12-11-2004

A Study of the Impact of the Mississippi Writing Project Summer Institute on Teacher Efficiency in Writing

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A STUDY OF THE IMPACT OF THE MISSISSIPPI WRITING PROJECT

SUMMER INSTITUTE ON TEACHER EFFICACY IN WRITING

by

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A Dissertation
Submitted to the Faculty of
Mississippi State University
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy
in Elementary Education
in the Department of Curriculum and Instruction

Mississippi State, Mississippi

December 2004

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Date of Degree: December 10, 2004

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Title of Study: A STUDY OF THE IMPACT OF THE MISSISSIPPI WRITING PROJECT SUMMER INSTITUTE ON TEACHER EFFICACY IN WRITING

Pages in Study: 81

Candidate for Degree of Doctor of Elementary Education

In order to provide evidence of the worth of the Summer Institute of the National Writing Project, this study sought to determine whether participation in the professional development would increase feelings of teacher efficacy in writing. The Summer Institute professional development is consistent with recommendations of researchers in teacher efficacy and in professional development. Albert Bandura's social cognitive theory provides a contextual framework for both teacher efficacy and the Summer Institute.

The study compared the pre- and posttest scores on the Teacher Efficacy Scale for Writing and Writing Orientation Scale (Graham, S., Harris, K. R., Fink, B. & MacArthur, C., 2001) reported by 65 teachers participating in the Summer Institute. The study investigated relationships between beliefs about writing and feelings of efficacy.

Dependent samples *t-tests* showed statistically significantly higher posttest scores for personal teaching efficacy $t(63) = -5.96$, $SE = 7.34$, $p < .001$ and for general teaching efficacy $t(63) = -2.96$, $SE = .11$, $p = .004$. Statistically significant higher posttest scores were found in natural learning in teaching writing, $t(61) = -4.87$, $SE = .104$, $p < .001$. No statistically significant differences were found for correctness in teaching writing and explicit instruction in teaching writing. Correlation analysis of posttest mean scores indicated statistically significant correlations between personal teaching efficacy and explicit instruction in writing *(r = .419, p = .001)* and between mean scores in general teaching efficacy and correctness in writing *(r = -.317, p = .012)*.

Results suggest that participation in the Summer Institute could enhance teacher efficacy in writing and increase student performance on writing assessments. The Institute's focus on the writing process seems to be effective in changing teachers' perspectives on writing instruction.

Results support a recommendation that types of professional development in which teachers have participated should be used as a source of variance in research on teacher efficacy. Other suggestions include allowing more time to pass before administration of the posttest or a third administration of the instruments to subjects after returning to classrooms and implementing the ideas.

DEDICATION

This dissertation is dedicated to my husband whose encouragement and support enabled me to reach this point in my career. Without his patient support, I would have never been able to finish. This work is also dedicated to my son, whose arrival marked a new era in my life. His tiny smiles enabled me to keep life in perspective. Thank you both.

ACKNOWLEDGMENTS

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CHAPTER I

INTRODUCTION

Professional development for practicing teachers is intended to change the

classroom practices of teachers, including their attitudes, beliefs, and actions (Guskey,

2002). However, professional development has often done little to change practice.

Bringing in outside experts to instruct teachers about practice frequently has not had a

positive effect on teaching practice; teachers may resent the power structure and ignore

the proposed practices (Galbo, 1998; Gennaoui & Kretschmer, 1996).

In an effort to reform ineffective professional development practices, educational

organizations have issued professional development standards designed to be beneficial

to teachers. Common ideas among the sets of standards include using the best available

research and practice in teaching, encouraging teachers to plan the professional

development, expecting teachers to be intellectually engaged with ideas, and offering

teachers the opportunity and support to become part of collaborative learning groups

("What Makes," 1996). Professional development planned around these principles should

enable teachers to become more proficient in their craft (Guskey, 2002).

Teachers who believe they have the ability to positively impact student learning

often see their students perform at a higher level than teachers who feel they have little

impact on student learning (Ashton & Webb, 1986). This statement, though succinct,

illustrates the central tenet of teacher efficacy research. Since the idea that teachers who demonstrate high levels of efficacy in an area may have a positive impact on student learning is generally accepted to be true (Tschannen-Moran, Hoy, & Hoy, 1998), research has begun to focus on finding ways to increase teacher efficacy among practicing teachers.

This study seeks to bring together inquiry into professional development and teacher efficacy through research into a well-respected professional development model, the Summer Institute of the National Writing Project. By seeking to determine whether the professional development offered through the Institute can impact teacher efficacy, recommendations for practice and future avenues of research can be made.

Review of Related Literature

Teacher Efficacy

During the mid-1970's the first evidence of teacher efficacy as an important variable in the educational process was found in studies conducted by the Rand Corporation (Ashton & Webb, 1986). In these studies, researchers noted positive correlations between teachers' sense of efficacy and reading achievement and between teachers' sense of efficacy and the use of innovations. Building on their early findings, Ashton and Webb defined teacher efficacy as the "situation-specific expectation that they [teachers] can help students learn" (p. 3). While the Rand study was based on social learning theory, Ashton and Webb were the first to apply Bandura's social cognitive

theory to teaching and make connections to the areas researched by the Rand researchers

(Henson, Kogan, & Vacha-Haase, 2001).

Social cognitive theory. A variety of theories exists which attempt to explain the

intricacies of human behavior. Social cognitive theory, as explained by Bandura (1997),

views people as both producers of social systems and products of social systems. An

individual is, at the same time, an agent and an object. In this view of human behavior,

Bandura (1999) rejected the idea that human behavior is a function of reinforcement and

conditioning. Instead, he used the model of triadic reciprocal causation to form the basis

for his views on social cognitive theory. In the model, three factors – internal personal

factors (cognitive, affective, and biological), behavior, and environmental events –

interact to influence each other and determine behavior (Bandura, 1997). The degree of

influence exerted by each of the three factors varies according to the situation. The

interdependent nature of the human as agent with social systems leads to an

understanding of human behavior based on an integrated causal system (Bandura, 1999).

The idea of personal or self efficacy lies at the heart of the social cognitive view

of human behavior. Bandura (1997) stated "(u)nless people believe they can produce

desired effects by their actions, they have little incentive to act" (p. 3). Personal efficacy,

the belief that one can produce a desired effect, acts upon the other factors which

influence behavior. Interactions among context, feelings of efficacy, and actual skill or

expertise produce novel reactions to the situations in which humans find themselves each

day.

Bandura (1997) pointed out major points regarding personal efficacy. First, efficacy is not a fixed ability. Feelings of efficacy may rise or ebb. Second, having a set of skills and using the skills are separate concepts. Perceived self-efficacy is concerned not with actual skill level, but with what one believes one can do with the skills in a variety of settings. To be successful in a given situation, one must have both feelings of efficacy (belief that one can use his or her skills) and the skills needed to address the given situation.

The beliefs about efficacy that one has partly determine which tasks one may undertake or which goals one may set (Bandura, 1999). The motivational aspects of self-efficacy become apparent in the goal setting process. People tend to derive satisfaction from reaching goals; therefore, as they set goals and work to meet them, feelings of efficacy influence both the goals they set and the level of determination exhibited in reaching the goals. Perceptions of efficacy also influence outcome expectations, a form of motivation (Bandura, 1999). The value placed on the expected outcome that a given action will likely produce serves to motivate human behavior. Therefore, Bandura (1999) concluded that "people act on their beliefs about what they can do as well as their beliefs about the likely outcomes of performance" (p. 29). People with high feelings of efficacy envision successfully undertaking challenges, while those with low efficacy envision failure much more easily than success.

Social cognitive theory uses a complex network of interactions to explain human behavior. Central to the theory is the idea that humans are not mere products of their surroundings; rather, their perceptions and abilities influence their environment in a

complicated scenario of interrelationships. Human perceptions of their abilities to impact their surroundings, to produce a desired effect, serve to motivate one to act. Self-efficacy, a focal point of this study, is a key component of the social cognitive view of society.

Conceptualizing teacher efficacy. Early in the development of research in teacher efficacy, Dembo and Gibson (1985) defined teacher efficacy as the "extent to which teachers believe they can affect student learning" (p. 173). In an effort to better define and examine teacher efficacy, Gibson and Dembo (1984) developed and validated a 30-item Likert-type scale to measure teacher efficacy. The instrument identified two factors which appeared to comprise teacher efficacy, personal teaching efficacy and general teaching efficacy. The first factor, personal teaching efficacy, was defined as the teacher's personal belief that he or she has the skills and abilities necessary to enable students to learn and was identified as corresponding to Bandura's self-efficacy dimension. The second factor identified by Gibson and Dembo, general teaching efficacy, was defined as the belief that external factors have a limiting influence on a teacher's ability to bring about change. This factor was identified as corresponding to Bandura's outcome expectancy dimension.

Although researchers are still investigating measurement of teacher efficacy, Gibson and Dembo's Teacher Efficacy Scale (TES) is currently the most frequently used instrument for measuring teacher efficacy. Its development and availability has facilitated research in the area of teacher efficacy and enabled researchers to expand their knowledge about the field (Tschannen-Moran, Hoy, & Hoy, 1998). Other researchers

have modified the wording of the instrument for specific situations, but the basic format and content have remained widely accepted (Henson, et al., 2001).

Research in the field of teacher efficacy has yielded useful information for educators which can influence policy in many ways. Campbell (1996) compared scores on a modified version of the TES between preservice and inservice teachers in Scotland and the United States. Analysis of the data indicated that location did not have a significant impact on teacher efficacy. However, he found a statistically significant difference between feelings of efficacy for inservice and preservice teachers ($p < .001$). Inservice teachers in both Scotland ($t = 3.75, p < .001$) and in the United States ($t = 3.44, p < .001$) scored higher than preservice teachers in their respective countries. Campbell concluded that teachers tend to develop feelings of efficacy in teaching as they gain experience in the classroom.

In a study of teacher commitment to the field, Coladarci (1992) found that teacher efficacy was a more accurate predictor of commitment than school climate, teacher-student ratio, and salary. He used the Gibson and Dembo TES to obtain efficacy scores for 364 teachers. He then asked them whether they would choose teaching as a career again. Coladarci found that personal teaching efficacy ($r = .25$) and general teaching efficacy ($r = .31$) were more strongly correlated with a commitment to teaching than were any of the other factors included in his study. Therefore, he concluded that efforts to combat teacher attrition should consider including an emphasis on teacher efficacy as a contributing factor.

Research in the field of teacher efficacy has recently begun to focus on defining the level of specificity necessary to accurately measure efficacy. Bandura (1997) explained that teacher efficacy scales should be developed for specific subject areas since a teacher may feel quite competent in one area but not in another. Researchers have developed instruments based on the Gibson and Dembo TES which focus on one area (Tschannen-Moran & Hoy, 2001). Colardarci and Breton (1997) modified the TES for use with special education teachers by modifying the items to include terms such as resource room rather than classroom and resource teacher rather than teacher. They found similar factor loadings for the respective items related to general teaching efficacy and personal teaching efficacy as those found by Gibson and Dembo (1984) on the original instrument. The instrument used in this study, the Teacher Efficacy Scale for Writing, was developed to measure teacher efficacy in writing and is an example of a subject-specific instrument based on the Gibson and Dembo TES (Graham, Harris, Fink, & MacArthur, 2001).

The Graham et al. (2001) validation study for the Teacher Efficacy Scale for Writing was consistent with the body of research suggesting two factors in efficacy, personal teaching efficacy and general teaching efficacy. The modification of the Gibson and Dembo TES to analyze efficacy in a specific subject did not change the components of efficacy which were measured. Additionally, their analysis indicated that teachers who were comfortable with natural methods of learning were more likely to have high scores in personal teaching efficacy ($p = .001$). The researchers also found that teachers who had a high sense of general teaching efficacy tended to place less emphasis on correctness in

writing (R = -.34; p < .01). This adaptation of an accepted instrument to analyze a specific subject has allowed researchers to begin to investigate quite specific components of teaching in a further effort to improve the instructional practices of teachers.

In the development of an understanding of teacher efficacy, examples of classroom practice and student learning can be informative. Researchers have found that teachers with high efficacy demonstrated observable differences from teachers with low efficacy. Dembo and Gibson (1985) found that the high-efficacy teachers they observed tended to give more useful feedback to struggling students; to use time in small groups more effectively, although they used small groups less often; and to keep students focused on academic tasks more effectively. The researchers noted that teachers with high efficacy maintained a "strong academic orientation in a supportive classroom environment" (p. 177) that fostered high achievement. Tschannen-Moran et al. (1998) noted similar differences and also found that teachers with high efficacy were more likely to try new materials and methods than teachers with low efficacy. In a position paper describing means of enhancing teacher efficacy as a school improvement model, Ross (1995) pointed out that teachers with strong feelings of efficacy tended to set higher goals both for themselves and for their students, increasing the likelihood that cognitive and affective learning goals would be achieved.

Teacher efficacy has been shown to have a positive relationship with student achievement. Ashton and Webb (1986) found strong correlations between teachers' sense of efficacy and student achievement. This correlation was found to be strongest in the area of math. Ashton and Webb concluded that an important relationship existed between

teacher efficacy and student achievement and that teacher efficacy was likely specific to a given subject area. Another study investigated the relationship between student performance and teacher efficacy by following students for two years as they moved from elementary school to junior high school (Midgley, Feldlaufer, & Eccles, 1989). Among the 1300 students used in analysis, the researchers found a statistically significant relationship between teacher efficacy and students' perceptions of their mathematics performance. The relationship was strongest for students who had high efficacy teachers or low efficacy teachers for both years of the study. By narrowing the field of study, the researchers were able to show that content-area specific feelings of efficacy have a strong relationship with student achievement and feelings of competence in a subject area.

A similar study of 387 primary grade students found that teacher efficacy variables accounted for between 7% and 9% of the variance in student learning outcomes in computer skills classes over two years (Ross, Hogaboam-Gray, & Hannay, 2001). The effect was stronger when the teachers received professional development throughout the implementation period. Such examples of subject-specific connections between efficacy and student achievement support Bandura's (1997) position on the situation-specific nature of efficacy and indicate that facilitating the growth of teacher efficacy is a worthwhile goal of instructional leaders.

Researchers (Ashton & Webb, 1986; Tschannen-Moran et al., 1998) have found that teacher efficacy is a cyclical construct. In other words, a high-efficacy teacher who experiences success in helping students learn will likely feel more efficacious as a result.

A low-efficacy teacher who finds himself or herself unable to help students learn a concept may then experience even lower feelings of efficacy.

Guskey's (1987) study of variables affecting teacher efficacy illustrates how the cyclical nature of efficacy can build. His study of 120 teachers found that greater perceptions of personal teaching efficacy were reported when their students achieved well on a task than when students performed poorly on a task ($t = 5.09$, $p < .01$). Additionally, Guskey found that significantly higher results for personal teaching efficacy were obtained when the teachers felt responsible for helping a group of students achieve as opposed to helping one student achieve ($t = 4.12$, $p < .01$).

Studies of collective teacher efficacy lend support to the concept of efficacy as a cyclical structure as well. Collective teacher efficacy, the overall perception of efficacy among a staff at a given school, is closely associated with student achievement. Goddard, Hoy, & Hoy (2000) found collective teacher efficacy to be a more accurate predictor of student achievement than the commonly accepted demographic variables of socioeconomic status, race, and gender. Their study of 47 urban elementary schools included 452 teachers and standardized test results from 7,016 students. The researchers found that collective teacher efficacy accounted for 53.26% of the between school variance in math scores and for 69.64% of the between school variance in reading scores. The strength of these results led the researchers to suggest that efforts to increase teacher efficacy can begin a cycle of improvement for both teachers and students.

Professional development and efficacy. Changes in feelings of teacher efficacy may be challenging to produce. Henson (2002) pointed out that personal teaching

efficacy is difficult to change in veteran teachers since beliefs about self seem to solidify over time. In order to promote teacher efficacy, professional development experiences should focus on meeting individual needs of teachers and be relevant to their specific instructional contexts (Smylie, 1988). Tschannen-Moran and Hoy (2001) suggested that professional development should be structured as "powerful mastery experiences with an eye toward helping teachers garner evidence of improved learning on the part of their students in order to reap the efficacy pay-off that would result" (p. 803). Henson (2002) concurred, suggesting that long-term professional development which encourages critical thinking about classrooms and requires active participation from teachers can increase efficacy.

Henson (2001) observed eight teachers in an alternative school setting during one school year to determine the impact of involvement in teacher research as professional development on teaching efficacy and empowerment. She found gains in both general and personal teaching efficacy as measured by the Gibson and Dembo TES. Additionally, Henson found that increased collaboration among teachers was consistently related to general teaching efficacy. Although the study was limited by the small sample size, the use of qualitative data including interviews and observations made the findings useful. The interviews allowed the researchers to conclude that collaboration during the research, which was structured and formal, was more consistently related with increased feelings of efficacy than the informal collaboration in which teachers typically participate.

Smylie (1988) found that teachers with high personal teaching efficacy and certainty of practice (defined by Smylie as belief in their own personal competence) were

more likely to change practice and were more frequently involved in collaboration about instruction. His quantitative research study focused on professional development experiences of 56 volunteer teachers from three school districts. The experiences were not connected to school or district but were based on individual goals for use of classroom time. Smylie studied the impact of the professional development on change in practice and organization of the classroom using research methods including observations, surveys, and interviews. Using path analysis and regression equations, he found a strong positive influence of personal teaching efficacy on change ($r = .3065$, $p < .05$) and a direct relationship between interactions with colleagues and certainty about practice ($r = .3380$, $p < .01$). Additionally his research showed that school level variables had little impact on the responses of teachers. He concluded that teachers who believed that they were effective in helping students learn were more likely to change their practice in ways that might improve learning.

Using an experimental design in which teachers in the experimental group participated in professional development specifically designed to enhance efficacy while the control group did not receive the professional development, Fritz, Miller-Heyl, Kreutzer, and MacPhee (1995) found that the experimental group showed increased feelings of personal teaching efficacy in the areas of job satisfaction ($F (1, 169) = 71.90$; $p < .0001$) and competence ($F (1, 169) = 70.20$; $p < .0001$) while the control group showed large declines in the two areas. No difference was found in general teaching efficacy for the treatment. The researchers suggested that teachers should be encouraged

and supported in taking risks with their teaching (i.e. trying out new ideas and methods) in an effort to increase competence and job satisfaction and prevent teacher burnout.

In a qualitative study of teacher efficacy and professional development, Scribner (1999) examined how personal teaching efficacy influenced teachers' responses to professional development. Using results from the administration of the Gibson and Dembo TES combined with interviews of 20 urban public high school teachers, his findings supported professional development that addressed individual needs. He found that teachers with high personal teaching efficacy were motivated by professional obligation and by the need to develop content knowledge and pedagogy. The teachers, like those in the Smylie (1988) study, evidenced more collaboration with colleagues about instructional issues. Teachers with low personal teaching efficacy were more likely to be motivated by external factors such as the need for assistance with discipline issues, salary, and licensure requirements. Additionally, Scribner found that teachers with low personal teaching efficacy were more isolated from colleagues than teachers with high personal teaching efficacy.

Other researchers have also noted the tendency of teachers with high personal teaching efficacy to collaborate more with peers. Ross (1995) and Moore and Esselman (1994) both suggested that enhancing teachers' opportunities to engage in interactions with their peers would increase feelings of efficacy. In an observational study of four teachers who mentored novice teachers, Yost (2002) found that mentors developed a greater sense of efficacy as they were allowed to share their expertise with others. In a study of middle grades organizational schemes, Warren and Payne (1997) found that

teachers who taught on interdisciplinary teams with collaborative planning periods

exhibited consistently higher personal teaching efficacy scores than did teachers without

the common planning period ($F(2,79) = 8.21$; $p < .001$). Additionally, Ross (1995)

recommended strategies such as encouraging collaborative teacher reflection on beliefs

about students and about teaching practices to foster increased feelings of efficacy.

Writing

Research by Wood and Lieberman (2000) and Inverness Research Associates

(National Writing Project, 2003) indicated that the professional development offered by

the National Writing Project (NWP) supports the same types of teacher behaviors as does

the professional development suggested by efficacy researchers. The NWP encourages

teachers to create classroom environments where students feel accepted and supported, to

engage in collegial discussions about instruction, and to become informed decision-

makers in the educational process. Thus, an investigation into the relationship between

the Summer Institute professional development and teacher efficacy is a logical step in

initiating conversations about the type of professional development to which teachers

should have access.

National Writing Project and Mississippi Writing Thinking Institute. In 1974 the

National Writing Project began its work with 25 teachers at the University of California

at Berkeley (NWP & Nagin, 2003). Now serving approximately 2 million teachers, the

NWP has expanded to include 175 sites in all 50 states, the District of Columbia, Puerto

Rico, and the U.S. Virgin Islands. Teachers from all types of communities – urban,

suburban, and rural – participate in the activities supported by NWP. The sites join

together to form a network of professionals – teachers and researchers – who seek to improve the quality of writing instruction in the nation. Already, approximately one out of every forty teachers in the nation has been served by the NWP (NWP & Nagin, 2003). One of the trademarks of the NWP is its university collaboration; the sites are housed on university campuses and offer collaboration between university staff and teachers. The goal of the National Writing Project is to have a site within reach of every teacher in America.

The NWP is the largest and most long-standing professional development project in the history of American education (NWP, 2003). The Project uses a teachers-teaching-teachers model to share information and expertise among practicing classroom teachers. The process typically begins with an intensive four to five week Summer Institute hosted on the university campuses where the local writing projects are based. Groups of approximately 25 teachers are invited to receive intensive instruction from accomplished teachers and writers and to spend time engaged in developing their own writing. After completing the Summer Institute, teachers become consultants for the writing project and begin to share their new expertise with their peers through workshops, study groups, mentoring, and other school-based applications. At the same time, the graduates of the Summer Institute work in their own classrooms to develop a community of readers and writers, analyze their practice, and share their findings with other consultants at periodic meetings. The teachers teach other teachers, but continue to learn from other teachers as well.

The model of professional development used by the National Writing Project capitalizes on the experiences of practicing teachers. Rather than relying on outside experts in a field to come into a school and tell teachers how to teach, the model used by the NWP asks practicing teachers to share model lessons and student work samples to show academic growth. The consultants encourage other teachers to develop a process-based classroom. As teachers attempt to incorporate the writing process strategies into their classrooms, results are shared with the larger group so that all can learn from the attempts. Successes are celebrated, and failures become topics for research and analysis.

Another important component of the professional development model used by the NWP is its long-term commitment to teacher growth (NWP & Nagin, 2003). As explained earlier, the teachers who complete the Summer Institute become consultants and maintain their contact with the local sites. When schools contract for professional development with a local site, the contract is for at least a school-year of professional development activities. Therefore, teachers are continually immersed in the strategies for improving student writing and have repeated opportunities to engage in discussions about student work.

After spending two years studying two sites of the National Writing Project, Lieberman and Wood (2002) found that teachers became members of a professional community, or network, as a result of participation in the Summer Institute. Participants interacted with each other in ways that incorporated the goals and philosophy of the NWP as well as a unique set of interpersonal relationships. The researchers described this network of teachers in terms consistent with Bandura's (1997) social cognitive theory.

Teachers who participated in the Summer Institute developed their own social practices as they worked together in the various roles of writer, researcher, and presenter. Lieberman and Wood concluded that the components of the Institute were ". . .tightly integrated into an experience that socializes teachers into a new way of thinking about themselves as teachers" (p. 301). The development of a social structure by human participants in a setting is an example of the interdependent working of environmental events, internal personal factors, and behavior described by Bandura (1997). The participants were the producers of the social system (network or community of learners) which developed during their professional development. The participants were also products of the social system since their ways of thinking about themselves as teachers changed during the development of the social system.

The Mississippi Writing Thinking Institute (MWTI), which includes seven local sites on university campuses in the state, has been offering Summer Institutes since 1985. During the year July 1, 2001 through June 30, 2002, the Institute served approximately 4,054 teachers in the state through one or more forms of professional development (MWTI, 2002b). Schools or districts often contract with the local site to provide professional development during a school year on the school campus (MWTI, 2002a). The public school sites provide teachers an opportunity to implement new methodologies with a supportive network in place as they seek to enhance writing instruction. Additionally, the MWTI has been able to use the sites to research and analyze the effectiveness of the methods being taught.

Initial research by the Institute has indicated that teachers who participated in the project saw an increase in the performance level of their students on the state assessment (MWTI, 2002a). Other studies have indicated statistically significant increases in other standardized test scores after implementation of NWP strategies by a school's teachers. The MWTI is currently developing a complex research agenda which will expand this line of research by investigating the performance of students at more schools around the state in an effort to generate research consistent with No Child Left Behind requirements for scientifically based research and to facilitate the availability of the model to other areas (S. Swain, personal communication, October 6, 2003).

Writing process. Writing is an essential component of literacy. In *The Literacy Dictionary,* a publication of the International Reading Association, the authors pointed out that reading is a primary component of literacy and explained that writing is also a vital part of being literate (Harris & Hodges, 1995). Reading alone is beneficial, but writing allows one to communicate, to provide text for another to read; writing is an essential skill for effective communication. Basic similarities between reading and writing are obvious: both deal with written language and are used to convey ideas through print (Savage, 1998). However, the similarities run far deeper. Both reading and writing are based on meaning; a writer writes to share meaning, while a reader reads to construct meaning. Both require critical thinking skills; a writer writes to construct and clarify meaning, and a reader must also validate and check the meaning of text as they read. These statements, while not intended to explore the depths of the relationship between reading and writing, support the idea that the two processes enhance one

another. Thus good readers are typically good writers, and good writers are typically good readers. Research has indicated that students who are proficient writers tend to read more than students who are weak writers (Vacca, Vacca, Gove, Burkey, Lenhart, & McKeon, 2003). These ideas support the position that writing should be taught for its own worth, but also to support reading development in the classroom (Teale & Yokota, 2000).

Routman (2003) explained that writing instruction should be a principal component of a literacy program. She pointed out that using writing instruction in a reading classroom is a powerful tool to help children develop literacy skills. Her work in classrooms has shown that children's written texts may become their reading texts, providing a starting point for instruction in reading skills. Donald Graves (2003) illustrated the necessity of the connection between writing and reading by pointing out that children's writing should be discussed and analyzed just as one analyzes the work of published authors, thus validating the worth of writing.

The reading and writing processes are inextricably interwoven. As one area develops, the second should develop concurrently. Students should become more proficient writers as they develop reading ability, and conversely, students should become more proficient readers as they develop writing ability. Skilled teachers capitalize on this connection to enhance and develop the literacy abilities of their students by creating learning experiences and assignments which include reading, writing, and the construction of meaning.

Writing is much more than grammar and punctuation (National Commission on Writing, 2003). Writing has been described as a way to help students understand what they know. It is a ". . . complex intellectual activity that requires students to stretch their minds, sharpen their analytical capabilities, and make accurate and valid distinctions" (p.13). In light of such a complex definition of writing, one can easily conclude that both teaching and learning writing can be challenging processes (NWP & Nagin, 2003).

Defining and delineating the writing process can be difficult because by nature it is not a linear, uniform process. Donald Murray (1985) stated that one does not teach writing well if one attempts to teach all students to write in the same manner. He explained that writing is thinking, not an act that occurs after thinking has been done. Writing should be a means of exploring one's world, of seeking to discover meaning, which may or may not be shared with others.

In his discussion, Murray (1985) pointed out the need to teach novice writers the recursive process of writing used by accomplished writers. Among the components of the process Murray used were preparing to write, or gathering information, writing a first draft – and then a second, a third, a fourth – until the writer is satisfied with the message, revising each draft to become clearer and more meaningful. He also stressed the value of an outside reader for a paper, as well as the need to edit by viewing the piece as a reader would view it.

While Murray presented a philosophical view of the process, Donald Graves (2003) presented the perspective of a classroom teacher. In his work with teachers and the writing process, Graves developed a set of strategies for assisting young writers with

creating a composition. The first phase, or step, was called rehearsal. During this time the writer explores possible topics by listing and drafting a few sentences about them. This stage may take more time for some children than for others as they seek to find a topic. As the students settle on topics, they begin to write drafts of their pieces where ideas emerge and may be explored or discarded. The teacher works with individuals or small groups to discuss progress, problems, and breakthroughs using a series of conferences. Revisions, or re-seeing the text, may occur in the conferences, in student-with-student conferences, or in independent work sessions. Graves explained that revision strategies develop with the child; children often have trouble seeing a piece from a new perspective. Teacher modeling and encouragement are vital to successful revision. When working with children through the writing process, teachers should assist in helping students develop their own voices, or styles of expression, and in helping students to compose papers that can be easily read by others, papers that follow the conventions of spelling and grammar at an age-appropriate level. Students learning to use conventions in the context of their own writing find them meaningful and use them in other situations.

Graves (1994), like Murray (1985), pointed out that the writing process is not identical for every student; that it should not be taught as content. Both concurred that the steps usually follow one after another in a logical process, but that each student (each writer) must use the steps in his own way.

The term workshop approach is often used in conjunction with the writing process. This approach, based on the work of Graves and others, is described by Calkins (1994) as a predictable, consistent classroom environment which encourages writing.

Large blocks of uninterrupted time should be set aside daily when students are able to write freely. Calkins listed work time and conferencing time among the essential elements of a workshop approach. Students need time to write as well as to conference with the teacher and with each other, in order to explore ideas and produce a piece of writing. Sharing is also an essential element (Atwell, 1987). During this time, students may share selections from their own writing or the class may share insight into the process itself. The key to a workshop approach is that children work at individual rates through the process, giving and receiving feedback as needed. They write, revise, and conference with peers and the teacher in an effort to make their meaning clear so that their voices may be heard by others.

Since most states have only recently begun assessing student writing with more authentic methods than multiple-choice tests, the impact of instructional strategies on student performance is largely qualitative and anecdotal. The most wide-reaching analysis was conducted as a part of the 1998 writing assessment for National Assessment of Educational Progress (NAEP) (National Center for Educational Statistics, 1999). Part of the assessment included a survey of teachers and students which asked for information regarding instructional practices in writing classes. The results of the survey were correlated with test scores, and certain definable practices were found to be beneficial. NAEP reported that 71% of the teachers participating in the survey reported using the writing process and that strategies such as using portfolios, teaching students to plan their writing, asking students to prepare multiple drafts, and talking with students about their writing were associated with higher scores on the assessment. These practices found by

NAEP to be connected to higher scores are consistent with those proposed by Calkins (1994) and Graves (1994) which are endorsed by the NWP.

In a meta-analysis of existing research on writing instruction and its impact on student achievement, Hillocks (1987) concluded that focusing instruction on grammar had no significant effect on improving the quality of student writing; rather an overemphasis on mechanics and usage resulted in losses in overall quality of student writing. Describing writing as an enormously complex task, Hillocks noted that several strategies were helpful in improving the quality of student writing. Those found to be most helpful were sentence combining instruction, using scales and criteria for guided revision, inquiry activities involving observation and writing, and the use of a writing process to develop a composition. Hillocks explained that the most useful knowledge for developing writers was procedural knowledge. By assisting the young writer in understanding the general procedures of the composing process, the specific procedures of the production of discourse, and the process of transforming data to use in writing, the effective teacher improved the quality of student writing.

While the writing process has gained acceptance as a proven method for instruction in American schools, studies show that implementation may be quite varied. A qualitative study of literacy instruction in ten fourth and fifth grade classrooms across the nation involved an examination of writing instruction as a component of literacy (Pressley, Wharton-McDonald, Mistretta-Hampston, & Echevarria, 1998). Using the constant comparison method of data analysis to find similarities among the writing process implementation in fourth and fifth grade classrooms, the researchers found that

all teachers noted the importance of writing instruction and all used some form of the

plan-write-revise model. They also found that all teachers in the study taught skills

explicitly, and most of the teachers allowed students to use word processors for at least

the final drafts of their compositions. Differences in implementation were noted in the

kinds and amounts of writing assigned to students. Narrative writing was by far the most

common, although some teachers used writing as a learning tool and used expository

writing assignments. The quality of student work also appeared to be influenced by

teacher expectations for the assignment.

 A similar study conducted in eleven Vermont classrooms (Lipson, Mosenthal,

Daniel, & Woodside-Jiron, 2000) found that all teachers there used the term writing

process to describe their instruction as well, although implementation methods varied

widely. The researchers used a case study approach and cross-case analysis to analyze the

data which allowed them to look closely at the classrooms (cases), code their notes, and

begin to look for emerging categories and patterns, then compare those notes with further

observations of the cases.

 In the Lipson et. al. (2000) study, the researchers discovered a range of

implementation of the writing process in classrooms which was closely connected to the

teacher's orientation toward teaching. While this study did not analyze student work

samples for growth, focusing, rather, on teacher orientation toward teaching and the

practices which were characteristic of the different orientations, some interesting

conclusions may be drawn. The teachers in the Lipson, et al. study who taught from a

process perspective tended to use a workshop approach to writing instruction.

Additionally, they offered students more opportunities to write, viewed writing as a recursive and flexible process, planned for longer sustained writing periods, and valued authentic writing practices. These strategies are consistent with the recommendations Hillocks (1987) made based on the meta-analysis discussed earlier and with the ideas of the NWP. In contrast, teachers classified as curricularists, those teachers focused on instructional objectives and outcomes, tended to use more skill sheets, maintain control over topic selection, teach the process itself as content, and use fewer conferences with students to improve writing. The idea of using the writing process seems to be integrated into the fabric of America's classrooms, but, since the degree implementation may vary widely, its impact on student learning is difficult to assess.

While the writing process may have become accepted as an instructional strategy in American schools, it is clear that definitions vary from classroom to classroom. It is on the ideas proposed by Murray, Graves, Calkins, and other like-minded researchers that the work of the National Writing Project is based. The professional development teachers in the study described in this paper received focused on writing as a process approach (NWP & Nagin, 2003). Teachers involved in the professional development participated in writing workshop as they composed their own pieces of writing. Teachers also learned to address the diverse abilities and instructional needs of their students. Additionally, since writing is viewed as a means of organizing thought (Murray, 1985), strategies for using writing as an instructional tool, particularly in the content areas, were also explored.

Professional development

Practicing teachers are encouraged, often required, to participate in professional development activities. These activities may take any of a number of forms, ranging from after-school meetings with experts in a particular field, to periodic meetings focused on a given topic, or even enrolment in university courses. Whatever form it takes, professional development is typically intended to increase teacher knowledge and change instructional practice in order to improve student performance (Guskey, 2003). An examination of commonly accepted descriptions of high quality professional development and of research in the field offers some insight into the nature of highly effective activities.

Research into the characteristics of highly effective professional development has yielded a range of principles necessary for professional development to lead to increased student performance. Though the research seems to contradict itself at times, it does indicate that some factors may be more important than others in planning and implementing a successful professional development experience (Guskey, 2003; Huffman, Thomas, & Lawrenz, 2003; Pritchard & Marshall, 2002).

Guskey (2003) analyzed 13 recently published and widely accepted list of characteristics to determine which factors appeared on most lists. One of the most commonly listed factors was the need to develop teachers' content and pedagogical knowledge. Another important factor was the need to develop networks among teachers for collegial exchange and collaboration. Other factors included the need for adequate evaluation strategies and the need to align professional development with current national or state reform initiatives. Guskey went on to point out an important missing factor as

well. According to his findings, fewer than half the lists he analyzed suggested linking professional development to student learning data.

The United States Department of Education (1996) published a guide for developing professional development activities which included the points Guskey (2003) outlined. This document also described effective professional development as reflecting the best available information about practice, being guided by a long-term plan, and creating a climate of continual learning and improvement within the school. It concluded with the point that evaluation should be based on improved teacher effectiveness and, ultimately, improved student learning.

Research has shown that professional development can have a positive impact on student achievement. Huffman et al. (2003) examined the relationship between professional development, teacher practice, and student achievement in the areas of middle school science and math. The researchers used surveys to collect data about the professional development experiences of 94 science teachers and 104 math teachers and used achievement test data to measure student achievement. Regression analysis indicated that professional development focusing on curriculum development and examination of practice accounted for 35% of the variance in science achievement and 18.5% of the variance in math achievement.

Researchers involved in a four-year study of professional development found ten common qualities characteristic of successful school districts' professional development plans (Pritchard & Marshall, 2002). This study focused on 24 school districts across the nation and included elementary, middle, and high school educators. Subjects participated

in an interview process and completed an instrument designed to evaluate the organizational health of the district. The researchers also examined student work samples of writing about their schools and other documents from the school and district levels. The constant comparative analysis of the data allowed the researchers to draw clear conclusions about the professional development practices of successful districts as opposed to the practices of those districts that were struggling.

Among their findings were the ideas that successful districts use professional development as part of a district plan to deal with curriculum and instruction issues (Pritchard & Marshall, 2002). The plan drives the professional development at the district and school level and keeps the focus on issues which need to be addressed. Professional development is seen as a duty of employees; an expectation exists which encourages educational professionals (teachers and principals) to constantly improve practice. The researchers concluded that the actual model of professional development which was used was secondary in importance to the high expectations and clear focus of the district.

While the Pritchard and Marshall (2002) study focused on the district level, the larger body of research in professional development tends to focus on the school level. King and Newmann (2000) argued that the context in which a teacher practices her craft has a measurable impact on the ability of professional development to impact pedagogical practice and student learning. Using the term school capacity to describe the school setting, the researchers collected data from nine schools through interviews, site visits, observations of professional development activities and classes, and through analysis of available documents including test scores and demographic data. They

concluded that three components of school capacity must be considered in order for professional development to be successful.

First, King and Newmann (2000) pointed out that the area of teacher competence in skills and knowledge of content and pedagogy should be considered. Secondly, the professional community of a school should be strengthened to encourage shared goals, collaboration among staff members, and reflective inquiry. Third, the instructional program of a school should be clearly defined with a strong, consistent emphasis on student learning. These areas influence the success of professional development, but the researchers pointed out that high-quality professional development will also improve each of these areas. The scenario they described offered a picture of mutual improvement and growth as professional development served to make the school capacity more positive, and the improved school capacity supported more collaborative growth and shared inquiry through professional development.

Lester (2003) investigated qualities of professional development that were effective for secondary school teachers. Surveys of 93 secondary teachers and administrators and interviews with randomly selected subjects found that small, study-group settings were more effective than large-group sessions. Lester also concluded that the opportunity to collaborate and participate in the decision-making process as part of a small group was vital to the success of professional development. Underlying the conclusions drawn was the idea that teachers wanted to be recognized and treated as professionals; they were interested in improving practice and desired the support and opportunity to do so in a collaborative environment.

The need to provide opportunities for teachers to enrich their content and pedagogical knowledge and to encourage collaboration and inquiry among teachers as components of professional development seems quite clear. Successful professional development, whether at the small group, school, or district level, must encourage teachers to share what they know, share their questions about practice, and take their new knowledge back into the classroom (Darling-Hammond & McLaughlin, 1995). The professional communities, or networks, may exist within a school or be composed of teachers with shared interests outside the school, perhaps in a professional organization or study group. An inquiry approach to professional development will allow teachers to engage in continual examination of practice and student growth in the contexts of their classrooms as they seek ways to improve student learning (Richardson, 2003).

The ideas of the National Writing Project are based on a collaborative model of professional development quite consistent with the characteristics of highly effective professional development models described in the literature. Inverness Research Associates (NWP, 2003) surveyed teachers who had participated in NWP professional development activities in an effort to determine the impact of the professional development in which they had participated. Their findings showed that the NWP was successful in helping teachers gain concrete teaching strategies from the professional development, as well as assisting them in gaining information about current research and practice, learning new ways to assess student learning and plan instruction, developing their abilities to teach diverse students, and gaining insight into how to help students meet performance standards.

In an effort to evaluate the impact of instructional strategies taught by the National Writing Project on student achievement, The Academy for Educational Development (AED) designed a study to analyze teacher assignments, student work samples, survey responses, and interview results (Fancsali & Silverstein, 2002). The three-year, five-state study found that teachers reported changes in their beliefs about teaching (86%) and in their teaching practices (72%) because of participation in the professional development offered by NWP. The interviews with teachers indicated that teachers saw writing as a tool for learning in all areas of the curriculum and that the assignments they constructed required students to perform authentic intellectual work. Analysis of student work showed that student responses to these assignments demonstrated construction of knowledge, as well as organization, coherence and appropriate use of the conventions of writing. During the three years of the study, the third and fourth grade students who completed the work samples demonstrated significant progress over time.

The conclusions based on analysis of the teacher assignments and student responses in this study support the idea that participation in the NWP improves student learning. When teachers are able to craft assignments that require critical thinking, processing of information and production of a new product, students are much more likely to construct knowledge than when the assignment does not explicitly require them to do so (Fancsali & Silverstein, 2002).

Research by Wood and Lieberman (2000) investigating the work of the NWP found that participation in the professional development opportunities often caused

teachers to change the way they thought about their professional identities and responsibilities, as well as causing them to change the way they approached their work. In addition, participation also strengthened teachers' instructional abilities in writing. In this study, the researchers attended and documented parts of the Summer Institute and attended NWP meetings over a two year period. They also conducted individual and focus group interviews with participants and site directors. Then they interviewed school principals and selected six teachers for classroom observations and analysis of student work samples.

The findings by Wood and Lieberman (2000) indicated that, while NWP participation did not guarantee high quality teaching, it tended to encourage high quality teaching. Classifying their findings into three dimensions – authorship, authority, and authorization – the authors found that participants felt that each one had something worth teaching to the group and that all could continue to learn. Interestingly, they also found that participants tended to believe that the teacher voice mattered in areas of policy and procedure, and that the teacher voice needed to be made public in a move to change the culture of teaching. The findings indicate that participants began to view themselves as professionals who could make a difference in American education.

The current research on teacher efficacy and professional development suggests that a powerful relationship may exist between the two. The National Writing Project provides a tested model of professional development which has been successful in changing practice and impacting student achievement in writing. Although there are no studies investigating its impact on teacher efficacy, the components of NWP professional

development are consistent with the recommendations of researchers in teacher efficacy and with the recommendations of researchers in professional development. For example, NWP professional development was found to encourage high-quality teaching (Wood and Lieberman, 2000), to support participation in professional collaboration (Lieberman and Wood, 2002), and to help teachers gain teaching strategies, information about current research, and insight into helping students meet performance goals. Efficacious teachers have been described in the literature as exhibiting these qualities (Smylie, 1988; Ross, 1995; and Allinder, 1995). Since the two appear to have a common theoretical underpinning as well, evaluating the impact of the NWP's professional development on teacher efficacy is a valid area of inquiry.

Purpose

Based upon research indicating that professional development is related to increased teacher efficacy, this study investigated the impact of subject-specific professional development on teacher efficacy in writing in an effort to make suggestions concerning professional development opportunities for teachers and to initiate discussions about improving writing instruction in Mississippi. First, the study was designed to compare the efficacy levels reported by teachers participating in the Summer Institute sponsored by the Mississippi Writing Thinking Institute at the beginning and end of the session. Second, the study also compared pre- and post-test scores on the Writing Orientation Scale to determine the impact of professional development on teachers' beliefs about writing instruction. Additionally, the study investigated the possible relationships between beliefs about writing and feelings of efficacy.

Research Questions

This study investigated the impact of professional development on self-reported perceptions of teacher efficacy and beliefs about writing. Teachers participating in the invitational Summer Institute of the Mississippi Writing Project completed the Teacher Efficacy Scale for Writing and the Writing Orientation Scale (Graham et al., 2001) at the beginning of the Institute and again at the end of the Institute. Results were used to answer the following questions:

1. Are teachers' scores on the Teacher Efficacy Scale for Writing administered after completion of the MS Writing Thinking Institute statistically significantly higher than teachers' scores on the instrument at the beginning of the Institute?

   a. Are teachers' scores on the personal teaching efficacy items of the Teacher Efficacy Scale for Writing administered after completion of the MS Writing Thinking Institute statistically significant higher than teachers' scores on the items at the beginning of the Institute?

   b. Are teachers' scores on the general teaching efficacy items of the Teacher Efficacy Scale for Writing administered after completion of the MS Writing Thinking Institute statistically significant higher than teachers' scores on the items at the beginning of the Institute?

2. Are teachers' scores on the Writing Orientation Scale administered after completion of the MS Writing Thinking Institute statistically significantly higher than teachers' scores on the instrument at the beginning of the Institute?

    a. Are teachers' scores on the correctness in writing items on the Writing Orientation Scale administered after completion of the MS Writing Thinking Institute statistically significantly higher than teachers' scores on the items at the beginning of the Institute?

    b. Are teachers' scores on the explicit instruction items on the Writing Orientation Scale administered after completion of the MS Writing Thinking Institute statistically significantly higher than teachers' scores on the items at the beginning of the Institute?

    c. Are teachers' scores on the natural learning items on the Writing Orientation Scale administered after completion of the MS Writing Thinking Institute statistically significantly higher than teachers' scores on the items at the beginning of the Institute?

3. Is there a statistically significant correlation between subscores on the Writing Orientation Scale and subscores on the Teacher Efficacy Scale for Writing?

<div align="center">Hypotheses</div>

In designing such a study, the researcher must state the null hypotheses so that results can either support or reject the null hypothesis. For this study the null hypotheses were:

1. There will be no statistically significant difference in teachers' scores on the Teacher Efficacy Scale for Writing administered after completion of the MS Writing Thinking Institute and scores on the Scale administered at the beginning of the Institute.

a. There will be no statistically significant difference in teachers' scores on the personal teaching items of the Teacher Efficacy Scale for Writing administered after completion of the MS Writing Thinking Institute and scores on the items administered at the beginning of the Institute.

b. There will be no statistically significant difference in teachers' scores on the general teaching efficacy items of the Teacher Efficacy Scale for Writing administered after completion of the MS Writing Thinking Institute and scores on the items administered at the beginning of the Institute.

2. There will be no statistically significant difference in teachers' scores on the Writing Orientation Scale administered after completion of the MS Writing Thinking Institute and scores on the Scale administered at the beginning of the Institute.

a. There will be no statistically significant difference in teachers' scores on the correctness in writing items on the Writing Orientation Scale administered after completion of the MS Writing Thinking Institute and scores on the items administered at the beginning of the Institute.

b. There will be no statistically significant difference in teachers' scores on the explicit instruction items on the Writing Orientation Scale administered after completion of the MS Writing Thinking Institute and scores on the items administered at the beginning of the Institute.

c. There will be no statistically significant difference in teachers' scores on the natural learning items on the Writing Orientation Scale administered after

completion of the MS Writing Thinking Institute and scores on the items administered at the beginning of the Institute.

3. There will be no statistically significant correlation between subscores on the Writing Orientation Scale and subscores on the Teacher Efficacy Scale for Writing.

Rationale

This study was necessary to further the exploration of possible connections between professional development and increased efficacy among writing teachers. The research in the field of teacher efficacy is only beginning to investigate subject-specific efficacy; there are no studies investigating professional development and teacher efficacy in writing and few experimental studies in the field of efficacy research (Henson, 2001). Therefore, this study makes an important contribution to this field of research. In addition, the developers of the Teacher Efficacy Scale for Writing (Graham, et al., 2001) suggested that additional research should be done in determining predictors of teacher efficacy in writing. The results of the study will offer an indication of whether professional development experiences should be included as a predictor of teacher efficacy in writing.

In order to validate practices commonly accepted as successful with scientifically based research, the National Writing Project has recently organized a national research agenda which has two main branches (S. Swain, personal communication, October 6, 2003). The first branch of research focuses on providing the scientific and disaggregated data required of authorized providers of professional development by No Child Left Behind. The second branch seeks to expand on research about best practices for

instruction by building on previous NWP research. Clearly, this research fits within the parameters of the first branch. The results can also be used to complement research currently being conducted by Dr. Sherry Swain, former director of the Mississippi Writing Thinking Institute (MWTI) and current member of the national research team for NWP, and Dr. Kim Patterson, director of the MWTI.

Limitations

The research was limited by the fact that teachers in the study completed both the pre-test and post-test within a four to five week period (Bernard, 2000). While the scales do not have correct answers but are composed of Likert-type items, the tendency of respondents to remember answers or to respond in what they perceive to be a correct manner may have influenced the result. Since the research design called for the administration of the posttest prior to the teachers' return to the classroom, the results only reflect the participants' perceptions related to the professional development, not to the application of the principles which were addressed during the Institute.

A second limitation was that the instrument (Graham, et al., 2001) was developed for use with teachers in kindergarten through third grade, and the teachers in the study represented kindergarten through higher education. However, the instrument is based on the Dembo and Gibson Teacher Efficacy Scale which has been widely used with teachers from all levels. In the absence of a more appropriate measure, the Graham, et al. (2001) Teacher Efficacy Scale for Writing was used.

Definition of terms

1. Reading is a complex intellectual process. The definition of reading may vary depending on the educational philosophy to which one subscribes. For the purposes of this paper, reading is defined as a thought process through which the reader must decode the written words and attempt to understand the message encoded by the writer in terms of the reader's own experiential background (Harris & Hodges, 1995).

2. Writing, as defined for this study, is a more complex process than forming a sentence and punctuating it correctly. Writing is the ability to put words on paper – to say things – correctly and clearly in a manner that makes sense to one who may be reading what has been written (National Commission on Writing, 2003).

3. The reading-writing connection is described by Pearson (2003) as a synergistic relationship including letter-sound knowledge, structural analysis, and the pragmatic nature of language. Children learn and apply principles which transfer immediately between the two disciplines.

4. The writing process can be described as an instructional model "that views writing as an ongoing process and in which students follow a given set of procedures for planning, drafting, revising, editing, … and publishing their writing" (Harris & Hodges, 1995, p. 195).

5. Instruction is defined as strategies employed by the classroom teacher to enable students to develop knowledge of a concept or process, build critical thinking skills,

and allow students to apply knowledge in a meaningful manner (Wandberg & Rohwer, 2003).

6. Professional development is defined as opportunities for practicing teachers to develop expertise in teaching beyond that offered by an undergraduate teacher-training program. Teachers need supportive educational programs in order to maintain their effectiveness in a changing society (Neff, 1990).

7. Self-efficacy, a central component of social cognitive theory, is the belief that one can produce a desired outcome as a result of one's actions (Bandura, 1997).

8. Teacher efficacy is defined as a specialized form of self-efficacy (Graham et al., 2001) characterized by a personal belief that the teacher as self has the ability to impact student achievement through one's actions and abilities.

9. Personal teaching efficacy, a component of teacher efficacy, is the belief that one can perform the necessary actions to enable students to learn (Henson, 2001).

10. General teaching efficacy, the second component of teacher efficacy, is defined as a general belief about the ability of teachers to overcome negative influences such as poverty or large class size and have a positive impact on student learning (Henson, 2001).

CHAPTER II

METHOD

Research Design

A one-group pretest-posttest design (Bernard, 2000) was used for the study.

Participants in the study completed two instruments prior to the professional development

experience of the Summer Institute and then completed the same two instruments at the

end of the Summer Institute. The design allowed the researcher to determine whether

changes in scores on the instruments could be influenced by participation in the Summer

Institute.

Approval Process for Research with Human Subjects

Since the study involved research with human subjects, appropriate approval was

obtained from the Office of Regulatory Compliance's Institutional Review Board. Initial

approval was obtained from the institution in which the researcher was enrolled as a

graduate student; subsequent approval was requested and granted from the appropriate

research oversight committees of the universities where each participating site was

located. The one modification in procedure which involved allowing a site director to

administer the posttest was approved by the appropriate oversight board.

A vital part of the research process was obtaining informed consent from all

participants. Each potential subject received a form explaining the study and was allowed

to ask questions regarding the research. (See Appendix D.) Only those potential subjects who signed and returned the consent document were asked to complete the instruments.

Participants

      Participants in the study were public school teachers enrolled in the invitational Summer Institute of the Mississippi Writing Thinking Institute during the summer of 2004. These teachers were selected for invitation to the Summer Institute through an interview process which allowed site directors to involve teachers who had expressed a desire to learn more about writing instruction. During the interview process site directors asked teachers to describe: (a) how they were currently using writing, (b) their philosophy about how children learn, (c) their classroom community, (d) what their students did best and worst; and (e) what they expected to get out of the Summer Institute. While individual site directors were responsible for the final decisions about whom to invite, recommended guidelines suggested inviting teachers to participate who expressed a professional interest in the writing process and who had some experience with using writing in their classrooms. Teachers who were opposed to the ideas proposed by the National Writing Project or who were strongly committed to traditional approaches to writing instruction were typically not invited to participate. Teachers with at least five years of experience were preferred, but teaching experience was not a deciding factor in the invitation process. All teachers invited to participate in the Mississippi Writing Thinking Institute were employed in public education in the state of Mississippi.

The directors of all seven sites were invited to involve their Summer Institute members in the research; directors at five sites chose to do so. Each teacher involved in the Summer Institute at the five participating sites had the opportunity to participate in the study, yielding a total population of 68 teachers. Only one teacher chose not to participate; all others who were present participated to some degree. Two absentees who failed to complete either pretest or posttest were not included in the study. Sixty-five teachers completed at least all of one instrument and were included in the study; 64 participants completed the Teacher Efficacy Scale for Writing while 62 participants completed the Orientation Toward Writing Scale.

The majority of participants in the study were female teachers (92.2%; $n = 59$). Most (63%; $n = 40$) held a bachelor's degree in education. Approximately half of the participants (51.6%; $n = 33$) had participated in some type of professional development activities related to writing, typically a school or district sponsored workshop on writing instruction. Teachers responding to the demographic questionnaire had been teaching an average of 9.5 years, with an average of 6 years in the current position. Six teachers had taught less than one year, while one teacher reported 48 years of teaching in the same grade and subject. (See Table 1. Totals represent only the subjects responding to each item.)

Teachers in the study came from all domains of public education. The largest group, 39.7% ($n = 25$), was elementary (K-4) teachers. Middle school (5-8) teachers made up 28.6% ($n = 18$) of the group and high school teachers (9-12) made up

14.3% ($n = 9$) of the group. The group also contained two instructors from higher

education (3%); one taught at a community college and the other taught at a university.

The remaining 14.3% ($n = 9$) teachers taught broader grade spans, either K-6 or 7-12 in

areas such as music, special education, counseling, or art.

The majority (61.5%, $n = 40$) of the participants taught English/Language Arts.

The elementary teachers typically taught the content in a self-contained setting, while the

middle and secondary teachers were in a departmentalized setting. Teachers from all

content areas were represented, including one librarian, one art teacher, two music

teachers, and two counselors.

Table 1

Demographic Data

	Elementary	Middle School	High School	Higher Education	Other	Total
Certification						
Bachelor's	20	8	6	0	6	40
Master's	4	7	3	2	2	18
NBCT*	1	1	1	0	0	3
Alternate	0	2	0	0	0	2
Gender						
Female	23	17	8	2	8	59
Male	2	1	2	0	0	5
Teaching Experience						
0 – 1 year	4	2	0	0	0	6
1 – 10	16	11	7	1	4	39
11 – 20	1	2	2	1	2	8
Over 20	4	3	1	0	2	10

*National Board Certified Teacher

Instrumentation

The Teacher Efficacy Scale for Writing is a modification of the widely used Gibson and Dembo TES which has been used to develop basic ideas about teacher efficacy. (See Appendix A.) The Teacher Efficacy Scale for Writing was developed by Graham et al. (2001) by selecting items from the Gibson and Dembo scale, modifying them to focus on writing, then validating the instrument with teachers. The scale requires participants to respond by using a Likert-type scale, ranging from 1(strongly disagree) to 6 (strongly agree). Using Cronbach's alpha coefficient to rate internal consistency, a value of .84 was obtained for personal teaching efficacy; a value of .69 was obtained for general teaching efficacy (Graham et al., 2001). These values were considered acceptable by the researchers, based on the generally accepted levels in the field of teacher efficacy research.

The Teacher Efficacy Scale for Writing (Graham et al., 2001) includes items to identify both personal teaching efficacy and general teaching efficacy. Items related to personal teaching efficacy in writing include statements such as:

(a) When students' writing performance improves, it is usually because I found better ways of teaching that student; (b) If a student masters a new writing concept quickly, this is because I knew the necessary steps in teaching this concept; (c)The influence of a student's home experience on writing can be overcome by good teaching; (d) If one of my students could not do a writing assignment, I would be able to accurately assess whether the assignment was at the correct level of difficulty; and (e) When a

student does better than usual in writing, it is because I exerted a little extra effort. (p.

184-185)

Items related to general teaching efficacy in writing include statements such as:

(a) Even a good writing teacher may not reach many students; (b) A teacher is very

limited in what he/she can achieve because a student's home environment is a large

influence on his/her writing achievement; (c) The amount a student can learn in

writing is primarily related to family background; and (d) If parents would do more in

writing with their children, I could do more. (Graham et al., 2001, p. 184-185)

The Writing Orientation Scale (Graham et al., 2001) is a 13-item questionnaire

developed to measure teachers' beliefs and orientations toward the teaching of writing.

(See Appendix B.) Factor analysis of the scale indicated that three factors were measured

by the scale: (a) the role of correctness in teaching writing; (b) the role of explicit

instruction in teaching writing; and (c) the role of natural and incidental learning methods

in the teaching of writing. Participants respond using a Likert-type scale, ranging from 1

(strongly disagree) to 6 (strongly agree). The responses to the items should allow the

researcher to determine the participants' changes in perceptions about writing instruction

as a result of the professional development.

The items on the Writing Orientation Scale (Graham et al., 2001) measure

teachers' perceptions about three factors related to writing instruction: (a) correctness,

(b) explicit instruction, and (c) natural learning. The scale contains five items related to

correctness. Examples of the items are:

(a) A good way to begin writing instruction is to have children copy good models of each particular type of writing; (b) Teachers should aim at producing writers who can write good compositions in one draft; and (c) Being able to label words according to grammatical function is useful in proficient writing. (p. 186)

The scale contains four items related to explicit instruction. Among the items are:

(a) It is important for children to study words in order to learn their spelling; (b) Children need to practice writing letters to learn how to form them correctly; and (c) It is important to teach children strategies for planning and revising. (p. 186)

The scale also contains four items related to natural instruction. Examples of the items are:

(a) Instead of regular grammar lessons, it is best to teach grammar which a specific need for it emerges in a child's writing; (b) With practice in writing and responding to written messages, children will gradually learn the conventions of adult writing; and (c) The act of composing is more important than the written work children produce. (p. 186)

Although the instruments were validated with kindergarten through third grade teachers, they were used with teachers from all grade levels participating in the Summer Institute. No other subject-specific measure of teacher efficacy is available in writing. The instrument on which the Teacher Efficacy Scale for Writing was based has been used repeatedly with teachers from a variety of grade levels. Both instruments are used with permission of the authors.

Procedures

   Professional development. The Summer Institute of the National Writing Project is a month long intensive professional development experience focusing on strategies for implementing the writing process in classrooms. The three main components of the Institute are: (a) writing, (b) reading the research on effective practice, and (c) demonstrations. The Institute functions on the premise that teachers of writing must be writers; therefore, a significant amount of time is spent in writing and writing workshop activities. Reading about effective practice and reflecting on the content through writing and collegial discussions is considered a vital part of growing professionally. The demonstration component requires each participant to develop a demonstration presentation about a particular classroom writing strategy and present it to fellow participants. Through the process, the participants reflect on practice and begin to develop their ideas about effective practice for their own classrooms. The components support the idea that teachers learn best from other teachers; all participants are equipped through experience, research, and development of presentations to share their craft with fellow teachers.

   Data collection. At the beginning of the Institute the researcher visited each of the participating sites to administer the instruments. Participants were given a letter of informed consent and allowed to read it and ask questions. Those who chose to participate then completed the instruments (Teacher Efficacy Scale for Writing and Writing Orientation Scale) and returned them to the researcher. At the end of the Institute, the researcher again visited each site and once again administered the

instruments to the subjects. Due to a scheduling miscommunication, one site director was allowed to administer the posttest to the participants involved in the local Summer Institute. The director followed the researcher's protocol in order to minimize possible impact on the results.

Demographic data were collected during the completion of the pre-test. Teachers were asked to indicate the grade level and subject(s) currently taught, their educational level, the number of years taught, and the types of professional development related to writing in which they had previously participated. (See Appendix C.)

Data analysis. All data analysis was conducted using SPSS 10.0.5 for Windows. Participants' responses to the Teacher Efficacy Scale for Writing (Graham, et al., 2001) were analyzed to determine if significant changes had occurred in teacher efficacy following participation in the Summer Institute. As in the original study, scores for each of the two factors measured by the scale, general teaching efficacy in writing and personal teaching efficacy in writing, were averaged to determine the mean. The mean for each factor was then analyzed separately using a dependent samples t test. (Scores on items that are negatively worded were reversed for consistency in analysis.)

Participants' responses to the Writing Orientation Scale (Graham, et al., 2001) were analyzed to determine if significant changes had occurred in teachers' orientation toward writing as a result of participating in the NWP Summer Institute. As in the original study, scores for each of the three factors measured by the scale, correctness, explicit instruction, and natural learning, were averaged to determine the mean. The mean for each factor was then analyzed separately using a dependent samples t test. The

statistical procedure is appropriate for detecting differences in matched or dependent

pairs at the .05 level of statistical significance (Hurlburt, 1994).

Relationships between scores on the two instruments were investigated as well. The researcher was interested in determining whether scores on the three factors of the Writing Orientation Scale were related to scores in the two factors on the Teacher Efficacy Scale for Writing. Pearson product-moment correlation coefficient was used for this analysis.

CHAPTER III

RESULTS

This study investigated the impact of professional development on self-reported perceptions of teacher efficacy and beliefs about writing. Teachers participating in the invitational Summer Institute of the Writing Project completed the Teacher Efficacy Scale for Writing and the Writing Orientation Scale (Graham et al., 2001) at the beginning of the Institute and again at the end of the Institute.

As noted earlier, the Teacher Efficacy Scale for Writing contains items to measure two aspects of efficacy: personal teaching efficacy and general teaching efficacy. Mean scores for each were obtained for individual subjects by averaging the scores on the responses to each set of items on the pretest and again for the posttest. A dependent samples *t-test* was then used to determine if scores on the posttest were statistically significant higher than scores on the pretest.

The first hypothesis, that there would be no statistically significant difference in teachers' scores for both sets of items (personal teaching efficacy and general teaching efficacy) on the Teacher Efficacy Scale for Writing administered after completion of the MS Writing Thinking Institute and scores on the Scale administered at the beginning of the Institute can be rejected based on statistical analysis using a dependent samples *t-test*. The dependent samples *t-test* conducted on the pre- and post-test scores for personal

teaching efficacy indicated that scores on the posttest were statistically significant higher than those on the pretest, $t(63) = -5.96$, $SE = 7.34$, $p < .001$. The dependent samples *t-test* conducted on the pre- and post-test scores for general teaching efficacy also showed statistically significantly higher scores on the posttest, $t(63) = -2.96$, $SE = .11$, $p = .004$. These results suggest that the researcher should reject the null hypothesis and conclude that teachers' scores on the Teacher Efficacy Scale for Writing are indeed statistically significantly higher for both personal teaching efficacy and general teaching efficacy after participating in the Summer Institute of the National Writing Project. See Table 2 for complete results.

Mean scores were also obtained for each of three areas measured by the Writing Orientation Scale for the pretest and for the posttest. The differences in scores for correctness in teaching writing, explicit instruction in teaching writing, and natural learning in teaching writing were then analyzed using a dependent samples *t-test* to evaluate the hypotheses that there would be no statistically significant differences in teachers' scores for each of the three sets of items on the Writing Orientation Scale administered after completion of the MS Writing Thinking Institute and scores on the Scale administered at the beginning of the Institute.

Statistically significantly higher scores were noted in the area of natural learning in teaching writing, $t(61) = -4.87$, $SE = .104$, $p < .001$. No statistically significant differences were found for the areas of correctness in teaching writing and explicit instruction in teaching writing. These mixed results for the second hypothesis must be considered by area. The researcher is able to reject the null hypothesis that there would be

no statistically significant difference in teachers' scores on the natural learning items on the Writing Orientation Scale administered after completion of the MS Writing Thinking Institute and scores on the items administered at the beginning of the Institute. However, the researcher must accept the null hypotheses stating that there would be no statistically significant difference in teachers' scores on the correctness in writing and explicit instruction items on the Writing Orientation Scale administered after completion of the Institute and scores on the sets of items on the Scale administered at the beginning of the Institute. The results do allow some conclusions to be drawn concerning the relationship between the Summer Institute and teacher orientations toward writing instruction.

Table 2

Dependent Samples t-Tests

Component	df	Pretest Score		Posttest Score		t
		Mean	SD	Mean	SD	
Personal Teaching Efficacy	63	4.27	.65	4.70	.55	-5.962*
General Teaching Efficacy	63	3.71	.83	4.04	.87	-2.956*
Correctness in Writing	61	2.17	.87	2.18	.81	-.147
Explicit Instruction	61	4.59	1.46	4.26	.90	1.700
Natural Learning	61	4.48	.81	5.00	.74	-4.872*

*p < .01

The third hypothesis, that there would be no statistically significant correlation between scores on the Writing Orientation Scale and scores on the Teacher Efficacy Scale for Writing, was evaluated using the Pearson product-moment correlation coefficient. Analysis of the posttest scores on the Writing Orientation Scale and the Teacher Efficacy Scale for Writing indicated statistically significant results in only two relationships. A statistically significant correlation was found between mean scores in personal teaching efficacy and mean scores in explicit instruction in writing, $r = .419$, $N = 62$, $p = .001$. Additionally, a statistically significant correlation was detected between mean scores in general teaching efficacy and mean scores in correctness in writing, $r = -.317$, $N = 62$, $p = .012$. As indicated in Table 3, no other statistically significant correlations were found. The null hypothesis that there will be no statistically significant correlation between scores on the Writing Orientation Scale and scores on the Teacher Efficacy Scale for Writing cannot be completely rejected, but the results allow for continued analysis and discussion.

Table 3

Correlation of Efficacy Components and Orientation Toward Writing Components

Component	Correctness in Writing	Explicit Instruction	Natural Learning
Personal Teaching Efficacy	.211	.419**	.066
General Teaching Efficacy	-.317*	-.013	.100

*p < .05

**p < .01

CHAPTER IV

DISCUSSION

Conclusions and Recommendations

The findings allow the researcher to make some recommendations for practice

based on the changes in scores on the Teacher Efficacy in Writing Scale. While the

results from the Orientations Toward Writing Scale score analysis are less conclusive,

additional conclusions can be drawn from them as well.

Teacher efficacy. The results show that posttest scores in both personal teaching

efficacy ($M_1 = 4.267$; $M_2 = 4.705$) and general teaching efficacy ($M_1 = 3.706$;

$M_2 = 4.043$) are statistically significantly higher for teachers after completing the

Summer Institute. Thus, the researcher is able to reject the null hypotheses and conclude

that participation in the Summer Institute has a positive impact on teachers' perceptions

of both general teaching efficacy in writing and personal teaching efficacy in writing.

Since it has been previously established that teacher efficacy is positively linked with

student learning (Ashton & Webb, 1986), there are clear implications for policy

concerning professional development.

In the state of Mississippi, student test scores in writing have historically lagged

behind scores from the rest of the nation. For example, when the NAEP writing scores for

Mississippi were examined, it was noted that, while the state's eighth graders made

greater gains since 1998 than students in 45 other states, Mississippi students' scores

ranked 48th among the fifty states (National Center for Educational Statistics, 2003).

Thirteen percent of the state's eighth graders scored at the proficient level; none scored at

the advanced level. For the fourth graders in Mississippi who participated in the

assessment, only 12% scored at the proficient level, and 0% scored at the advanced level.

Since 2000, Mississippi has been assessing fourth and seventh graders in writing

at the state level. A brief look at the fourth grade scores offers an overview of the need

for improving the quality of writing instruction offered to students. During the 2000/2001

school year, 23% of the state's fourth graders scored 3 or higher on a 4 point scale;

during the 2001/2002 school year, 44% of the state's fourth graders scored 3 or higher,

with only 12% scoring at the highest level (Mississippi Department of Education, 2002).

For 2003, only 3% of the students scored at the highest level (MDE, 2003); in 2004, this

increased to find 9% of the students scoring at the highest level (MDE, 2004).

Coupled with the available test data, results of this study suggest that encouraging

increased teacher participation in the Summer Institute could enhance teacher efficacy in

writing, and theoretically allow students to demonstrate increased performance on both

state and national measures of writing performance. As demonstrated by the research of

Dembo and Gibson (1985), Tschannen-Moran, et al. (1998), Ashton and Webb (1986),

Midgley, Feldlaufer, & Eccles (1989) and Ross et al. (2001), teacher efficacy has been

associated with more effective teaching strategies and increased student performance. It

follows, therefore, that since endeavors to improve teacher efficacy in writing should

improve student writing performance of the state's students, as many teachers as possible

should be encouraged to become involved in the professional development offered by the Mississippi Writing Project through their Summer Institutes.

Orientation toward writing instruction. In the three areas of teachers' orientation toward writing instruction which were examined, statistically significant differences were noted in only one area, natural learning. The four items which address natural learning focus on teaching grammar and conventions gradually, as students demonstrate a need for learning. The methods described include using frequent writing opportunities and small group feedback with an emphasis on process rather than product. These ideas are radically different from the traditional approach to teaching English found in many schools which focuses on the completion of exercises in a grammar text and limited opportunities to write (National Commission on Writing, 2003). Therefore, the Institute's focus on using the process approach to writing does seem to be effective in changing teachers' perspectives on writing instruction.

The absence of statistically significant differences in the two areas of correctness in writing and explicit instruction can likely be attributed to the screening process used to select participants for the Summer Institute. Since potential participants must discuss their perspectives on writing instruction before being selected, it seems that orientations toward correctness in writing and the role of explicit instruction are likely already consistent with the ideas presented by the leaders of the Summer Institute. Therefore, no change in the orientations is noted in the research.

The one area in which statistically significant change was noted, natural learning, can be analyzed in terms of the philosophy of the National Writing Project as well.

Correlations between scores on the two instruments. Since only two areas of statistically significant correlation between scores on the two instruments were found, the researcher is unable to conclude that important relationships exist. An examination of the two relationships which were found, however, does offer some insight. The positive correlation between personal teaching efficacy and explicit instruction would seem to indicate that teachers who believe they are able to effectively teach a topic are able to identify areas of instruction which need to be addressed. This finding is compatible with other research which has indicated that explicit instruction, offering clear and explicit explanations to students concerning the steps and processes used in writing, improves student performance. An investigation involving 38 fifth-grade students (Schweiker-Marra & Marra, 2000) found that instruction emphasizing the use of prewriting skills in a classroom improved student writing ability and attitude. This study involved a control group that did not participate in the writing process activities and an experimental group that participated in the writing process activities with an emphasis on prewriting strategies. The researchers collected data for a six-month period and analyzed two writing samples per student (one from the beginning of the school year and one from late in the second semester of the school year), journals from the experimental group, teacher/student conference reports, and teacher journals, as well as using a writing apprehension test to investigate student feelings about their writing. Statistically significant improvement was noted for the experimental group in the areas of perception of writing ability and written expression.

The four items which define explicit instruction on the instrument include an emphasis on formal instruction and an awareness of the need to teach specific strategies for strategies and revising. Thus, it appears that teachers are confident of their abilities to identify needs and address them so that students can become better writers.

The negative correlation found between general teaching efficacy and correctness in writing is consistent with the process approach to writing instruction taught during the Summer Institute. The items related to correctness in writing focus on copying models, labeling parts of speech, spelling all words correctly, and using only Standard English. Clearly, these items reflect a traditional approach to English instruction. It seems, then, that as teachers become more confident of their general teaching efficacy, they were more able to relinquish traditional ideas. These results are consistent with the findings of Graham, et al. (2001) in the initial study. They also concluded that teachers who were positive about their general teaching efficacy were less likely to place a great deal of emphasis on the role of correctness in writing. This finding is also quite consistent with that of Tschannen-Moran, et al. (1998) who noted that teachers with high efficacy were more likely to try new methods than teachers with low efficacy. Therefore, one might expect teachers with greater feelings of efficacy to be less likely to use the traditional approach to writing instruction.

Implications for Future Research

The research was limited by the time between administration of the pretest and the posttest (Bernard, 2000) which required teachers to respond to the posttest prior to

actual implementation of the strategies in a classroom. Future research should be designed to address this in one of two ways. First, a third administration of the instruments to subjects could be used after the teachers have returned to their classrooms and actually begun implementing the ideas from the Summer Institute. This would allow the researcher to determine whether the results held up in a school setting, away from the support of fellow Institute participants. A second design option would be to allow more time to pass before the administration of the posttest, perhaps four to six weeks after the completion of the Institute.

An additional area for future research is the need to replicate the study with a larger sample size. The population in this study was limited by the number of teachers invited to participate in the Summer Institute. Replication of the study in a state with more Writing Project sites would serve to further refine the results.

Graham et al. (2001) indicated that research was needed to determine additional sources of variation in teacher efficacy scores. In their study, sources of variation were identified as number and type of students, grade taught, gender, years of teaching experience, and school variables. However, this study indicates that professional development has a strong impact on efficacy scores. Coupled with the evidence that carefully planned professional development experiences which encourage teacher inquiry can produce increased effectiveness in the classroom, a recommendation that types of professional development in which teachers have participated should be used as a possible source of variance in future research on teacher efficacy in writing would seem to be in order.

In order to strengthen the research for potential use in policy decisions, an experimental design component should be considered to measure the feelings of efficacy in writing and orientations toward writing of teachers who have not participated in the Summer Institute. If comparable groups of teachers could be located, the researcher would be able to draw conclusions about the impact of the Institute as measured against other types of professional development or no professional development at all.

While this research is too limited in nature to recommend widespread policy changes, the results do suggest that high-quality professional development can positively impact teacher efficacy, and, by extension, student achievement. The literature implies that high-quality professional development which allows teachers to become collaborative learners and engage in follow-up activities is fundamental to the improvement of student learning (Kent, 2004). Further research can more fully inform policy makers about the extent of the influence, but this research may offer adequate information to encourage teacher participation in National Writing Project professional development while awaiting the results of future studies.

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APPENDIX A

TEACHER EFFICACY SCALE FOR WRITING

Teacher Efficacy Scale for Writing

(Gibson and Dembo, 1984, modified by Graham, Harris, Fink, and MacArthur, 2001)

Please read each item and circle the number which indicates most accurately your response to the item using the following scale: 1=strongly disagree, 2=moderately disagree; 3=disagree slightly (more than agree); 4=agree slightly (more than disagree); 5= moderately agree; 6=strongly agree.

1. When students' writing performance improves, it is usually 1 2 3 4 5 6 because I found better ways of teaching that student.

2. Even a good writing teacher may not reach many students. 1 2 3 4 5 6

3. If a student did not remember what I taught in a previous writing lesson, I would know how to increase his/her retention 1 2 3 4 5 6 in the next lesson.

4. The hours in my class have little influence on students' writing 1 2 3 4 5 6 performance compared to the influence of their home environment.

5. If a student masters a new writing concept quickly, this is 1 2 3 4 5 6 because I knew the necessary steps in teaching this concept.

6. If I try really hard, I can help students with the most difficult 1 2 3 4 5 6 writing problems.

7. When a student does better than usual in writing, it is because 1 2 3 4 5 6 I exerted a little extra effort.

8. If students are not disciplined at home, they are not likely to 1 2 3 4 5 6 accept any discipline during the writing period.

9. When a student is having difficulty with a writing assignment, 1 2 3 4 5 6 I would have no trouble adjusting it to his/her level.

10. The influence of a student's home experience on writing can 1 2 3 4 5 6 be overcome by good teaching.

11. A teacher is very limited in what he/she can achieve because a 1 2 3 4 5 6 a student's home environment is a large influence on his/her writing achievement.

12. If one of my students could not do a writing assignment, I   1 2 3 4 5 6
would be able to accurately assess whether the
assignment was at the correct level of difficulty.

13. The amount a student can learn in writing is primarily related   1 2 3 4 5 6
to family background.

14. If a student becomes disruptive and noisy during writing time,   1 2 3 4 5 6
I feel assured that I know some technique to redirect
him/her directly.

15. When students' writing performance improves, it is usually   1 2 3 4 5 6
because I found more effective teaching approaches.

16. If parents would do more in writing with their children, I   1 2 3 4 5 6
could do more.

APPENDIX B

WRITING ORIENTATION SCALE

Writing Orientation Scale

Please read each item and circle the number which indicates most accurately your response to the item using the following scale: 1=strongly disagree, 2=moderately disagree; 3=disagree slightly (more than agree); 4=agree slightly (more than disagree); 5= moderately agree; 6=strongly agree.

1. A good way to begin writing instruction is to have children copy good models of each particular type of writing.

   1 2 3 4 5 6

2. Before children begin a writing task, teachers should remind them to use correct spelling.

   1 2 3 4 5 6

3. Teachers should aim at producing writers who can write good compositions in one draft.

   1 2 3 4 5 6

4. Being able to label words according to grammatical function (e.g., nouns, verbs) is useful in proficient writing.

   1 2 3 4 5 6

5. Before they begin a writing task, children who speak a nonstandard dialect of English should be reminded to use correct English.

   1 2 3 4 5 6

6. It is important for children to study words in order to learn their spelling.

   1 2 3 4 5 6

7. Formal instruction in writing is necessary to insure the adequate development of all the skills used in writing.

   1 2 3 4 5 6

8. Children need to practice writing letters to learn how to form them correctly.

   1 2 3 4 5 6

9. It is important to teach children strategies for planning and revising.

   1 2 3 4 5 6

10. Instead of regular grammar lessons, it is best to teach grammar when a specific need for it emerges in a child's writing.

    1 2 3 4 5 6

11. With practice in writing and responding to written messages, gradually learn the conventions of adult writing.

    1 2 3 4 5 6

12. Students need to meet frequently in small groups to react   1 2 3 4 5 6
and critique each other's writing.

13. The act of composing is more important than the written   1 2 3 4 5 6
work children produce.

APPENDIX C

DEMOGRAPHIC QUESTIONNAIRE

Demographic Questionnaire

1. What grade (and subject area, if applicable) do you teach? _____

2. How long have you been teaching the grade/subject addressed in #1? _____

3. How many total years' teaching experience do you have? _____

4. What level of certification you have achieved?

    _____ Bachelor's degree in _____

    _____ Master's degree in _____

    _____ Other _____

    _____ National Board Certification in _____

5. With which of the following professional development activities for writing instruction have you been involved? Feel free to offer explanation as necessary.

    _____ MS Writing/Thinking Project Summer Institute

    _____ MS Writing/Thinking Project Site-based Professional Development (consultants come to a school site to provide semester- or year- long professional development activities)

    _____ MDE Writing Workshops (please describe)

    _____

    _____

    _____ School or district sponsored professional development on writing instruction (please describe)

    _____

APPENDIX D

INFORMED CONSENT FORM

Consent Form

Title of Study: A Study of the Impact of the Mississippi Writing Project Summer
 Institute on Teacher Efficacy in Writing

Study Site: Mississippi State University, University of Southern Mississippi, University
of Mississippi, University of Southern Mississippi Gulf Coast, Alcorn State University,
Delta State University, Mississippi Valley State University

Name of Researcher(s) & University affiliation: Susan G. Dillard, Mississippi State
University

What is the purpose of this research project? The study will investigate the impact of
professional development on teacher efficacy in writing. The study will compare the
efficacy levels reported by teachers participating in the Summer Institute at the beginning
and end of the session. The study will also compare pre- and post-test scores on the
Writing Orientation Scale to determine the impact on beliefs about writing instruction.
The study will also investigate the possible relationships between beliefs about writing
and feelings of efficacy.

How will the research be conducted? As a participant in this research, you will be asked
to complete two short instruments (a total of 29 items) and provide demographic data
before completing the Summer Institute and again at the end of the Institute.

Are there any risks or discomforts to me because of my participation? You should not
experience any discomfort or be put at risk in any way because of your participation.

Does participation in this research provide any benefits to others or myself? The
researcher will use the data for completion of research requirements for a doctoral degree
from MSU. The MS Writing Thinking Institute will use the results of the analysis as part
of a larger research agenda to document the effectiveness of their professional
development offerings.

Will this information be kept confidential? Although your responses will be initially
linked to your name by a code, your name will not be used in any way. As soon as both
of your submissions have been received, the matched data pairs will no longer be linked
to your name. Also, please note that these records will be held by a state entity and
therefore are subject to disclosure if required by law.

Whom do I contact with research questions? If you should have any questions about this
research project, please feel free to contact Susan Dillard at 662-325-9405 or 662-803-
0554. For additional information regarding your rights as a research subject, please feel
free to contact the MSU Regulatory Compliance Office at 662-325-3294.

What if I do not want to participate? Please understand that your participation is voluntary, your refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled, and you may discontinue your participation at any time without penalty or loss of benefits.

You have been given a copy of this form for your records.

_____   _____

Participant Signature   Date

_____   _____

Investigator Signature   Date