary	15	16.90
After Completion STARR		
Returned Same District	72	85.70
New District	7	8.30
Left Education	2	2.40
Retired	3	3.60

The demographic information for the teachers' current ages and experiences are presented in Table 3. The average current age of the participants responding to the survey was 50 years old. The respondents' ages had a range from 36 to 67 years with a standard deviation of 7.8. The demographic of age had a large variance.

The respondents had an average of 20.78 "years of experience as a teacher." The average number of "total years experience in education in education" was 23.14 years. Of the responses, seven years was the minimum "years of experience as a teacher" and ten years was the minimum "total years experience in education in education." Thirty-five

years of teaching and 36 years in education were the maximum years for those categories. Both of these items had a large variance and range.

Table 3

Temporal Measures: Age and Years Experience

	Mean	SD	Variance	Min.	Max.	Skew	Kurtosis
Age in Years	50.09	7.800	60.84	31	67	-0.506	-0.446
Years of Experience as a Teacher	20.78	6.992	48.89	7	35	-0.044	-0.854
Total years experience in education in Education	23.14	6.754	45.61	10	36	-0.147	-1.049

Descriptive Statistics

When analyzing the descriptive statistics for the empowerment factors and the three times: “prior to STARR,” “immediately after STARR,” and “currently,” the factors showed increased means or averages on a continuum across the three time periods. The exception was the factor of “self-efficacy,” which increased from “prior” but then decreased from “immediately after” to “current.” The findings are shown in Table 4.

The SPES factor with the lowest mean score “prior to STARR” was “decision making” (3.16 on a five point scale). Most of the former STARR participants in the study perceived they had average empowerment for “decision making” prior to participation in the STARR program. The mean increased from 3.79 immediately after STARR, to a mean of 4.04 for the “current” time.

Table 4

Descriptive Statistics, Factors of SPES

		Mean	SD	Variance	Min.	Max.	Skew	Kurtosis
Decision Making	Prior	3.16	0.68	0.46	1.30	4.90	-0.04	0.25
	Im. After	3.79	0.74	0.54	1.50	5.00	-1.02	1.44
	Current	4.04	0.84	0.70	1.56	5.00	-0.98	0.40
Professional Growth	Prior	4.00	0.64	0.40	1.67	5.00	-1.24	2.93
	Im. After	4.38	0.65	0.42	1.83	5.00	-1.85	4.08
	Current	4.48	0.60	0.37	1.83	5.00	-1.66	3.78
Status	Prior	4.23	0.41	0.17	3.00	5.00	-0.24	-0.15
	Im. After	4.61	0.39	0.16	3.50	5.00	-1.18	0.81
	Current	4.66	0.41	0.17	3.50	5.00	-1.31	1.02
Self-Efficacy	Prior	4.38	0.45	0.20	3.20	5.00	-0.15	-0.76
	Im. After	4.58	0.51	0.26	3.00	5.00	-1.39	1.53
	Current	4.46	0.53	0.28	3.00	5.00	-0.80	-0.25
Autonomy	Prior	3.65	0.68	0.46	1.00	5.00	-0.66	1.92
	Im. After	3.92	0.74	0.55	1.00	5.00	-1.12	2.54
	Current	4.05	0.79	0.62	1.00	5.00	-1.11	1.87
Impact	Prior	4.08	0.54	0.29	2.40	5.00	-0.77	0.64
	Im. After	4.60	0.46	0.21	2.80	5.00	-1.33	1.98
	Current	4.60	0.49	0.24	2.60	5.00	-1.34	2.03

The factor of “status” for the “current” time had a mean score of 4.66, which was the highest score among the SPES factors. The factor of “impact” showed increased mean scores from (4.08) “prior to STARR” to (4.60) “immediately after STARR.” However, no change in the “impact” factor was seen following the STARR program since the mean score remained at (4.60).

Hypothesis Testing

Two hypotheses were tested in this study. Hypothesis One was tested by conducting a correlation analysis of the relationships between the selected demographic variables of the former STARR participants and the participants' current self-perceived empowerment. Hypothesis Two was tested by a paired-sample T-test to find significant differences in the self-perceptions about empowerment for the participants in the STARR program prior to beginning participation in the program, immediately after completion of the program, and currently.

Hypothesis One

The first hypothesis tested in this study was: There are no significant relationships between the demographic variables of teachers who have participated in the STARR program and the participants' current self-perceived empowerment.

Pearson-product moment correlations between the demographic variables and the STARR participants' current self-perceived empowerment as measured by the factors of the School Participant Empowerment Survey (SPES) are presented in Table 5. Four SPES factors had significant correlations with the demographic variables. One SPES factor, "decision making" had a small, positive correlation of .225 ($p = .048$) with the demographic variable, "degree."

Three different factors had negative correlations with the demographic variable "years of experience as a teacher." "Decision making" and "years of experience as a teacher" had a small, negative correlation of $-.300$ ($p = .008$). "Professional growth" and "years of experience as a teacher" also had a significant relationship, with a small, negative correlation of $-.292$ ($p = .010$).

Table 5

Correlations between Demographic Variables and Current Empowerment Factors

	Gender	Age	Degree	Years of experience as a teacher	Total years experience in education	Years in STARR program	Level of schooling at time of selection	Following STARR
Decision Making	.185 (.100)	-.151 (.185)	.225* (.048)	-.300* (.008)	-.215 (.058)	-.154 (.173)	-.008 (.944)	-.003 (.982)
Professional Growth	.179 (.111)	-.184 (.104)	.145 (.207)	-.292* (.010)	-.193 (.088)	-.083 (.466)	-.019 (.870)	.047 (.684)
Status	.213 (.056)	-.147 (.194)	.108 (.344)	-.153 (.178)	-.038 (.739)	.046 (.683)	-.124 (.271)	-.052 (.648)
Self-Efficacy	.146 (.196)	-.187 (.100)	.144 (.208)	.089 (.439)	.094 (.409)	.136 (.229)	-.195 (.083)	-.202 (.078)
Autonomy	.199 (.077)	-.107 (.346)	.160 (.163)	-.138 (.227)	-.069 (.549)	-.189 (.094)	-.083 (.464)	-.057 (.623)
Impact	.214 (.057)	-.166 (.143)	.069 (.547)	-.240* (.034)	-.165 (.146)	-.114 (.315)	-.193 (.086)	-.022 (.846)

* $p < .05$

Notes: () = p level

The relationship between “impact” and “years of experience as a teacher” had a small, negative correlation of $-.240$ ($p = .034$). Because there were four significant correlations between the selected demographic variables and the factors of the SPES, Hypothesis One was rejected.

Hypothesis Two

The second hypothesis tested in this study was: There are no significant differences in the self-perceptions about empowerment for the participants in the STARR

program prior to beginning participation in the program, immediately after completion of the program, and currently.

Hypothesis two was tested using paired samples T-test. Paired sample T-tests were completed for each SPES factor at each of the three intervals: prior and immediately after, prior and current, and immediately after and current. These findings are shown in Table 6. Also included in Table 6 are the Pearson correlations for each factor for the three time intervals. While not part of the hypothesis, this information provided insight about the degree to which each pairing was related and the direction of the relationship. More detailed information about the paired sample T-tests and Pearson correlations for the factors are in Appendix E.

The paired samples T-tests were also conducted for each individual item of the factors for the three paired times: prior and immediately after, prior and current, and immediately after and current. For this study, current means at the time of the study. By computing the T-test for each of the items for the time intervals and finding the significance for each, a better understanding of the significance of each item and the influence or impact on the factor could be determined. The paired sample T-tests for each of the items were not presented in this section of the study because of the extensive length. The detailed information for the paired sample T-tests and the correlations for each item are present in Appendix F.

The results for “decision making” (prior) and “decision making” (immediately after) were significant with a t-value of -8.77, $p = .000$.

Table 6

Tests of Difference for Empowerment for Time Intervals

SPES Factor	Prior to STARR – Immediately After STARR	Prior to STARR - Current	Immediately After STARR- Current
Decision Making	r .571 Sig. .000 <i>Mns: (3.16) (3.79)</i> t: -8.771 Sig. .000	r .322 Sig. .004 <i>Mns: (3.16) (4.04)</i> t: -9.084 Sig. .000	r .562 Sig. .000 <i>Mns: (3.79) (4.04)</i> t: -3.147 Sig. .002
Professional Growth	r .606 Sig. .000 <i>Mns: (4.00) (4.38)</i> t: -6.044 Sig. .000	r .324 Sig. .003 <i>Mns: (4.00) (4.48)</i> t: -6.108 Sig. .000	r .534 Sig. .000 <i>Mns: (4.38) (4.48)</i> t: -1.600 Sig. .114
Status	r .406 Sig. .000 <i>Mns: (4.23) (4.61)</i> t: -7.710 Sig. .000	r .280 Sig. .011 <i>Mns: (4.23) (4.66)</i> t: -7.915 Sig. .000	r .648 Sig. .000 <i>Mns: (4.61) (4.66)</i> t: -1.670 Sig. .099
Self-Efficacy	r .395 Sig. .000 <i>Mns: (4.38) (4.58)</i> t: -3.340 Sig. .001	r .167 Sig. .140 <i>Mns: (4.38) (4.46)</i> t: -1.157 Sig. .253	r .617 Sig. .000 <i>Mns: (4.58) (4.46)</i> t: 2.153 Sig. .034
Autonomy	r .654 Sig. .000 <i>Mns: (3.65) (3.92)</i> t: -3.998 Sig. .000	r .448 Sig. .000 <i>Mns: (3.65) (4.05)</i> t: -4.674 Sig. .000	r .614 Sig. .000 <i>Mns: (3.92) (4.05)</i> t: -1.968 Sig. .023
Impact	r .323 Sig. .003 <i>Mns: (4.08) (4.60)</i> t: -7.937 Sig. .000	r .134 Sig. .238 <i>Mns: (4.08) (4.60)</i> t: -6.972 Sig. .000	r .418 Sig. .000 <i>Mns: (4.60) (4.60)</i> t: - .143 Sig. .886

$p < .05$

Notes: r = Pearson correlations; Sig.= Correlation significance; Mns: Factor means; t= t-value; Sig.= T-test significance.

The paired sample T-test results for “decision making” (prior) and “decision making” (current) had the highest level of significance with a t-value of -9.08, $p = .000$. The paired sample T-test results for “decision making” (immediately after) and “decision making” (current) were not as significant, with a t-value of -3.15, $p = .002$. Of the three T-tests, the differences for the test of “decision making” (prior) and “decision making” (current) were the most different. With a difference in each time progression, it is evident that the STARR respondents perceived that the degree to which they participated in critical decisions that directly affected their work increased significantly from “prior” to “current.” Among the items for the factor of “decision making,” 24 of the 30 item T-tests were significant. The item details are provided in Appendix F.

Professional growth

In the SPES, the factor “professional growth” describes the degree to which the respondents were provided with opportunities to grow and develop professionally, to learn continuously, and to expand one’s own knowledge and skills through work. The results for “professional growth” (prior) and “professional growth” (immediately after) were significant with a t-value of -6.04, $p = .000$. The paired sample T-test results for “professional growth” (prior) and “professional growth” (current) had a similar level of significance, with a t-value of -6.11, $p = .000$. The paired sample T-test results for “professional growth” (immediately after) and “professional growth” (current) were not significant. There were no significant differences or changes in former STARR participants’ perceptions of their opportunities to grow and develop professionally at work from the time “immediately after” the STARR program until the “current.” Among

the items for the factor of “professional growth,” 12 of the 18 item T-tests were significant (Appendix E.) The item details are provided in Appendix E.

Status

In the SPES, the factor “status” describes the degree to which the respondents perceived they had professional respect and admiration from colleagues. The results for “status” (prior) and “status” (immediately after) were significant with a t-value of -7.71, $p = .000$. The paired sample T-test results for “status” (prior) and “status” (current) had a similar level of positive significance with a t-value of -7.92, $p = .000$. The paired sample T-test results for “status” (immediately after) and “status” (current) were not significant. Among the items for the factor of “status,” 13 of the 18 items had t-values which were significant (Appendix E). The STARR respondents perceived that the degree to which other colleagues respected and admired them did not change significantly from “immediately after” to “current.” Five items in the “status” factor were not significant for the “immediately after” to “current” time interval. The item details are provided in Appendix R.

Self-Efficacy

In the SPES, the factor “self-efficacy” describes the degree to which the respondents perceived that they have the skills and ability to effect changes in student learning. The results for “self-efficacy” (prior) and “self-efficacy” (immediately after) were significant with a t-value of -3.34, $p = .001$. The paired sample T-test results for “self-efficacy” (prior) and “self-efficacy” (current) were not significant with a t-value of -1.15, $p = .253$. The paired sample T-test results for “self-efficacy” (immediately after) and “self-efficacy” (current) were significant with a t-value of 2.15, $p = .034$. The score

represents a negative influence or a decrease in self-efficacy. The differences in significance for the “self-efficacy” factor at the different time intervals are important. The STARR respondents perceived that their skills and ability to effect changes in student learning had the largest positive change from the time interval “prior to STARR” and “immediately after STARR.”

Autonomy

In the SPES, the factor “autonomy” describes the degree to which the respondents perceived that they make decisions and control certain aspects of their work life. Each of the paired sample T-tests for “autonomy” were significantly different. The results for “autonomy” (prior) and “autonomy” (immediately after) were significant with a t-value of -4.00, $p = .000$. The paired sample T-test results for “autonomy” (prior) and “autonomy” (current) had the highest level of significance with a t-value of -4.67, $p = .000$. The paired sample T-test results for “autonomy” (immediately after) and “autonomy” (current) were not as significant, with a t-value of -1.97, $p = .023$. The STARR teachers perceived that the degree to which they were able to make decisions and control certain aspects of their work changed significantly during the time intervals. Among the items for the factor of “autonomy,” two items were not significant for any of the time intervals. Items details are in Appendix E.

Impact

In the SPES, the factor “impact” describes the degree to which the respondents perceived that they. The results for “impact” (prior) and “impact” (immediately after) had the highest level of significance with a t-value of -7.94, $p = .000$. The paired sample T-test results for “impact” (prior) and “impact” (current) were significant with a t-value of

- 6.97, $p = .000$. The paired sample T-test results for “impact” (immediately after) and “impact” (current) were not significant, with a t-value of -.143, $p = .886$. The STARR teachers perceived that the degree to which they have an effect and influence on school life and that what they are doing is worthwhile did not change significantly during the time intervals of “immediately after” and “current” (Appendix E).

Because there were four significant differences between the self-perceptions about empowerment for participants in the STARR program during the time periods of “prior to beginning participation,” “immediately after completion,” and “currently,” Hypothesis Two was rejected.

Open-Response Questions

The final portion of the study survey consisted of nine open-ended response questions concerning the STARR training, participants’ experiences and their subsequent careers. Open coding of the responses to these questions created general categories to organize the participant responses. These general categories provided insight into the participants’ perceptions concerning the impact of the STARR program experience. Examples of open codes included collaboration, leadership, opportunities, professional growth, increased knowledge and confidence. These open codes were compared with the School Participant Empowerment Scale (SPES) factors in an effort to discover similar themes and patterns. The data were organized to describe: (a) beneficial experiences during the STARR program, (b) important outcomes from the experiences, (c) personal leadership development as a result of the program, (d) influences of the program on subsequent career choices, (e) career goals obtained since the program, and (f) other

professional outcomes attributed to the STARR program. The qualitative data provided anecdotal insight used to interpret the quantitative findings.

In examining the open-ended responses, the participants were identified by a designated number, which was inserted in parentheses with their comments. The insertions will be as follows: (R-1). This designation indicates that “Respondent 1” made the comment.

Beneficial experiences

One of the more beneficial experiences during the STARR program cited by most of the respondents was the high quality of research-based professional development they experienced. Although this benefit appears obvious since STARR is a professional development program based on teachers teaching teachers using authentic instructional strategies, the power of the professional development of the STARR experience is worth mentioning. “The (STARR) training was outstanding” (R-6). “Getting Professional Development in a small group setting by the top authors in the field of education” (R-11) was invaluable (R-24). The “amazing” professional development where “the original authors/educators shared their research and gave credence to the strategies”(R-24) was what made the STARR program powerful and unforgettable. “Actually meeting the people who wrote the books that were often referenced...made the strategies and concepts seem more real” (R-52). “The intense and varied professional development gave...an incredible foundation of knowledge” (R-45). R-26 agreed with others, “The most beneficial experiences were the trainings with outstanding presenters, national and international. Their expertise and enthusiasm was truly inspiring.”

Collaboration was listed by a third of the participants and was frequently cited as being a beneficial experience during the STARR program. Meeting and collaborating with excellent teachers from across the state was inspiring and beneficial (R-34). Similar comments were made by many citing the opportunity to collaborate with others who shared the STARR experience as a very powerful experience. Many former STARR participants “still carry the influence of so many excellent teachers ... and remember their suggestions, advice and passions for kids and learning” (R-34). One of the outcomes of the STARR program was the “ability to collaborate and value others, their expertise and viewpoints” (R-1). The STARR program provided the opportunity for collaboration as the participants’ knowledge base about effective teaching strategies was increasing. “Being able to gather with the cohort to discuss recent PD presentations during the training year, and being able to work on a team in my region” (R-40) was the most beneficial experience during the STARR program. “Team-based, collaborative experiences” helped STARR “understand the concepts and processes being presented, as well as create a sense of belonging and common purpose” (R-40). “Learning from the experts, networking and developing ideas and plans with co-workers” (R-51) was a vital part of the STARR program.

Important outcomes

The professional development and increased teaching ability and skills were the outcomes from the STARR experiences cited by more than a third of the respondents as being the most important. The expanded content knowledge and strengthened pedagogy was the most beneficial experience to many (R-20). Some teachers cited specific training, such as cooperative learning, brain-based research, writing workshop, multiple

intelligences, Socratic seminars, and active learning, as the experiences that made a lasting impact on the STARR participants' teaching methods and strategies. Reflection about teaching and effective presentation strategies (R-30) were some of the skills developed through STARR. Many respondents "felt empowered with knowledge of how to be a much better teacher" (R-16). The teaching strategies and instructional skills transformed the STARR participants into "education expert(s)" (R-58) and "fundamentally changed the way (they) taught and looked at effective instruction" (R-62). The STARR program "validated" what the STARR teachers were doing in their presentations and their classrooms (R-16).

Respondents also listed "an enormous amount of self-confidence" (R-77) as being an important outcome of the STARR program. R-31 indicated that developing confidence in one's ability as a teacher to develop personally through the shared learning experiences and through the mastery of teaching skills that led to teaching effectiveness was a major outcome. STARR also produced confidence in being able to "impact teachers and students" (R-35) and "influence others" (R-29). STARR produced "a greater confidence in presenting; a greater confidence in discussing and using current educational research ideas" (R-41).

Personal leadership development

For many of the respondents, the most important outcome gained from the STARR program was not in teaching skills. Respondent 37 was typical, noting the development of confidence in personal leadership abilities. Other respondents noted confidence in presentation skills (R-13) and/or the confidence to leave the classroom to pursue other positions or roles in administration (R-91).

Confidence was cited by more than half the respondents as being the factor that most influenced personal leadership development. As a result of the training acquired in the STARR program, STARR participants became more confident and developed a sense of efficacy (R-23). As the STARR participants received more practice presenting, they spoke with more authority, assurance and confidence (R-43, R-77). Expertise in presentation skills developed through the STARR program became invaluable when required to make presentations in subsequent leadership positions.

Confidence allowed STARR participants to pursue leadership roles both personally and professionally (R-66). This confidence increased as STARR teachers were recognized by their peers as leaders (R-68). The program gave others the confidence to step out of the comfort zone of teaching and move into leadership roles (R-69). This confidence was evident as STARR teachers became “more comfortable discussing issues with district administrators and those at the state level” (R-47).

Other factors cited for developing leadership capabilities were the opportunities to work with other adult leaders and learning about student and adult instructional strategies. Becoming comfortable and confident in their ability to teach peers was valuable for many STARR participants. The STARR experience provided the platform to develop leadership capabilities through extended knowledge and training, and building relationships with area administrators, teacher leaders, RPDC staff, and other leaders in education (R-62). The STARR program helped develop leadership capabilities by providing the learning needed to build confidence and the opportunity to be seen as an “expert” by other districts (R-92). The STARR program provided the opportunity for the expertise to develop. Experiences during STARR built confidence in decision making.

According to (R-17), the opportunities experienced during the STARR “developed my ability to think on my feet when unexpected situations were presented. It gave (me) self-confidence in all aspects of my life.”

Influences on subsequent careers

Twenty-four of the respondents said that STARR did not influence their career choices because they returned to their original school districts as teachers. After the STARR experience, returning to the classroom was the goal of several. Some came to the realization that they “would make more of a difference staying in the classroom working with students than going to an administration situation which was more politics” (R-78). As R-30 explained, “I now realize that I get great satisfaction from working with students everyday. My goal was to be a better teacher and I’ve achieved that goal.” Some became “confident teacher(s) as a result of the STARR program” (R-11). Others returned to the classroom because of personal situations. “My subsequent choices were influenced more by my age and extraneous factors of my situation with aging parents and becoming a grandparent” (R-52).

For some STARR participants with career flexibility, the classroom did not allow the full utilization of the talents and skills the participants had developed during the two years as a STARR teacher. For these teachers the program “was clearly a stepping stone to the development of my career beyond teaching in the classroom” (R-94). One respondent said, “If I had not done the STARR program I don’t think I would have ever thought of working beyond the classroom” (R- 56). As R-56 wrote, “I loved the classroom, loved the students, but after returning to the classroom I did not feel like it was a good fit anymore.” After STARR, others found they had a desire to work with

teachers and could influence more individuals that way (R-94). Many expressed the goal of working with teachers or making a difference in education by continuing “to enlarge my ‘circle of influence’ to have more of an impact” (R-40).

In addition to the professional development and increased leadership capacity as a result of the STARR program, the professional relationships developed were important for future career opportunities. STARR “brought (me) a networking opportunity to learn from others and develop professional relationships” (R-63). Many saw “education in a different light” and became “stronger at advocacy and speaking out for education” (R-63). The relationship with the host RPDC resulted in positions and new career choices for several in the STARR program. As R-72, explained, “I saw that I can make a difference...and that I could in my role at the RPDC share my experience and knowledge (to) influence the teachers and the children they teach. It is a ripple effect.”

Twenty-three respondents cited the move to administration as a positive career choice which resulted from the STARR experience. “To be a good administrator (I) needed to be a good teacher first, then (I) could help influence more teachers to teach better!” (R-43). One respondent had an “administration certificate since 1985, but was not interested in using it (until STARR)” (R-91). Before retirement, the same individual had been an administrator for seven years.

Several of the respondents moved to teaching at the university level rather than administration. “After 2 years (back) in the classroom I began a doctorate program and began teaching at a university. I did not leave education, I just became the teacher of teachers!” (R-56). Others worked with mentors, student teacher supervision, new teacher induction, and various professional development programs. For the former STARR

participants who chose to change positions, the move was to a position with the potential for a larger impact on the education field. Rather than impacting one classroom, an entire school or an entire program would be influenced by the former STARR teacher. STARR was the foundation from which many respondents moved into leadership or professional development positions.

Career goals obtained

For seventeen of the former STARR participants, their career goal was to return to the classroom. STARR helped classroom teachers “meet the learners where they are and move forward...become more aware of engaging all learners, (using) differentiated instruction, assessment FOR learning, and using research-based, brain-friendly strategies” (R-11). For these STARR teachers, growing “as a teacher” and becoming an expert teacher was the goal that the STARR program helped them achieve.

There were a variety of reasons for those returning to the classroom. Several former STARR teachers felt indebted to their district for allowing them the opportunity to participate in STARR. These STARR participants returned to their districts and the classroom as a part of the STARR contract or agreement. “I felt obligated to spend 10 years in the classroom after STARR, since my district had felt burned by the program - this limited my choices” (R-95). One classroom teacher felt that the program should not be used as a stepping stone to other careers or positions (R-11).

Some teachers remained in the classroom due to personal limitations such as age, health issues, and family obligations. One STARR teacher who delivered her first child during STARR wrote,

“Any professional career goals I may have had were put on hold as I began the

challenge of learning to manage work and family. I believe that I handle the stresses of working motherhood better because of my STARR experience”

(R-34).

For others near the end of their careers at the time of participation in STARR, timing was a factor. STARR “helped me to realize more of my potential and if timing had been different ...but health issues led me to retirement” (R-16). Some former STARR teachers expressed an interest in moving into other positions but the opportunity did not exist in their present districts. Being a curriculum director “is not going to happen in my current district. I cannot move districts until after my children are out of school” (R-55). For these individuals, the STARR program “may be (influential) someday, but not at this time”(R-55).

Some respondents were content to stay in the classroom, while others expressed an attitude that of mild resentment that they had to return to the classroom. Others “wanted to be used by my district to aid in improving instruction... but have been generally ignored” by their districts when returning from STARR (R-9).

When considering goals, several former STARR teachers are “still working on them” (R-40). Several of the professional career goals were not actually goals, but occurred as the opportunities became available, which is not true for all of the participants. Some individuals proposed a new position to their district when they returned from STARR. One school district “created a job... in a leadership position as coordinator of Curriculum, Instruction and Assessment” (R-38). The following list describes the varied school and district leadership positions held by former STARR teachers: director of pre-service teacher induction, mentor, curriculum coordinator,

district professional development coordinator, teacher leader, reading coach, math coach, instructional facilitator, curriculum and instruction director, district grant writer, MAP coordinator, principal, assistant principal, assistant superintendent, and superintendent. The leadership positions outside the school or district were more varied. The most common position mentioned was working at the RPDC in some capacity. STARR not only gave critically important experience, but also instilled in STARR participants the confidence and professionalism to achieve their goals (R-58).

The STARR program's influence on former STARR participants' achievement of their professional goals was significant. There was a small group of former STARR teachers who said STARR was not influential in achieving their goals. Most of those responses were from STARR teacher who returned to the classroom. However, many of those same teachers did describe how the STARR program positively influenced their teaching competence. Other respondents said that the program was not influential in achieving their goals because they did not have specific goals. Goals "keep evolving based on new responsibilities" (R-40). Other former STARR participants indicated that they have not achieved their goals yet, but are on their way (R-62). As R-30 responded, "I believe that STARR opens many doors for participants, even though I chose to go back to my classroom."

The majority of the respondents acknowledged the profound influence of the STARR program on them personally and how the experiences were instrumental in achieving their goals. "...STARR changed me most, yes it had a profound impact in empowering me" (R-95). For some the STARR program helped them realize their potential (R-57). The STARR program gave participants "a renewed sense of

accomplishment and determination ...although not a new career” (R-15). “It (STARR) not only gave me critically important experience...but also instilled in me the confidence and professionalism to achieve my goals” (R-58). “The STARR experience opened up a whole new world to this K to 3rd teacher who taught in the same school for 24 years” (R-84). “The esteem and regard with which districts view participants in the STARR program opens doors” (R-23).

For others, the influence came in career opportunities. “STARR opens many doors for participants” (R30). Most participants acknowledge, “I was hired because of the training I had received during my STARR Teacher program” (R-17). “One of the reasons I got the administrative position was because of my STARR training. I beat out other candidates because of it (I was told)” (R-18). “School districts were anxious to ‘court’ me as a candidate for principal...the year after STARR. They all knew the quality of the program and wanted my training capabilities” (R-6).

Other STARR teachers directly related their present positions to the relationships that were made during STARR. The contacts made during the STARR program and the recognition for work completed were the reasons many former STARR teachers have their present jobs (R-38). Participants “made so many contacts through the STARR role” (R-62). These contacts created the present opportunities which include “a researcher in the field of education” (R-11), “coordinator of the district’s Induction Program” (R-39), and “teach(ing) at the university level and with the Regional Professional Development Center before leaving for the justice system” (R-17). The STARR experience opened the door to many career opportunities for positions in districts, state and national organizations, and in the private sector. R-29 summed up the opinion of many,

“Everything that happened to me professionally after the STARR program was due to the fact that I was a STARR.”

Other professional outcomes

Many STARR participants were influenced to pursue continued formal (university coursework) after the STARR program. Several STARR teachers were already in an advanced degree program or had already obtained a graduate degree prior to STARR. While 38 of the survey respondents did not choose to pursue further formal education following STARR, all continued learning and growing professionally as a result of the STARR program. Immediately following the STARR program, several participants began master’s programs, specialist’s programs, or doctoral programs, in addition to taking classes for additional certification. Some who pursued degrees, “had not ever considered it” before the STARR program (R-83). Several STARR teachers would have liked to continue education if the time or situation had been different (R-15).

Others suggested the information derived from the STARR program was the equivalent of many education graduate programs. As R-86 expressed, “I wish so much that college credit would have been granted for all the workshops we attended and gave. I know I had the education of anyone with a master’s degree—just not on paper.” Several pursued National Board Certification rather than a formal education program. The National Board requirements were stringent and appeared to be aligned with the STARR program’s foundation of continued professional growth to support student achievement (R-43).

Many other STARR teachers continued their education in individual classes or programs which ignited their interest (R-65). These professional development

opportunities prepared the former STARR participants for specific interests, contributed to general self-improvement or increased their skills as an educator. One educator described continued studies which included the “JASON project in the Channel Islands,...a fossil dig on hillsides in Oklahoma, ...studied the French influence on Missouri’s settlement, (and) traveled Missouri... to Canada, and finally France” (R-64). STARR made others want to improve and do better, just not formally pursue a master’s degree (R-64).

The most often cited continuing education after the STARR program was continuing to pursue and take part in professional development workshops and programs. As a result of STARR, some cited being “addicted to PD now!” (R-62). This “unquenchable thirst for knowledge and the practical application of that knowledge” (R-37) resulted in continued participation in trainings for university credit or additional accreditation. STARR participants want to continue learning and building their own capacity (R-62) as experts in professional development and educational strategies. The STARR program allowed the opportunity for participants to “see ‘The Big Picture’ of what happens in school, outside of the classroom” (R-54). Having the opportunity to learn and then share expertise and training with others was behind the STARR experience success (R-31). Sharing this expertise with others was an enjoyable outcome from providing professional development (R-66). “My experiences in STARR have greatly impacted my ability to organize, compose and deliver quality presentations” (R-40). It is interesting to note that one respondent mentioned the “opportunity to make extra money presenting” as being an outcome of STARR (R-80). This response was the only one which associated a monetary value with any of the outcomes of the STARR program.

This expertise developed through STARR resulted in personal and professional rewards. One former STARR won the Milken award in 1996 and attributed the STARR experience as having an impact on receiving this award (R-3). Another was selected Teacher of the Year by colleagues (R-22). This recognition by students, teachers and the “important” people is invaluable (R-78). During the STARR program, many felt valued and validated for the first time as an educator (R-56). It was noted that “when you work in a large school district, you are not always noticed or praised as frequently as you would like” (R-4). Once the STARR participants returned to their schools, this recognition did not always continue (R-60). However, most of the respondents found that students and “other teachers look at you differently after you have had the experience of being a STARR teacher” (R-4). Following STARR, “the admiration of school, colleagues, friends, community, and even those in other school systems was a happy surprise” (R-15).

The STARR program also produced professional and personal relationships as an outcome. Many respondents cited working with the wonderful teachers across the state and Dr. Bell as one of the best rewards from the STARR program (R-87). Good friends and in one case a new “best friend” were products from the STARR program experience (R-68). During the STARR program, lasting relationships were formed with fellow STARR team members. Relationships also developed with teachers and administrators from schools where STARR participants conducted professional development training (R-26). The colleagues and positive network of people around the state were useful as resources for future careers and personal and professional contacts (R-72). “It is rewarding to know and learn from a vast number of outstanding educators across the state

and nation” (R-1). STARR was one of the most rewarding experiences of STARR participants’ lives (R-77).

On a personal level, confidence and empowerment were mentioned by the majority of the STARR participants. The most important outcomes cited by the former STARR participants were intrinsic and individual. STARR provided the positive morale “bank” to keep teachers motivated to meet the day to day challenges of the classroom (R-24). For many “STARR remains a happy, happy point of (their) career in education...and invited (them) to step outside the box to interact on a real level” (R-75). For some participants, STARR created enthusiasm for education at a time when it was needed in their careers (R-24).

Summary of Results

The purpose of the study was to analyze the impact of the STARR program on the former STARR participants’ personal empowerment, professional growth and the influence of the program on subsequent career roles. The results of the STARR Participant Survey provided insight about the relationships between the demographic variables of the participants and the SPES factors of empowerment. Although the correlation was small, a positive relationship existed between “degree” and the SPES factor “decision making.” As the STARR participants achieved advanced degrees, their perception of their own influence on decision making increased. The demographic “years of experience as a teacher” had a negative correlation with the STARR teachers’ perceptions of the SPES factors of “decision making,” “professional growth,” and “impact.”

Self-perceptions about empowerment were analyzed using paired sample T-tests

for each SPES factor for three time intervals: “prior” and “immediately after,” “prior” and “current,” and “immediately after” and “current.” For the time intervals “prior” and “immediately after” each of the empowerment factors was significantly different with a positive increase. The descriptive statistics for the factors showed that the mean score of each factor increased from “prior to STARR” to the score for “immediately after.”

The paired sample T-test results for the time intervals “prior” and “current” were significantly different for five of the factors. The paired sample t-test for “self-efficacy” (prior) and “self-efficacy” (current) was not significant.

The results of the paired sample T-tests for the time intervals “immediately after STARR” and “current” were significant for half of the factors: “decision making,” “self-efficacy,” and “autonomy.”

When reflecting on the program, the respondents agreed that the STARR program was influential both personally and professionally. For most former participants, the STARR program had a profound and far-reaching influence on both their professional growth and their subsequent career roles. The STARR program was “life changing in all areas” (R-95). The participants recognized being a STARR teacher was a “once in a lifetime” professional experience (R-20).

CHAPTER 5

Discussion of Findings

Introduction

Professional development is necessary for educators to develop their expertise in the field of education (Guskey & Huberman, 1995) needed to keep abreast of the changing knowledge base, changing student needs, and changing research based teaching methods (Darling-Hammond, 1997; Hawley & Valli, 1999). Teacher professional development involves activities which develop higher professional competence, promote positive personal and professional attitudes, and increase teacher knowledge and teaching skills for improving student success (Britton, Raizen, Paine, & Huntley, 2000; Darling-Hammond, 1997; Fullan, 2003; National Commission on Teaching and America's Future, 1996). Since the mid-1990's, teacher professional development has gained significant attention as a means of dealing with some of the concerns of the American educational system (Guskey & Huberman, 1995; Parsad, Lewis & Farris, 2001). "The designation of 'teacher education and professional development' as one of the National Educational Goals is genuine recognition that well-prepared teachers are essential to educational reform efforts" (Dilworth & Imig, 1995, p. 1). The standards based movement has created a need for teacher learning and research-based professional development (Willis, 2002). Educational reform requires changes in each level and across relationships in schools, districts, and state (Fullan, 2003).

Senate Bill 380, or the Outstanding Schools Act of 1993, was Missouri's answer to education reform. Teacher professional development was one component of the Outstanding Schools Act mandated by the legislature (Outstanding Schools Act, 1993). As one way of addressing professional development, the Select Teachers As Regional Resources (STARR) program was created to provide free, high-quality professional development for teachers and school districts in Missouri (MO Department of Elementary and Secondary Education, 2006). The two-year program was based on the idea of teachers becoming the professional development experts to teach other teachers (D. Miller, personal communication, October 2007). A previous study by Weingarth and evaluations by the Southwest Missouri State University, Institute for School Improvement have established the STARR program as a successful professional development program.

Since 1994, teachers have been trained to become STARR teachers based in Regional Professional Development Centers (RPDC) around the state of Missouri (MO Department of Elementary and Secondary Education, 2006). Each year a new group of STARR teachers is selected from applicants, who are active teachers from school districts throughout the state. After selection, the STARR teachers are provided professional development workshops throughout the school year, which emphasize authentic instruction educational techniques. Having completed a year of training and practice, each new group of STARR teachers goes on leave from their district, made possible by funding from DESE and reports to one of nine Regional Professional Development Centers (RPDC). (Appendix A). From these sites, STARR teachers are available to conduct seminars in a variety of topics for schools and school districts in the surrounding regions (MO Department of Elementary and Secondary Education, 2005). Hundreds of teachers have

been trained to be STARR teachers or alternates, and scores of teachers and students have been influenced by the professional development programs presented by STARR teachers (L. Dooling, personal communication, April, 2007).

The researcher has a personal interest in the topic of STARR training outcomes. Selection to be a STARR participant from 1996 - 1998 had a profound impact on the researcher, both personally and professionally. After returning to the classroom, in the years following the STARR experience, the researcher felt a desire to continue the professional development and camaraderie which had been experienced as a STARR teacher. Like other respondents in the study, the researcher had already obtained a Master's degree in elementary administration but had not actively pursued obtaining an administrative position. The STARR program gave the researcher the confidence and desire to actively pursue an administrative position and apply for the Educational Doctoral Cohort program in Educational Leadership and Policy Analysis at the University of Missouri. Currently the researcher is an elementary principal and is completing a doctoral degree. The researcher is uncertain she would have achieved either of these professional goals without the self-confidence which resulted from participation in the STARR program. After the personal experience following the STARR program, the researcher desired to find out if the STARR program had similar influence and impact on the professional development and subsequent career paths of other former STARR teachers.

This final chapter includes a summary of the findings, a discussion of the findings in relation to the literature discussed in the research review, and an explanation of the contribution of this study to insight about professional development, specifically the

STARR program, and the impact on personal empowerment, professional growth and the influence on STARR teachers' subsequent career roles. The chapter concludes with implications for professional development, specifically the STARR program, and suggestions for future research.

Overview of the Study

The purpose of the study was to analyze the impact of the STARR program on the former STARR participants' personal empowerment, professional growth and the influence of the program on subsequent career roles. Findings provided insight about the relationships between selected demographic variables of the participants and the participants' self-perceptions of empowerment. The findings also provided an understanding about the influence of the STARR experience on the personal empowerment of the participants across time intervals, as well as the influence of the program on the participants' subsequent career roles.

The method of analysis for the study was mixed and utilized both quantitative and qualitative analysis. A quantitative survey of former STARR participants, who completed the program by 2006, was conducted, with survey data to determine (a) if any relationships existed between selected demographic variables of teachers who have participated in the STARR program and the participants' "current" self-perceived empowerment, according to the SPES; and (b) if differences existed in the self-perceptions about empowerment for the participants in the STARR program prior to beginning participation in the program, immediately after the completion of the program, and currently. A qualitative analysis of nine open-ended questions was completed to determine (a) the degree participants in the STARR program described beneficial

experiences from the program, influences of the program on their professional development, and the influences of the program on their subsequent career roles. The open-ended questions asked participants to describe: (a) beneficial experiences during the STARR program, (b) important outcomes from the experiences, (c) personal leadership development as a result of the program, (d) influences of the program on subsequent career choices, (e) career goals obtained since the program, and (f) other professional outcomes attributed to the STARR program.

Initial contact was made with the STARR teacher populations by mail. Addresses for the population were provided by the Director of the STARR program for the Department of Professional Development at DESE. The initial letter was sent to describe the study, outline expectations, assure confidentiality and invite participation. A copy of the introductory letter can be found in Appendix C. **Phone numbers and addresses were provided, so participants could contact the researcher.** Participants had the opportunity to indicate to the researcher via e-mail or by mail if they wanted to receive a copy of the survey results.

A survey was developed by the researcher to provide data about the impact of the STARR program on the former STARR participants' perceived personal empowerment, professional growth and the influence on subsequent career roles. The STARR Participant Survey (Appendix B) included demographic questions, items from the School Participant Empowerment Scale (SPES), and nine open-ended questions about the STARR participants' experiences and subsequent career roles. The former STARR participants completed the 60 item survey online at www.SurveyMonkey.com.

The first component of the survey measured self-perceptions of empowerment with items from the School Participant Empowerment Scale (SPES) developed by Short & Rinehart, (1992). The SPES consists of 38 Likert-type questions with five response options: strongly agree, agree, neutral, disagree and strongly disagree. The SPES items are divided into six subscales (a) decision making, (b) professional growth, (c) status, (d) self-efficacy, (e) autonomy, and (f) impact. The STARR Participant Survey required the respondents to reflect upon their empowerment at three different time frames: (a) prior to STARR participation, (b) immediately after STARR participation, and (c) at the “current” time, meaning when the survey was completed.

The second part of the survey consisted of nine open ended response questions concerning the STARR training, experience and subsequent careers. The STARR participants were directed to answer the questions based upon their perceptions of the training to be a STARR teacher, the STARR experience, and their career after the STARR program. The open-ended questions asked participants to describe: (a) beneficial experiences during the STARR program, (b) important outcomes from the experiences, (c) personal leadership development as a result of the program, (d) influences of the program on subsequent career choices, (e) career goals obtained since the program, and (f) other professional outcomes attributed to the STARR program.

Research Questions

A survey of former STARR participants, who completed the program by 2006, was conducted in 2007, with survey data to determine (a) if any relationships existed between selected demographic variables of teachers who have participated in the STARR program and the participants’ current self-perceived empowerment; (b) if differences

existed in the self-perceptions about empowerment for the participants in the STARR program prior to beginning participation in the program, immediately after the completion of the program, and currently; and (c) the degree former participants in the STARR program described beneficial experiences from the program and influences of the program on their subsequent career roles.

Discussion of Findings

STARR Participant Demographics

Over 300 teachers have participated in training in the STARR program since its inception in 1994 (L. Dooling, personal communication, April, 2007). From this population, only those teachers serving as STARR participants, not alternates, were contacted by letter and asked to participate in the study. Two-hundred and sixty-eight STARR teachers, who had completed their training and had been out of the program for at least two-years, or since 2006, were invited to participate. Ninety-five participants provided information by completing all or part of the survey. The majority of the respondents, 94% of the total, were female. The demographic of “highest degree obtained” followed a normal distribution. Few respondents, 10.3%, had only a bachelor’s degree in education. The largest percentage of the population, 67.8%, had a master’s degree. Fewer respondents, 17.2 % had a specialist’s degree, and the smallest population of the respondents, 4.6% had a doctoral degree (Table 1).

The number respondents with master’s degrees could be a reflection of the current requirement for teachers pursue advanced degrees for continued teacher certification. These figures are also reflected in the open question, “Did the STARR teacher experience influence you to pursue continued formal (university coursework) learning?” Thirty-six

had not pursued any additional coursework. A few individuals considered going back to school, but age or other individual circumstances prevented continued education from occurring. As R-16 responded, “if timing had been different, I definitely would have pursued a Masters and perhaps a Doctorate.” Other participants were still completing educational programs or were planning to begin them soon.

The respondents selected the years they were participants in the STARR program from 1995-2006 in two-year increments (Table 2). The largest group of respondents was from the most recent year in the survey, 2004-2006. Given the use of addresses from when the STARR participants were selected, this response rate was predictable. Those respondents with the most recent STARR experience would be most likely to still reside at the same address. It was anticipated that there would be an inverse relationship, with the number of respondents decreasing as the number of years it has been since the respondents’ participation in STARR increased. However, there was no pattern to the responses received for the demographic “years participation in STARR.” The 2000-2002 participants were the second largest group responding.

The levels of employment at time of selection are also shown in Table 2. Almost 60% of the respondents were elementary teachers, 25% were middle school teachers, and the smallest percentage was from secondary. It is not known if these percentages are a reflection of those applying for the STARR program, those selected to participate, or both. To apply, a teacher must have taught for three years and filled out an application. Part of the application is to obtain permission and a recommendation from the building administrator and permission from the applicant’s superintendent or district representative. It is possible that the discrepancy between the elementary and upper level

STARR teachers is a reflection of those given permission to apply for the STARR program by their principal or district. More replacements are available for an elementary teacher than an upper level teacher who is certified to teach a specific subject. Difficulty in finding a one year replacement for the STARR participant may make a difference in those allowed to apply; and therefore, those who are selected for participation in STARR.

Of those responding to the survey, 86% returned to the same district where they were when selected for STARR. The “demographics after STARR” are in Table 2. This category does not differentiate between participants who returned to their original positions or those who took new positions in their original district. The smallest percentage of respondents left education and a slightly larger population, 3.60% retired. These statistics were not surprising since part of the STARR program design is that the STARR participant will return to their own district after completing their year out of the classroom. In exchange for allowing a teacher to take a year leave of absence to participate in STARR, the district would benefit from the expertise developed during the STARR experience when the participant returns to the classroom. Those who returned to their school often did so, “with a renewed sense of accomplishment and determination” (R-15).

The demographics for the teachers’ current ages and experience are located in Table 3. The average “current age” of the participants responding to the survey was 50 years old. The respondents had a current average of 21 “years of experience as a teacher” and 23 “total years experience in education.” All three of these items have a large variance and range. The respondents’ ages had a 36 year difference with 31 being the

youngest and 67 being the oldest. The standard deviation of 7.8 means there was a large variety of ages responding to the survey.

The 20.78 years as a teacher and 23.14 “years of experience in education” were also high averages for the education population. Of the responses, seven years was the minimum years of experience teaching and ten years was the minimum years in education. The 35 years for the maximum range of years teaching and 36 for maximum years in education were interesting results. As R-4 observed, “The STARR experience brought new life to my career when I was nearing retirement.” The long careers in education could reflect “a passion for teaching and leading teachers” (R-95) which was mentioned by many of the respondents.

There were small significant relationships between some of the demographic variables of teachers who have participated in the STARR program and the participants’ current self-perceived empowerment. Although most demographics did not show a relationship, there were some interesting findings. There was a positive degree of correlation between “degree” and “decision making.” As participants increased their own education, or degree level, their perception of their influence on “decision making” (current) increased. This increase in perceived “decision making” would be expected. Most STARR teachers who pursued advanced degrees did so to move to a degree in administration or a position at the university level. Positions of leadership, which have increased decision-making responsibilities, require an advanced degree; so this relationship is predictable.

The demographic variable of “years experience as a teacher” showed a negative correlation with three different empowerment factors. As “years experience as a teacher”

increased, “decision making,” “professional growth” and “impact” all showed a decrease. Gonzales and Short (1996) found similar results in a study of 301 teachers in Florida. Unlike previous studies, age and years of experience were not significantly related to teachers’ perception of empowerment (Gonzales and Short, 1996). This inverse relationship could be a result of the teacher career development stages (Christensen, Burke, Fessler & Hagenstrom, 1983). This inverse effect may have been influenced by the retired teachers in the former STARR population who no longer have an avenue for “decision making,” “professional growth” and “impact.” However, this explanation does not appear valid since the negative relationship does not exist with the demographic “total years experience in education in education.” It appears that the negative relationships existed only with the “years of experience as a teacher.” Self-perception of “professional growth” and “impact” also decreased as “years of experience as a teacher,” but not “total years experience in education in education” increased (Table 5). The negative relationship with “years of experience as a teacher” could be due to the participants’ personal detachment or it could be school produced. The participants may have lost interest as they neared the end of their career or have chosen to be disengaged from the school responsibilities and professional development activities. It is also possible the administration, school, or district, selected to disregard the contributions of the teachers as they near retirement. It is notable that the negative correlations for the factors of “decision making,” “professional growth” and “impact” were not evident with the demographic “total years experience in education in education,” but were present in the demographic “years of experience as a teacher.”

The comparison of the results between the demographics: “total years experience

in education,” and “years of experience as a teacher,” indicates that those who have years in education, other than teaching, do not have a negative correlation with any of the “current” empowerment factors. In fact “decision making” and “total years experience in education” are very close to having a positive relationship with a correlation score of .058 when $p < .05$ is the criteria for identifying a relationship. The open responses show that individuals staying in education after their teaching years have moved into administration or leadership roles, such as MAP leader, Title teacher, curriculum director, principal, assistant superintendent, etc. These roles would allow the former STARR teachers to have a greater current impact on decision making than as a teacher. It is important to note that the standard deviation (SD) for the “decision making” continually increased from 0.68 “prior to STARR,” to 0.74 “immediately after STARR,” and 0.84 for the “current” time. The increased standard deviation indicates the variety of answers for “decision making” increases as the time increases. The respondents had a variety of different experiences resulting in a large standard deviation for “decision making” current.

SPES Factors and Items

The factor of “status” (current) had a mean score of 4.66, which was the largest score received on Table 4. This score indicates that the average score for all respondents was located closer to “strongly agree” than “agree” on the Likert scale. The factor of “status” was also interesting because there was little variation in the standard deviation for the three time periods, meaning the respondents were in close agreement. The standard deviation (0.39) was slightly less “immediately after STARR” than either “prior to STARR” (0.41), or “currently” at (0.41). The diminished perception of “status” (immediately after STARR) could result from the change created by leaving the STARR

experience, returning to a position with less perceived status than the STARR, or a combination of both of the changes. The increased “status” standard deviation from “immediately after STARR” to “currently” increased. This standard deviation would indicate that “status” varied by the individuals’ experiences between the time the former STARR participants completed the program and the current time.

The “self-efficacy” average scores for the three times did not have an upward trend. This is the only factor which did not show a continually increasing average score from “prior to STARR” to “currently”. The mean score for “self-efficacy” increased from (4.38), “prior to STARR” to (4.58) “immediately after STARR”. This score would be expected since the increased training and professional development of the STARR program was designed to increase the individual’s knowledge and capability, or “self-efficacy”. The unusual finding is “self-efficacy” (current) with a mean score of 4.45, decreased from the “immediately after STARR” score. This decrease could be a result of the STARR participants’ retiring or changing positions, or an indication of the participants’ decreased capacity in their current positions. As R-72 wrote, “I saw that I can and do make a difference... (but) in my classroom I only have an effect on my group of students.” Other respondents had different perceptions. One school district no longer approves STARR applications. As R-78, explained, “...the administration does not see the importance. They don’t use us when we come back so why would they see any relevance?”

Two of the factors have results which indicate the STARR program had a significant impact, but this impact was not sustained following the completion of the program. The results for the “self-efficacy” factor showed a decrease in the average score

and results for the “impact” factor showed no change from “immediately after STARR” to “currently.” The STARR program was such an empowering experience of the STARR program that could not be duplicated or maintained in the years after participation in the STARR program. Several STARR participants wrote that the STARR experience was the epitome of their career. “You have had this awesome experience...as a STARR...then you are back with other educators that do not see the positive side of staff development, ...active learning...and collaboration...It can be a little frustrating” (R-4).

When looking at the average scores for the empowerment factors across the three time intervals (Table 4), the factor, “decision making” had an upward trend increasing from 3.18 “prior” to 3.79 “immediately after STARR” to 4.04 “currently.” This upward linear trend was also true for the factors of “professional growth,” “status,” and “autonomy.” The averages increased incrementally across the time intervals. These increases would indicate that the STARR program had a positive impact on these factors of empowerment. It is interesting to note that the standard deviation (SD) for “decision making” also had an upward trend 0.68 “prior” to 0.74 “immediately after STARR” to 0.84 “currently).” The mean scores indicate that the average scores increased, but the standard deviation indicates that the variety of scores also increased. For those teachers going into administration, it is probable that their perceived “decision making” increased. For those teachers retiring or nearing the end of their career, the perception of “decision making” would possibly decrease. Together these assumptions would result in a wide range of answers, resulting in “decision making” (current) having the highest standard deviation of all the factors.

The individual items for the “decision-making” factor have different results. The

feeling of diminished “decision making” is supported by the paired samples T-test for the item: “I was given the opportunity to teach other teachers” (Appendix F-5). The first two pairings have a significance of .000. The paired sample, “immediately after STARR” and “current” is not significant with a score of .765. The results from this pairing indicated that “immediately after STARR” until the “current” time, the former STARR participants did not increase in their opportunity to teach teachers. This pairing had the smallest standard deviation for this item which indicates the responses were very similar for the respondents.

Another “decision making” item was: “Principals, other teachers, and school personnel solicited my advice.” The results of the paired samples T-tests for the items are also of interest (Appendix F-7). This item is important because for the pairing “immediately after STARR” and “current,” there is no significance. Others experienced negative attitudes from teachers in the building and perceived it was because they had been a STARR teacher (R-95). “Years of experience as a teacher” and “perception of influence” had the largest negative relationship with a correlation of .008. After receiving the in depth training made possible by the STARR program, it would seem reasonable to expect the former STARR participant would be utilized within the district as a resource and consultant. The statistics actually state the opposite results with no significant difference developing over the time interval.

There are four items on the SPES which showed no significance for changes or differences during any of the time intervals as reported in this study. The items are found in Appendix F and listed below:

Item 11: “I was able to teach as I chose.”

Item 17: “I had the freedom to make decisions on what was taught.”

Item 20: “I worked at a school where kids come first.”

Item 22: “I saw students learn.”

The results from these items are not unusual since many state and federal mandates require that districts develop and utilize district-wide curriculum. Districts even have grade level and course specific curriculum required as part of the state accreditation and state assessments are the norm. Putting students first is the goal of education which should be the focus for effective schools.

Open-Ended Questions

The open-ended questions asked participants to describe: (a) beneficial experiences during the STARR program, (b) important outcomes from the experiences, (c) personal leadership development as a result of the program, (d) influences of the program on subsequent career choices, (e) career goals obtained since the program, and (f) other professional outcomes attributed to the STARR program.

The most beneficial outcome cited from the STARR program experience was collaboration: According to R-58, “Teaching is a very isolated profession...I didn’t realize that until I went through STARR.” The literature reports that collaborative ongoing professional development is one of the solutions to alleviate the isolation inherent to the teaching profession (Abdal-Haqq, 1996; Furtwengler, 1995; Nelson, 1996; Short & Echevarria, 1999; Willis, 2002). Collaboration is one of the positive trends in professional development which includes mutual respect and learning from our most successful teachers (Peterson & Deal, 1999; Willis, 2002). Collaboration is a necessary pre-requisite to accumulating a knowledge base necessary for successful professional

development (Willis, 2002). The STARR program provided the opportunity for collaboration as the participants' knowledge base about effective teaching strategies was increasing.

The STARR program is a form of professional development which creates the foundation for individual teacher growth and collegial support resulting in more authentic approaches to teaching and learning (Blase & Blase, 2001). The most promising professional development is based on educators analyzing what works in the classroom, sharing with other educators and collaborating together (Willis, 2002). For many of the respondents, the most important outcome gained from the STARR program was not in teaching skills, but included confidence in leadership abilities (R-37), confidence in presentation skills (R-13), or confidence to leave the classroom to pursue other positions or roles in administration (R-91). This confidence develops as STARR teachers learn strategies, practice skills, and reflect during the two year program. The STARR program achieved the professional development goal of empowering participants with new knowledge, skills, and attitudes (Guskey, 2000).

The pursuit of continued formal (university coursework) learning was influenced by the STARR program. Thirty-six had not pursued any additional coursework. A few considered going back to school, but age or other individual circumstances prevented the continued education from occurring. As participant R-16 responded, "if timing had been different, I definitely would have pursued a Masters and perhaps a Doctorate." Others took classes for obtaining additional certifications instead of advanced degrees. Participant R-20 had "received approximately 38 additional hours in literacy education." Many expressed the desire to continue growing professionally. "The STARR experience

deepened my desire to be a life-long learner and to continually expose myself to current best practices and research” (R-20). Other participants were still completing educational programs or were planning to begin them soon.

More than pursuing an educational degree, many STARR participants desired to continue learning but not necessarily in formal educational programs. The degree was not the focus; the growth and obtaining information was important. This opinion was expressed by one participant who did pursue an “Educational Specialist in administration, but more importantly, STARR led (her) to seek more opportunities to participate in workshops that focused on authentic assessment and hands-on teaching methodology” (R-88).

Conclusions

In conclusion, the STARR program made significant differences in the STARR participants’ perceptions of empowerment from “prior to STARR” and “immediately after STARR.” All six factors: decision making, professional growth, status, self-efficacy, autonomy and impact had significant positive change during the time period. This significant positive difference indicates the STARR program had a profound effect on the participants’ sense of empowerment.

The perceptions for changes in empowerment for the time interval from “immediately after STARR” to “currently” shows significance for three factors out of six. “Decision making,” “self-efficacy,” and “autonomy” showed significant positive changes, but the other factors: “professional growth,” “status,” and “impact” did not change significantly. Although the STARR program had a measurable impact on STARR teachers, the effect for some participants was not a lasting effect. Some of the

participants indicated they did not continue to grow professionally following the completion of the program. The statistics show many different relationships and correlations, but ultimately the findings demonstrate the STARR program had an initial positive effect on the participants' empowerment since all SPES factors showed an initial positive difference after participating in the STARR program. However, the lasting relationships were varied, depending on the participants. Some continued their personal and professional growth to pursue leadership positions or other challenging and rewarding careers. For other STARR participants, the STARR program was the highlight of their careers and was virtually unsurpassed as a professional empowering experience.

Implications

Implications for Research and Practice

This study has several implications for the practice of professional development, specifically on the influence of empowerment. Educational theory and researchers continually espouse the values of teacher professional development as a necessity for developing expertise in the field of education (Guskey & Huberman, 1995). Teachers are encouraged and often required to participate in professional development to keep abreast of the changing knowledge base, changing student needs, and changing research based teaching methods (Darling-Hammond, 1997; Hawley & Valli, 1999). Teacher professional development involves activities which develop higher professional competence, promote positive personal and professional attitudes, and increase teacher knowledge and teaching skills for improving student success (Britton, Raizen, Paine, & Huntley, 2000; Darling-Hammond, 1997; Fullan, 1993; National Commission on Teaching and America's Future, 1996). Professional development is required to create

well prepared teachers, or highly qualified teachers (No Child Left Behind, 2001). The standards movement has created a need over the past few years for teacher learning and research-based professional development (Willis, 2002). Educational reform requires changes in each level and across relationships in schools, districts, and state (Fullan, 2003).

The STARR program was developed in accordance with the best practices in professional development. The collaboration, the ongoing training with time for reflection and practice, the authentic research-based materials, and the design of the teachers-teaching-teachers approach have all been cited in research and evaluations as being successful. Collaboration was a powerful outcome for the participants of the STARR program. This study showed positive effects and influence of the program on the STARR participants' personal empowerment according to their perceptions on the SPES factors. Professional development and support for the participants following their time as a STARR teacher has not been an integral part of the program and needs to be addressed.

The STARR program has been deemed successful in assessments of the programs provided by the STARR teams; however, the STARR participants sometimes experience disappointment and even resentment following the STARR experience. According to the findings from the study, the "professional growth" ended with the ending of the program for most STARR participants. "Status" and "impact" on education also stopped developing or changing following the STARR program.

In the open-ended response questions there were differences in attitudes and experiences when the STARR teachers returned to their home districts. Of the respondents in the study, 85.7% percent of the STARR participants returned to their

home district in some capacity. For many of the STARR teachers the years following the STARR program were unfulfilling. There was also a negative correlation between “years of experience as a teacher” and “decision making,” “professional growth,” and “impact.” Consideration should be given to the development and implementation of strategies designed to provide continued professional growth for the participants following the STARR program. Many of the STARR teachers who did not relocate or change leadership positions expressed disappointment that their local school system was unable to use, or uninterested in using the expertise they had developed during the STARR experience. The STARR teachers indicated they lost “status,” “autonomy,” and “impact” as the time progressed. An implication for additional communication between the administration and the STARR program needs to be developed, as there appears to be a disconnect between the STARR program administration and the home school districts. Most administrators are probably not aware of the STARR participants’ training or capabilities. Consideration should also be given to efforts that will help local school leaders develop strategies for utilizing former STARR teachers. Many former STARR teachers do not feel they are valued or being utilized when they return to their home districts and their professional growth is not continued. The STARR teachers are valuable resources and their expertise needs to be utilized after the STARR program ends.

The study was conducted to understand the influence and impact of the STARR teacher program on empowerment as measured by the SPES. The former STARR participants were asked to give their self-perceptions of empowerment at three time periods: “prior to STARR,” “immediately after STARR,” and “currently.” The results indicated that a significant increase in the factors of empowerment occurred during the

interval “prior to STARR” to “immediately after STARR.” The results for the interval “immediately after” and “currently” had very mixed results. For three of the factors, no growth was significant. This lack of growth for these factors would indicate that even educational experts need to continue to receive professional development to maintain and continue professional growth.

A more detailed analysis of former STARR participants and their level of fulfillment from multiple perspectives, not just empowerment, would provide valuable insight about the effective utilization, or lack thereof, of personal expertise. School systems can ill afford not to utilize internal expertise. Yet some of the former STARR participants indicated they were under-utilized and under-valued as resources to their own schools and districts following their time as a STARR teacher.

Recommendations for Future Research

The following are specific recommendations for future research based upon the findings of this study.

- Survey STARR teachers prior to beginning STARR, immediately after the STARR program and at a designated time period following the STARR program. There would be increased consistency and commonality in the time for administering the surveys. These results would add to the findings of this study.
- Survey administrators about the effective utilization of the STARR teachers as a school resource, after the STARR participants return to the classroom.
- Examine the relationship between former STARR participants and their teaching colleagues after they return to the classroom.

- Conduct surveys, comprised of open-ended questions, of former STARR participants on regular intervals. Results could have further implications for insight into STARR training and influence following the STARR program.
- Study the perceived lack of continuing professional growth among the STARR teachers who return to classroom teaching.
- Study in more detail the specific roles taken by STARR teachers when they leave the program and the profession.

Implications for the STARR Program

The findings of this study hold implications for the STARR program. The study results may have implications for the selection of STARR participants. The demographic “years of experience as a teacher” had negative correlations with “decision making,” “professional growth,” and “impact.” It is not known if these findings are related to a lack of interest or involvement as the teachers near retirement or to the fact that some current administrators or districts are not including the post-STARR teachers in the school’s improvement efforts. The research studies on teacher career development stages appear to have implications for the STARR program. It would seem prudent to include questions concerning the teacher career stages in the STARR application process. Consideration should also be given to having applicants acknowledge an intent to return to their home districts and share their expertise across their home district. The STARR program invests a great deal of time and funding training the STARR teachers. When the STARR participants retire or leave the profession immediately following the STARR experience, there is a loss of both training resources and post-STARR impact on the education profession.

The STARR program was influential and empowering to all participants as measured by the changes in SPES factors “prior to STARR” and “immediately after STARR.” However, the lack of continued “professional growth,” lack of increase in “status,” and lack of increase in “impact” from “immediately after” until “current” are concerns. The STARR program has invested many resources and funding in the training of the STARR teachers. Perhaps it would be prudent to utilize the former STARR teachers in some capacity at the regional or state level following their completion of the STARR program. The STARR teachers are empowered and thirsting for additional opportunities for professional development (R-37). These groups of highly effective teachers have the capacity to continue their professional growth and impact education in Missouri. Some of the possible ways to utilize the former STARR teachers would be committee members, mentors, advisory groups, and educational support for programs at the RPDC and state.

The STARR program left many former STARR teachers desiring additional opportunities for professional development about the latest educational theory, educational topics and teaching strategies. It would seem that some type of continuing training or a STARR conference could be developed. The opportunity to have a STARR reunion on a regular basis would allow the former STARR teachers to stay connected with former colleagues, would provide DESE with ongoing updated information about the STARR participants, and would allow the former STARR teachers the opportunity to continue their professional growth.

Since so many of the STARR participants pursued careers in administration or a position with some type of leadership responsibility, consideration should be given to

providing some form of leader assessment and training as part of the STARR program. Consideration should also be given to the opportunity for STARR participants to receive graduate credit for their participation in the STARR program.

Closing Comments

Professional development has become a major component of the education reform movement (Bredeson and Scribner, 2000; Fullan & Miles, 1992; Furtwengler, 1995; Guskey, 1995; National Commission on Teaching and America's Future, 1996; Scribner, 1998). Teacher professional development involves activities which develop higher professional competence, promote positive personal and professional attitudes, and increase teacher knowledge and teaching skills for improving student success (Britton et al, 2000; Darling- Hammond, 1997; Fullan, 1993; National Commission on Teaching and America's Future, 1996). At the beginning of the twenty-first century, much of the work in professional development focused on the goals of improving student and school performance (Darling-Hammond & McLaughlin, 1999; Willis, 2002). Now, state and local policy have responded to federal public mandates to recapture excellence in education by using staff development to produce school improvement (Dilworth & Imig, 1995; Guskey & Huberman, 1995).

The Select Teachers As Regional Resources (STARR) program was created to provide high quality professional development for teachers and school districts in Missouri (MO Department of Elementary and Secondary Education, 2006) as a component of Senate Bill 380 or the Outstanding Schools Act of 1993 (Outstanding Schools Act, 1993). The effectiveness of the program to provide meaningful professional development for educators across the state has been positively assessed by previous research and assessments. The findings of this study clearly

document that participants in the STARR program found the experience to be powerful and unforgettable. For some, it was the most valuable professional experience of their career and for many it provided the foundation for career changes and the accomplishment of career goals. For a few, life after STARR was a bit of a disappointment, as those individuals felt they had expertise that was untapped by their local schools or districts. Not surprisingly, the range of thoughts about empowerment and their overall STARR experience was extreme, but throughout this study it was evident that nearly all STARR teachers were overwhelmingly positive about the professional development experience and the influence they were able to have during their role as a STARR teacher. For many respondents, the feelings of empowerment, and the feelings of confidence and power, continued beyond the program. It is safe to say that the STARR program has had a profound impact on the participants. One can assume that, at least to some degree, the impact of the participants on other educators and programs across the state has also been positive. The positive findings from this study far outweigh the few negative findings. As one former STARR teacher wrote, “I was not just a teacher, I was a STARR!” (R-64).

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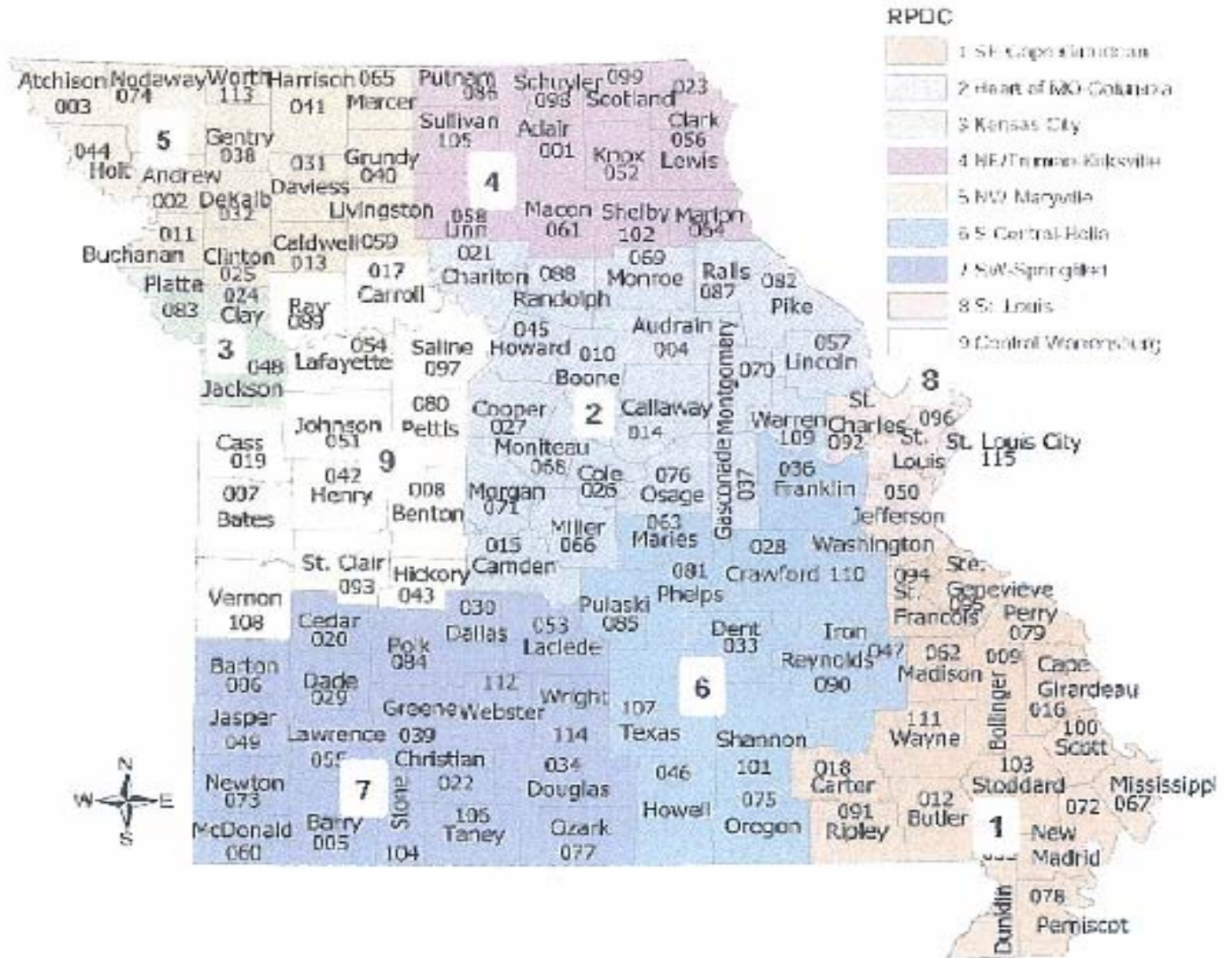
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Appendix A

RPDC Map

Missouri Regional Professional Development Centers (RPDC) Map



Appendix B
STARR Participant Survey

The Perceived Influence of the STARR Teacher Program on STARR Participants

1. Default Section

Thank you for taking the time to complete this important survey. The information you share will be very valuable to understanding the influence of the STARR program upon the STARR participants' professional growth and subsequent careers. The results will have implications for both the future of the STARR program and other professional development programs.

The following are demographic questions. Your answers will allow for generalizing the findings.

Name:

E-mail Address:

Phone Number:

Gender: Male Female

Age:

Highest degree obtained: Bachelors Masters Specialist Doctorate

Year last degree was obtained:

Years of experience as a teacher (including this year):

Total years of experience in education (including this year):

Years as a formal leader in a position not accounted for in the previous question (including this year):

Years you participated in the STARR program: 1995 - 1997 1996 - 1998 1997 - 1999
1998 - 2000 1999 - 2000 2000 - 2002 2001 - 2003 2002 - 2004 2003 - 2005
2004 - 2006

When selected for the STARR program, you were employed in which level school?
Elementary Middle Junior High Secondary

Name of the district you were employed in when you began the STARR program:

Name of the district or organization you are currently employed in:

Following the STARR program: Returned to the same district Went to new district
Left field of education Retired immediately Currently retired

2. DIRECTIONS: This survey is designed to provide information about self-perceptions of empowerment and leadership capacity by those teachers who have participated in the STARR teacher program. Please select the responses that best describe you during the three different times: Prior to STARR, Immediately after STARR, and Currently. Each statement is written in past tense for ease of reading but please respond to “Currently” in the present tense if you are still employed as an educator. If you have retired or are no longer in the education field, please respond to “Currently” based upon your last year in education.

Using the options of 5 – 4 – 3 – 2 – 1, please indicate your perception of appropriate response for each column. 5: STRONGLY AGREE 4: AGREE 3: NEUTRAL 2: DISAGREE 1: STRONGLY DISAGREE

I was given the responsibility to monitor programs.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I functioned in a professional environment.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I believe that I had earned respect.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I believe that I was helping kids become independent learners.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I had control over daily schedules.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I believe that I had the ability to get things done.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I made decisions about the implementation of new programs.					
Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1
I was treated as a professional.					
Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1
I believe that I was very effective.					
Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1
I believe that I was empowering students.					
Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1
I was able to teach as I chose.					
Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1
I participated in staff development.					
Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1
I made decisions about the selection of other teachers.					
Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1
I had the opportunity for professional growth.					
Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1
I had respect for my colleagues.					
Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I felt that I was involved in an important program for children.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I had the freedom to make decisions on what was taught.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I believe that I was having an impact.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I was involved in school budget decisions.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I worked at a school where kids come first.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I had the support and respect of my colleagues.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I saw students learn.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I made decisions about curriculum.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I was a decision maker.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I was given the opportunity to teach other teachers.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I was given the opportunity to continue learning.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I had a strong knowledge base in the areas in which I taught.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I had the opportunity to grow by working daily with students.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I perceived that I had the opportunity to influence others.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I could determine my own schedule.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I had the opportunity to collaborate with other teachers.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I perceived that I made a difference.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

Principals, other teachers, and school personnel solicited my advice.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I believed that I was good at what I did.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I planned my own schedule.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I perceived that I had an impact on other teachers and students.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

My advice was solicited by others.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

I had an opportunity to teach other teachers about innovative ideas.

Prior to STARR	5	4	3	2	1
Immediately After STARR	5	4	3	2	1
Currently	5	4	3	2	1

3. Please answer the following questions based upon your experience and perceptions of the training to be a STARR teacher, the STARR experience, and your career after the STARR program.

What were the most beneficial experiences during the STARR program? Please explain how they influenced you professionally.

What was the most important outcome for you as a result of your STARR experience? Please describe.

How did your experiences as a STARR teacher develop your leadership capabilities? Please describe.

How did your experiences as a STARR teacher develop your leadership capabilities? Please describe how.

Did your experiences as a STARR teacher influence your subsequent career choices? Please explain.

Have you achieved your professional career goals since your STARR experience? Please explain.

Was the STARR experience influential in achieving your professional goals? Please explain.

Did the STARR teacher experience influence you to pursue continued formal (university coursework) learning? Please describe how.

Did the STARR program influence your acceptance of new career roles or career paths? Please describe the influence of the STARR program, as appropriate, on each career change.

Were there other outcomes in your professional life that you attribute to your STARR experiences? Please explain.

Appendix C
Participant Introductory Letter

February 25, 2008

Dear STARR teacher,

My name is Susan Bowles. I am the principal at Wyman Elementary School in Rolla, Missouri. I am also a doctoral student in the Educational Leadership and Policy Analysis program at the University of Missouri and a former STARR teacher. I am conducting a study about the influence of the STARR program on former STARR teachers. In order to better understand the effect the STARR program is having on teacher leaders, I need to ask for your assistance.

The name of my study is “The Perceived Influence of the STARR Teacher Program on Professional Growth of Program Participants and Their Subsequent Career Roles”.

I am using SurveyMonkey.com to post my survey. This is a secure site and your answers will be confidential. Participation in this study is voluntary and there is no risk in your participation. You may stop your participation at any time and leave any question unanswered without consequences. By logging on and answering the questions you are giving informed consent to participate in this study.

The questionnaire is comprised of 38 questions regarding your perceptions about your empowerment, prior to beginning the STARR training, immediately after the STARR program, and currently, using a 5 point Likert scale. There are also nine short answer questions and demographics. The questionnaire should take less than 20 minutes to complete.

The STARR program had a profound impact on me, both personally and professionally. This is one of the first opportunities for STARR teachers to show the impact the program had on their professional development and subsequent career paths. The results could have implications for both the STARR program and future educational programs. Your participation will make a difference. To participate, please copy the following link into your browser:

http://www.surveymonkey.com/s.aspx?sm=ypMzqfqGvZ683GlbW23H9g_3d_3d

Please complete the survey by April 1, 2008, so your answers will count. If you would like a copy of the results, please contact me by e-mail for mailing instructions.

Any questions you may have regarding the research may be directed to Susan Bowles (573) 364-7962 or by e-mail at ssb67f@mizzou.edu or to my advisor, Dr. Jerry Valentine, at (573) 882-0944 or by e-mail at valentinej@missouri.edu.

Thank you in advance for your participation. STARR teachers do make a difference.

Sincerely,

Susan Steinbeck Bowles

Appendix D

IRB Approval

Comments Regarding Project #1106117

Comment Number: 182202 (03-03-2008)

Exempt Approval Letter (Jan2008) sent on Mar 03, 2008:

To: ssb67f@mizzou.edu, ValentineJ@missouri.edu

BCC: greeningjm@missouri.edu

Subject: Campus IRB Exempt Approval Letter: IRB # 1106117 (See restriction)

Dear Investigator:

Your human subject research project entitled The Perceived Influence of the STARR Teacher Program on the Professional Growth of Program Participants and Their Subsequent Career Roles was reviewed and APPROVED as "Exempt" on March 03, 2008 and will expire on March 03, 2009. Research activities approved at this level are eligible for exemption from some federal IRB requirements. Although you will not be required to submit the annual Continuing Review Report, your approval will be contingent upon your agreement to annually submit the "Annual Exempt Research Certification" form to maintain current IRB approval. You must submit the "Annual Exempt Research Certification" form by January 17, 2009 to provide enough time for review and avoid delays in the IRB process. Failure to timely submit the certification form by the deadline will result in automatic expiration of IRB approval. (See form: <http://research.missouri.edu/cirb/>)

RESTRICTION: Phase II: You must submit the interview questions for IRB review prior to interviewing participants. You can e-mail them to Denise Harrington (harringtond@missouri.edu) when you have them.

If you wish to revise your activities, you do not need to submit an Amendment Application. You must contact the Campus IRB office for a determination of whether the proposed changes will continue to qualify for exempt status. You will be expected to provide a brief written description of the proposed revisions and how it will impact the risks to subject participants. The Campus IRB will provide a written determination of whether the proposed revisions change from exemption to expedite or full board review status. If the activities no longer qualify for exemption, as a result of the proposed revisions, an expedited or full board IRB application must be submitted to the Campus IRB. The investigator may not proceed with the proposed revisions until IRB approval is granted.

Please be aware that all human subject research activities must receive prior approval by the IRB prior to initiation, regardless of the review level status. If you have any questions regarding the IRB process, do not hesitate to contact the Campus IRB office at (573) 882-9585.

Campus Institutional Review Board

Appendix E

Paired Sample T-Tests and Correlations for SPES Factor Means

Pared Sample T-Tests and Correlations for SPES Factor Means

Table E-1

Paired Samples T-Test, Pair 1: Decision Making (Prior) and Decision Making (Immediately After)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
						Lower	Upper			
1	.571	.000	-.6395	.65618	.07291	-.7846	-.4944	-8.771	80	.000

$t(80) = -8.77, p = .000$

Table E-2

Paired Samples T-Test, Pair 2: Decision Making (Prior) and Decision Making (Current)

Pair	Correlation		Paired Differences							
	R	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
						Lower	Upper			
2	.322	.004	-.9053	.89138	.09966	-1.1036	-.7069	-9.084	79	.000

$t(79) = -9.08, p = .000$

Table E-3

Paired Samples T-Test, Pair 3: Decision Making (Immediately After) and Decision Making (Current)

Pair	Correlation		Paired Differences							
	R	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
						Lower	Upper			
3	.562	.000	-.2615	.74331	.08310	-.4269	-.0961	-3.147	79	.002

$t(79) = -3.15, p = .002$

Table E-4

Paired Samples T-Test, Pair 4: Professional Growth (Prior) and Professional Growth

(Immediately After)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
4	.606	.000	-.3854	.57036	.06377	-.5123	-.2585	-6.044	79	.000

$t(79) = -6.04, p = .000$

Table E-5

Paired Samples T-Test, Pair 5: Professional Growth (Prior) and Professional Growth

Immediately After (Current)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
5	.324	.003	-.4933	.72238	.08077	-.6541	-.3326	-6.108	79	.000

$t(79) = -6.11, p = .000$

Table E-6

Paired Samples T-Test, Pair 6: Professional Growth (Immediately After) and Professional

Growth (Current)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
6	.534	.000	-.1093	.60696	.06829	-.2452	.0267	-1.600	78	.114

$t(78) = -1.60, p = .114$

Table E-7

Paired Samples T-Test, Pair 7: Status (Prior) and Status (Immediately After)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
7	.406	.000	-.3812	.44231	.04945	-.4797	-.2828	-7.710	79	.000

$t(79) = -7.71, p = .000$

Table E-8

Paired Samples T-Test, Pair 8: Status (Prior) and Status (Current)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
8	.280	.011	-.4333	.49272	.05475	-.5423	-.3244	-7.915	80	.000

$t(80) = -7.92, p = .000$

Table E-9

Paired Samples T-Test, Pair 9: Status (Immediately After) and Status (Current)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
9	.648	.000	-.0617	.33037	.03694	-.1352	.0119	-1.670	79	.099

$t(79) = -1.67, p = .099$

Table E-10

Paired Samples T-Test, Pair 10: Self-Efficacy (Prior) and Self-Efficacy (Immediately After)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
10	.395	.000	-.1967	.52998	.05889	-.3139	-.0795	-3.340	80	.001

$t(80) = -3.34, p = .001$

Table E-11

Paired Samples T-Test, Pair 11: Self-Efficacy (Prior) and Self-Efficacy (Current)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
11	.167	.140	-.0819	.63651	.07116	-.2235	.0598	-1.151	79	.253

$t(79) = -1.15, p = .253$

Table E-12

Paired Samples T-Test, Pair 12: Self-Efficacy (Immediately After) and Self-Efficacy

(Current)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
12	.617	.000	.1098	.45603	.05099	.0083	.2113	2.153	79	.034

$t(79) = 2.15, p = .034$

Table E-13

Paired Samples T-Test, Pair 13: Autonomy (Prior) and Autonomy (Immediately After)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
13	.654	.000	-.2646	.59190	.06618	-.3963	-.1329	-3.998	79	.000

$t(79) = -4.00, p = .000$

Table E-14

Paired Samples T-Test, Pair 14: Autonomy (Prior) and Autonomy (Current)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
14	.448	.000	-.4052	.77538	.08669	-.5778	-.2327	-4.674	79	.000

$t(79) = -4.67, p = .000$

Table E-15

Paired Samples T-Test, Pair 15: Autonomy (Immediately After) and Autonomy (Current)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
15	.614	.000	-.1487	.67168	.07557	-.2992	.0017	-1.968	78	.023

$t(78) = -1.97, p = .023$

Table E-16

Paired Samples T-Test, Pair 16: Impact (Prior) and Impact (Immediately After)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
16	.323	.003	-.5194	.58529	.06544	-.6496	-.3891	-7.937	79	.000

$t(79) = -7.94, p = .000$

Table E-17

Paired Samples T-Test, Pair 17: Impact (Prior) and Impact (Current)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
17	.134	.238	-.5275	.67673	.07566	-.6781	-.3769	-6.972	79	.000

$t(79) = -6.97, p = .000$

Table E-18

Paired Samples T-Test, Pair 18: Impact (Immediately After) and Impact (Current)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
18	.418	.000	-.0082	.51012	.05739	-.1225	.1060	-.143	78	.886

$t(78) = -.143, p = .886$

Appendix F

Factor Item Paired Sample T-Tests and Pearson Correlations

Factor Item Paired Sample T-Tests and Pearson Correlations

Items for the Factor 1: Decision Making

Table F-1

Paired Samples T-Test, Item 1: "I was given the responsibility to monitor programs."

(Prior, Immediately After, Currently)

Pair	Correlation		Mean	SD	SE	Paired Differences 95% CI of Diff		t	df	Sig.
	r	Sig.				Lower	Upper			
P & IA	.188	.205	-0.98	1.310	.191	-1.36	-0.59	-5.121	46	.000
P & C	-.026	.844	-1.49	1.443	.188	-1.87	-1.12	-7.940	58	.000
IA & C	.199	.201	-0.51	1.404	.214	-0.94	-0.08	-2.390	42	.021

Table F-2

Paired Samples T-Test, Item 7: "I made decisions about the implementation of new programs." (Prior, Immediately After, Currently)

Pair	Correlation		Mean	SD	SE	Paired Differences 95% CI of Diff		t	df	Sig.
	r	Sig.				Lower	Upper			
P & IA	.527	.000	-0.66	0.993	.111	-0.88	-0.44	-5.968	79	.000
P & C	.266	.017	-0.76	1.255	.140	-1.04	-0.48	-5.433	79	.000
IA & C	.544	.000	-0.11	1.050	.118	-0.35	0.12	-0.964	78	.338

Table F-3

Paired Samples T-Test, Item 13: "I made decisions about the selection of other teachers."

(Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
P & IA	.667	.000	-0.20	1.060	.119	-0.44	0.04	-1.687	79	.095
P & C	.409	.000	-0.61	1.382	.155	-0.92	-0.30	-3.963	79	.000
IA & C	.641	.000	-0.42	1.105	.124	-0.67	-0.17	-3.360	78	.001

Table F-4

Paired Samples T-Test, Item 19: "I was involved in school budget decisions."

(Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
P & IA	.703	.000	-0.34	0.941	.105	-0.55	-0.13	-3.209	79	.002
P & C	.588	.000	-0.82	1.199	.134	-1.09	-0.56	-6.155	79	.000
IA & C	.714	.000	-0.48	1.048	.118	-0.72	-0.25	-4.078	78	.000

Table F-5

Paired Samples T-Test, Item 25: "I was given the opportunity to teacher other teachers."

(Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
P & IA	.323	.003	-0.99	1.142	.128	-1.24	-0.73	-7.736	79	.000
P & C	.120	.288	-0.93	1.339	.150	-1.22	-0.63	-6.181	79	.000
IA & C	.307	.006	0.04	1.126	.127	-0.21	0.29	0.300	78	.765

Table F-6

Paired Samples T-Test, Item 30: "I could determine my own schedule." (Prior,

Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
P & IA	.646	.000	-0.52	1.006	.112	-0.75	-0.30	-4.668	79	.000
P & C	.325	.003	-1.27	1.405	.157	-1.59	-0.96	-8.117	79	.000
IA & C	.610	.000	-0.77	1.132	.127	-1.03	-0.52	-6.054	78	.000

Table F-7

Paired Samples T-Test, Item 33: "Principals, other teachers, and school personnel solicited my advice." (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
P & IA	.409	.000	-0.63	0.986	.110	-0.84	-0.41	-5.672	79	.000
P & C	.296	.008	-0.71	0.996	.111	-0.93	-0.49	-6.398	79	.000
IA & C	.522	.000	-0.10	0.856	.096	-0.29	0.09	-1.051	78	.296

Table F-8

Paired Samples T-Test, Item 35: "I planned my own schedule." (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
P & IA	.694	.000	-0.50	0.981	.110	-0.72	-0.28	-4.560	79	.000
P & C	.358	.001	-1.14	1.421	.159	-1.45	-0.82	-7.161	79	.000
IA & C	.558	.000	-0.66	1.197	.135	-0.93	-0.39	-4.887	78	.000

Table F-9

Paired Samples T-Test, Item 37: “My advice was solicited by others.” (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
P & IA	.480	.000	-0.68	0.823	.092	-0.86	-0.49	-7.333	79	.000
P & C	.284	.011	-0.69	0.976	.109	-0.90	-0.47	-6.303	79	.000
IA & C	.508	.000	-0.03	0.751	.084	-0.19	0.14	-0.300	78	.765

Table F-10

Paired Samples T-Test, Item 38: “I had an opportunity to teacher other teachers about innovative ideas.” (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
P & IA	.437	.000	-0.98	0.941	.105	-1.18	-0.77	-9.268	79	.000
P & C	.239	.034	-0.86	1.163	.131	-1.12	-0.60	-6.579	78	.000
IA & C	.405	.000	0.09	0.983	.111	-0.13	0.31	0.806	77	.422

Items for the Factor 2: Professional Growth

Table F-11

Paired Samples T-Test, Item 2: “I functioned in a professional environment.” (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
						Lower	Upper			
P & IA	.527	.000	-0.37	0.865	.097	-0.56	-0.17	-3.772	78	.000
P & C	.257	.022	-0.57	1.009	.113	-0.80	-0.34	-5.019	78	.000
IA & C	.423	.000	-0.21	0.903	.102	-0.41	0.00	-2.007	77	.048

Table F-12

Paired Samples T-Test, Item 8: “I was treated as a professional.” (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
						Lower	Upper			
P & IA	.470	.000	-0.51	0.941	.105	-0.72	-0.30	-4.870	79	.000
P & C	.146	.197	-0.65	1.092	.122	-0.89	-0.41	-5.324	79	.000
IA & C	.347	.002	-0.14	0.888	.100	-0.34	0.06	-1.394	78	.167

Table F-13

Paired Samples T-Test, Item 14: "I had the opportunity for professional growth." (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
						Lower	Upper			
P & IA	.540	.000	-0.51	0.729	.082	-0.67	-0.35	-6.288	79	.000
P & C	.301	.007	-0.35	0.982	.110	-0.57	-0.13	-3.187	79	.002
IA & C	.581	.000	0.15	0.700	.079	0.00	0.31	1.930	78	.057

Table F-14

Paired Samples T-Test, Item 20: "I worked at a school where kids come first." (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	Df	Sig.
						Lower	Upper			
P & IA	.698	.000	0.00	0.773	.088	-0.17	0.17	0.000	77	1.00
P & C	.245	.031	-0.18	1.159	.131	-0.44	0.08	-1.367	77	.175
IA & C	.387	.000	-0.19	1.077	.123	-0.44	0.05	1.588	76	.116

Table F-15

Paired Samples T-Test, Item 26: "I was given the opportunity to continue learning."

(Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
P & IA	.468	.000	-0.31	0.773	.086	-0.48	-0.14	-3.617	79	.001
P & C	.380	.001	-0.33	0.848	.096	-0.52	-0.14	-3.473	77	.001
IA & C	.731	.000	.01	.525	.060	-0.11	0.13	0.217	76	.829

Table F-16

Paired Samples T-Test, Item 31: "I had the opportunity to collaborate with other teachers." (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
P & IA	.654	.000	-0.58	0.826	.093	-0.77	-0.40	-6.266	78	.000
P & C	.307	.006	-0.85	1.099	.124	-1.09	-0.60	-6.860	78	.000
IA & C	.454	.000	-0.28	0.910	.103	-0.49	-0.08	-2.737	77	.008

Items for the Factor 3: Status

Table F-17

Paired Samples T-Test, Item 3: "I believe that I had earned respect." (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
						Lower	Upper			
P & IA	.378	.001	-0.46	0.762	.085	-0.63	-0.29	-5.428	79	.000
P & C	.217	.053	-0.50	0.900	.101	-0.70	-0.30	-4.969	79	.000
IA & C	.536	.000	-0.04	0.706	.079	-0.20	0.12	-0.478	78	.634

Table F-18

Paired Samples T-Test, Item 9: "I believe that I was very effective." (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
						Lower	Upper			
P & IA	.238	.034	-0.51	0.675	0.75	-0.66	-0.36	-6.792	79	.000
P & C	.146	.196	-0.55	0.673	0.75	-0.70	-0.40	-7.308	79	.000
IA & C	.472	.000	-0.04	0.517	0.58	-0.15	0.08	-0.652	78	.516

Table F-19

Paired Samples T-Test, Item 15: "I had respect for my colleagues." (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
P & IA	.727	.000	-0.15	0.576	.064	-0.28	-0.02	-2.330	79	.022
P & C	.458	.000	-0.30	0.715	.079	-0.45	-0.14	-3.730	80	.000
IA & C	.644	.000	-0.16	0.625	.070	-0.30	-0.02	-2.324	79	.023

Table F-20

Paired Samples T-Test, Item 21: "I had the support and respect of my colleagues." (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
P & IA	.334	.002	-0.38	0.862	.096	-0.57	-0.18	-3.889	79	.000
P & C	.241	.032	-0.49	0.875	.098	-0.69	-0.30	-5.013	78	.000
IA & C	.615	.000	-0.13	0.589	.067	-0.26	0.00	-1.922	77	.058

Table F-21

Paired Samples T-Test, Item 21: "I had a strong knowledge base in the areas in which I taught." (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
P & IA	.422	.000	-0.42	0.497	.056	-0.54	-0.31	-7.641	79	.000
P & C	.243	.030	-0.39	0.626	.070	-0.53	-0.25	-5.534	79	.000
IA & C	.660	.000	0.03	0.357	.040	-0.05	0.11	0.630	78	.531

Table F-22

Paired Samples T-Test, Item 34: "I believed that I was good at what I did." (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
P & IA	.361	.001	-0.36	0.641	.072	-0.51	-0.22	-5.056	79	.000
P & C	.273	.014	-0.39	0.665	.074	-0.54	-0.24	-5.208	79	.000
IA & C	.543	.000	-0.04	0.492	.055	-0.15	0.07	-0.686	78	.495

Items for the Factor 4: Self-Efficacy

Table F-23

Paired Samples T-Test, Item 4: “I believe that I was helping kids become independent learners.” (Prior, Immediately After, Currently)

Pair	Correlation		Mean	SD	SE	Paired Differences 95% CI of Diff		t	df	Sig.
	r	Sig.				Lower	Upper			
P & IA	.152	.176	-0.32	0.772	.086	-0.49	-0.15	-3.743	80	.000
P & C	.049	.672	-0.29	0.854	.097	-0.49	-0.10	-3.048	77	.003
IA & C	.514	.000	0.03	0.602	.068	-0.11	0.16	0.376	77	.708

Table F-24

Paired Samples T-Test, Item 10: “I believe that I was empowering students.” (Prior, Immediately After, Currently)

Pair	Correlation		Mean	SD	SE	Paired Differences 95% CI of Diff		t	df	Sig.
	r	Sig.				Lower	Upper			
P & IA	.256	.023	-0.47	0.765	.086	-0.64	-0.30	-5.440	78	.000
P & C	.018	.875	-0.41	0.913	.103	-0.61	-0.20	-3.943	78	.000
IA & C	.295	.009	0.04	0.711	.080	-0.12	0.20	0.478	77	.634

Table F-25

Paired Samples T-Test, Item 22: "I saw students learn." (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
P & IA	.315	.005	-0.05	0.714	.080	-0.21	0.11	-0.630	78	.531
P & C	.319	.004	-0.05	0.701	.079	-0.21	0.11	-0.646	77	.520
IA & C	.579	.000	-0.03	0.606	.069	-0.16	0.11	-0.376	76	.708

Table F-26

Paired Samples T-Test, Item 28: "I had the opportunity to grow by working daily with students." (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
P & IA	.436	.000	0.06	0.785	.088	-0.11	0.24	0.712	79	.479
P & C	.104	.362	0.62	1.191	.134	0.35	0.89	4.630	78	.000
IA & C	.507	.000	0.55	1.015	.115	0.32	0.78	4.798	77	.000

Table F-27

Paired Samples T-Test, Item 32: "I perceived that I made a difference." (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
						Lower	Upper			
P & IA	.460	.000	-0.29	0.620	.069	-0.43	-0.15	-4.146	79	.000
P & C	.250	.025	-0.33	0.742	.083	-0.49	-0.16	-3.915	79	.000
IA & C	.711	.000	-0.05	.389	.044	-0.14	0.04	-1.157	78	.251

Items for the Factor 5: Autonomy

Table F-28

Paired Samples T-Test, Item 5: "I had control over daily schedules." (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
						Lower	Upper			
P & IA	.654	.000	-0.48	1.006	.112	-0.70	-0.25	-4.223	79	.000
P & C	.272	.015	-1.11	1.423	.160	-1.43	-0.80	-6.957	78	.000
IA & C	.526	.000	-0.63	1.179	.133	-0.90	-0.37	-4.773	78	.000

Table F-29

Paired Samples T-Test, Item 11: "I was able to teach as I chose." (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
						Lower	Upper			
P & IA	.507	.000	-0.08	0.859	.097	-0.27	0.12	-0.786	78	.434
P & C	.218	.053	0.03	1.154	.130	-0.23	0.28	0.195	78	.846
IA & C	.551	.000	0.08	0.879	.100	-0.12	0.28	0.773	77	.442

Table F-30

Paired Samples T-Test, Item 17: "I had the freedom to make decisions on what was taught." (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
P & IA	.778	.000	-0.15	0.681	.077	-0.30	0.00	-1.982	78	.051
P & C	.526	.000	-0.16	0.993	.112	-0.39	0.06	-1.473	78	.145
IA & C	.702	.000	-0.01	0.814	.092	-0.20	0.17	-0.139	77	.890

Table F-31

Paired Samples T-Test, Item 23: "I made decisions about curriculum." (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
P & IA	.549	.000	-0.36	0.860	.096	-0.55	-0.17	-3.768	79	.000
P & C	.362	.001	-0.38	1.017	.114	-0.61	-0.15	-3.320	78	.001
IA & C	.508	.000	-0.01	0.913	.103	-.022	0.19	-0.123	78	.902

Items for the Factor 6: Impact

Table F-32

Paired Samples T-Test, Item 6: “I believe that I had the ability to get things done.” (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
						Lower	Upper			
P & IA	.458	.000	-0.45	0.840	.094	-0.64	-0.26	-4.789	79	.000
P & C	.397	.000	-0.46	0.899	.101	-0.66	-0.26	-4.600	79	.000
IA & C	.616	.000	-0.01	0.650	.073	-0.16	0.13	-0.173	78	.863

Table F-33

Paired Samples T-Test, Item 12: “I participated in staff development.” (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
						Lower	Upper			
P & IA	.375	.001	-0.48	0.782	.088	-0.66	-0.31	-5.466	78	.000
P & C	.033	.770	-0.39	0.993	.112	-0.61	-0.17	-3.514	78	.001
IA & C	.207	.068	0.09	0.724	.082	-0.07	0.25	1.095	77	.277

Table F-34

Paired Samples T-Test, Item 24: "I was a decision maker." (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
P & IA	.446	.000	-0.39	0.720	.081	-0.55	-0.23	-4.812	79	.000
P & C	.283	.011	-0.51	0.811	.091	-0.69	-0.33	-5.651	79	.000
IA & C	.429	.000	-0.11	0.679	.076	-0.27	0.04	-1.491	78	.143

Table F-35

Paired Samples T-Test, Item 29: "I perceived that I had the opportunity to influence others." (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
P & IA	.351	.001	-0.69	0.894	.100	-0.89	-0.49	-6.876	79	.000
P & C	.299	.007	-0.71	0.908	.102	-0.91	-0.51	-6.939	78	.000
IA & C	.595	.000	-0.01	0.689	.077	-0.17	0.14	-0.163	78	.871

Table F-36

Paired Samples T-Test, Item 36: "I perceived that I had an impact on other teachers and students." (Prior, Immediately After, Currently)

Pair	Correlation		Paired Differences							
	r	Sig.	Mean	SD	SE	95% CI of Diff		t	df	Sig.
						Lower	Upper			
P & IA	.393	.000	-0.59	0.724	.081	-0.75	-0.43	-7.260	79	.000
P & C	.164	.145	-0.56	0.884	.099	-0.76	-0.37	-5.694	79	.000
IA & C	.448	.000	0.01	0.610	.069	-0.12	0.15	0.185	78	.854

Vita

Susan Jean Steinbeck Bowles was born on November 10, 1955 in Butler, Missouri. Susan graduated from Butler High School in 1974. She attended the University of Missouri and graduated with a Bachelor of Science in Art Education in 1978. In 1980, she received her Master of Education in Elementary Administration from Southwest Missouri State University (now Missouri State University). In 2008, she received her Educational Doctorate in Educational Leadership and Policy Analysis from the University of Missouri. Susan previously taught Art for twenty-four collective years at Branson Elementary, Dixon Elementary, Dixon Middle School, Salem Junior High, Rolla Junior High and Rolla High School. While teaching at Rolla High School, Susan was selected by DESE to be a STARR teacher, representing the South-Central Region from 1996-1998. Following one year as Assistant Principal at the Rolla Middle School, Susan is in her sixth year as Principal at Colonel John B. Wyman Elementary School in Rolla, Missouri.

In 1980, Susan married Steve Bowles. Susan and Steve reside in Rolla, Missouri and are the proud parents of three grown children, Jeremy Stephen, Joshua Steinbeck, and Jennifer Susan. The Bowles' family shares the tradition of being University of Missouri alumni.