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CONGRUENCE OF PARTICIPANTS SELF-REPORTED
THEORETICAL BELIEFS AND PRACTICES AS A FUNCTION
OF MICHIGAN LITERACY PROGRESS PROFILE

presented by

Cara Josephine Wicks-Ortega

has been accepted towards fulfillment
of the requirements for the

Ph.D. degree in Family and Child Ecology

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**CONGRUENCE OF PARTICIPANTS SELF-REPORTED
THEORETICAL BELIEFS AND PRACTICES AS A FUNCTION OF MICHIGAN
LITERACY PROGRESS PROFILE TRAINING**

By

Cara Josephine Wicks-Ortega

A DISSERTATION

**Submitted to
Michigan State University
in partial fulfillment of the requirements
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DOCTOR OF PHILOSOPHY

Department of Family and Child Ecology

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ABSTRACT

CONGRUENCE OF PARTICIPANTS SELF-REPORTED THEORETICAL BELIEFS AND PRACTICES AS A FUNCTION OF MICHIGAN LITERACY PROGRESS PROFILE TRAINING

By

Cara Josephine Wicks-Ortega

The primary purpose of this study was to determine if elementary teachers held more constructivist beliefs and practices as a result of Michigan Literacy Progress Profile (MLPP) training. The secondary purpose was to determine if MLPP training resulted in greater congruence between participants' self-reported theoretical beliefs and their self-reported classroom practices. The third purpose of this study was to determine if different training durations facilitated greater congruence in teachers' beliefs and practices.

The final sample consisted of 49 elementary school teachers across five training sites. Most participants held bachelor's degrees (70.2%) with elementary teaching certifications (66%), and had an average of 1-4 years of teaching experience (61%). A questionnaire (The Literacy Orientation Survey, Lenski, Wham, & Grifey, 1997) inquiring into teacher beliefs and typical teaching practices was administered over three measurement-intervals: pre-, post- and delayed-post training. The delayed-post survey was given 60 days after the final training session. Ten completed surveys were randomly selected from each training area to complete the sample population.

Results indicated no significant training effects on teacher beliefs and practices. Training itself, as well as training duration had no effects on

congruence of teacher beliefs and practices. The univariate effects for education on congruence scores ($p=.04$) and training duration ($p=.03$) were significant.

Conclusions indicated traditional approaches to professional development training were insufficient in altering teachers' beliefs and practices and without continuing local, on-site support following professional development training, long-lasting change in teachers' beliefs and practices will not occur.

Recommendations included: 1) replicating this study using a short, moderate, and long training model with a larger sample size; and 2) MLPP models adopt an action research process approach to professional development supported by on-site mentoring.

DEDICATION

**Once in a while someone comes along
who makes you feel a little happier, a little more alive to life.
This person gives new perspectives on a lot of things- including oneself.
I'll always remember how this person helped and inspired me.
I am grateful he came into my life.**

Ronny O.

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I would like to give special recognition to Soon Hung, Ph. D. from Grand Valley State University. He acted as a statistical tutor during the last few months of this process. Dr. Hung was patient, and supportive. He provided consultation relative to conducting and analyzing repeated measure MANCOVA's, verified my analyses, and was able to provide me with the level of confidence needed to complete this study. Additional recognition must be made to Jordan Simpson for his efforts as my Webmaster. Elizabeth English, M.A., my friend, editor, constant supporter, and taskmaster, must be given thanks.

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CHAPTER ONE

Introduction

Up until the Cold War, people were generally content with the educational system in the United States. As the Cold War escalated, Sputnik was launched in 1957 and with it, a wave of educational reform followed in its wake. Educators began teaching higher level math and science skills. Then in the 1970's, the economic superiority of the United States was challenged by Japan, West Germany and other nations as a result of their automotive and technology advances. Once again, this political posturing had a "ripple effect" in America's schools. Our schools were accused of not producing sufficiently skilled and educated workers to compete in the global economy (Primeaux, 2000; Wong, 2003).

Publications such as *A Nation At Risk* (Goldberg, Baten, Stella, Gerber, Harvey, Longworth, et al., 1983) called for higher academic expectations. Goals 2000 (1998) addressed academic expectations, safe schools, parental involvement and professional development for educators. Recently, *No Child Left Behind* (2004) mandated that schools in need of improvement spend at least 10 percent of their Title I funds to assist teachers.

As our nation calls for higher student achievement and greater teacher accountability, the pendulum of schooling young children swings. Educational reform initiatives continue spreading across the nation, challenging theoretical beliefs of teachers and potentially impacting instructional decisions (Applefield, Huber, & Moallem, 2000; Franks, 2000). Yet when teachers face instructional decisions under the constraints of curriculum mandates, both novice and expert

teachers are likely to adapt lessons to reflect their own theories of instruction. As educational systems try to meet the societal demands for higher student achievement levels and update teachers' training on best practices, the issue of providing professional development with sustained change in beliefs and practices is raised (Applefield, et al., 2000; Wong, 2003).

Statement of the Problem

Research (Applefield, et al., 2000; Franks, 2000; Harste & Burke, 1977) shows that teachers' belief systems impact the way they approach instructional planning and delivery. For example, teachers' beliefs may support student empowerment and responsibility over learning, or support passive learning. Teachers develop theories and beliefs about teaching and learning through the process of their own experiences. This suggests that all aspects of instruction, including expectations, goals, procedures, assessments, and materials, are guided by teachers' personal belief systems. As stated above, school districts are faced with the issue of providing quality professional development with sustained change in beliefs and practices in an effort to improve student achievement (Applefield, et al., 2000).

In 1998, 51% of Michigan's fourth graders scored below the satisfactory level on the reading portion of the Michigan Education Assessment Program (MEAP) (Michigan Department of Education, n.d.). In an effort to raise reading scores, Michigan developed the Michigan Literacy Progress Profile (MLPP). This set of diagnostic literacy assessments was designed to help teachers gather information on students' literacy development. Along with this new assessment program, a 35-hour training was required for all kindergarten through third grade

teachers across Michigan. The training targeted literacy orientations within the constructivist learning theory, classroom management, and instructional strategies. This training was designed to encourage teachers to align their current beliefs and practices with constructivists' views and practices (C. Fox, personal communication, November 14, 2001).

The MLPP was implemented state-wide in eight different Regional Literacy Development Centers (RLTC) with the goal of guiding teachers' instructional decisions and ultimately leading to improved student reading achievement. The training emphasized a social constructivist perspective of learning and was designed to train teachers to apply this perspective to their daily classroom practices, although training practices varied in their delivery methods. Social constructivist theory posits that individuals construct knowledge through experiences and influences from the world around them. Knowledge is individually constructed and socially co-constructed (Jonassen, 1999).

According to Windschitl (1999), as teachers and administrators adopted these new practices, they would come to understand and embrace the idea that constructivism is a "culture" within the classroom. Constructivism would ultimately become the undergirding for beliefs, norms, and practices that would constitute the foundation of school experiences. If Michigan's goal was to facilitate change in highly entrenched and deep-seated teachers' practices, the MLPP had to do it in such a way that modeled characteristics and components consistent with constructivist learning through professional development efforts.

As already mentioned, the MLPP was implemented across Michigan through different training regions and professional development efforts. Trainings

for K-3 teachers took place using a variety of models depending on the training region. Although all professional development models were based on constructivist teaching, some training models took place in a one-week format, using five full-day sessions. Other models took place over a seven-month period of time, incorporating three full-day sessions and four half-day sessions. Because of the wide range of professional development models used to train teachers on the MLPP, this study investigated the effects of MLPP training on teachers' theoretical beliefs and classroom practices and congruence of teachers' beliefs and practices as a function of professional development training.

Importance of the Problem

Despite the recent surge of training in best practices offered through professional development and higher education institutions, inconsistencies still exist between teacher belief systems and actual practices (Lenski, Wham, & Griffey, 1998). In an effort to close this gap, the state of Michigan initiated MLPP to create a paradigm shift with the goal of impacting teachers' theoretical beliefs and ultimately leading to better teaching practices across Michigan.

Steady and consistent increases in student achievement may not occur when teachers' beliefs and practices are not consistent with each other because without consistency between beliefs and practices, good teaching occurs, at best, only randomly (Lenski, et al. 1998). One of the difficulties in paradigm shifts is that teachers may be using good constructivist practices but don't understand the theoretical underpinnings. Without a solid theoretical understanding, these teachers may not have enough of a theoretical foundation to continue choosing activities consistent with constructivist teaching. On the opposite continuum,

teachers who have book knowledge, but lack power of application, aren't able to undergird their teaching with their beliefs. When this happens, good practices ultimately crumble. The result, in both cases of non-alignment between theory and practice, is unorganized, haphazard teaching pedagogy (King, 2000; Lenski, et al. 1998; Windschitl, 1999).

Purpose of the Study

The primary purpose of this study was to determine if teachers held more constructivist beliefs and practices as a result of MLPP training in teachers across Michigan. The secondary purpose was to determine if new-user K-3 MLPP training resulted in greater congruence between participants' self-reported theoretical beliefs and their self-reported classroom practices. The third purpose of this study was to determine if different training durations facilitated greater congruence in teachers' beliefs and practices.

Conceptual Model

Changes occur as individuals make observations from individual perspectives, and individual perspectives and knowledge are molded by interactions with the world (Chen, Chung, Crane, Hlavach, Pierce, & Viall, 2001). As noted earlier, individuals construct knowledge through experiences and influences from the world around them. Knowledge is individually constructed and socially co-constructed (Jonassen, 1999). These statements describe an ecological and social constructivist approach to building new knowledge.

Educators employ different perspectives to make observations that ultimately guide their instructional pedagogy within their classrooms. Teachers develop their personal theoretical beliefs based on what they themselves have

experienced in life. For example, the way teachers were instructed in school, the way in which their pre-service education programs were delivered, and the values and morals that were instilled in them while growing up all impact their belief systems and affect their teaching practices. Societal effects, such as local, state, and national educational reforms, budgetary constraints in the field of education, and peer influences also have an effect on theoretical beliefs and how they transfer into practice. Old theories are discarded or adapted when new theories or ideas prove superior in educating students (Chen, et al., 2001; Paris & Winograd, 2003).

Teachers attending MLPP trainings across Michigan were immersed in different experiences, interactions, and perspectives. Teachers construct knowledge differently based on their past experiences and prior knowledge coupled with *new* experiences and knowledge (Jonassen, 1999; Chen, et al. 2001; Paris & Winograd, 2003). These experiences help to form new perspectives and eventually a shift in theoretical beliefs and practices. It was the state of Michigan's hope that MLPP, along with its required training, would drive such a paradigm shift.

Theories of Development and Instructional Design Approaches

For many years, debates regarding early childhood instructional practices have been the topic of discussions, papers, and research projects. Most recently, debate has centered around the *instructivist* perspective, which aligns itself with behaviorism, and the *constructivist* perspective, which is based, in part, on theories by Piaget and Vygotsky (Katz, 1999). The *instructivist* perspective believes that "meaning exists in the world separate from personal experiences"

(Instructional Design Approaches, n.d., p.1). Instructional goals exist within the framework of specific, behavioral, and observable terms. This approach looks for immediate, recognizable changes in behavior. Learning outcomes describe the tasks the learner(s) will perform and prescribe how learner(s) will carry out activities to demonstrate mastery. Criterion references define acceptable levels of performance. The instructor presents academic materials and assesses students' understanding. The focus is on presentation and product. Students are expected to absorb the information and materials presented and then demonstrate mastery.

In contrast, the social constructivist approach believes that “learners impose meaning on the world, and ‘construct’ their own understanding based on their unique experiences” (Instructional Design Approaches, n.d., p. 2). Instructional goals exist within the framework of experiential terms by specifying learner problems to be solved, establishing control learners have over their learning environments, and guide ways in which instructors shape activities. Learners reflect on the results of their activities together, and learning outcomes define how learners should be able to think or solve problems differently when they are finished. This instructional approach provides an opportunity for learners to have input into the course's goals and objectives. Instructional outcomes focus more on process and interaction rather than on specific outcomes. This approach assumes that learners are motivated by a common interest in some problem or issue. The instructor's role includes establishing a conducive learning environment and assisting students as they explore that environment. The instructor does this by designing experiences that are both meaningful to the

learner and based in some social context that will allow for assimilation and accommodation of the learning. The instructor is seen as a facilitator of learning. The student's role is to explore the environment in a social construct with others and then construct new understandings based on prior learning experiences (Instructional Design Approaches, n.d.).

A third perspective that must be mentioned is that of Bronfenbrenner's ecological systems (Bronfenbrenner, 1989). Here the learners' relationships with their homes, schools, neighborhoods, teachers, and other non-direct influences such as school board decisions and state and federal mandates have multidirectional relationships between children and their environments. The teachers' role is to recognize the influences from the contexts in which the learners exist. This information should be taken into consideration when planning and working with students.

The ecological perspective and the social constructivist perspective were used as the theoretical frameworks for this study. This decision was based on the fact that in constructivism, learners manipulate and interact with the environment while taking into account the readiness of the learners to master the content. The ecological perspective weaves itself into constructivism. The relationships and influences within and around the learners' lives are multidirectional and interactive. The positive or negative influences in life can have a great deal of impact on the learning that takes place within life systems. A detailed explanation of the ecological model and the social constructivist model follows.

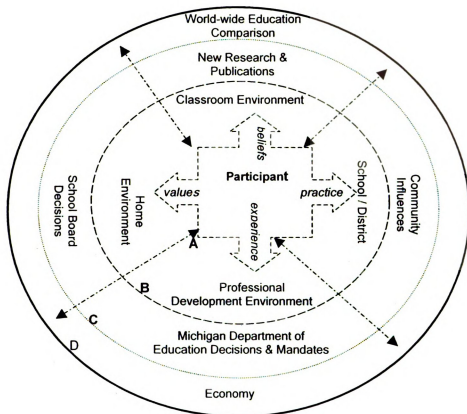
Ecological Model. The human ecological perspective is an ideal way to understand the dynamics of individuals' abilities to understand, modify, or change

their personal beliefs and practices in instruction, which was one of the broad goals of the MLPP training component. Human development is influenced by external and societal decisions, conditions, and environments, which provide a framework for this investigation (Bronfenbrenner, 1979). According to this theory, each person is significantly affected by the interactions among a number of overlapping environments. In an ecological systems approach, it is the interaction of individuals within and across their environments that shape human development, including one's beliefs, ideals, perceptions, and the ability to adapt to changing societal expectations and practices. These environments maintain similar rules for relating to each other and have boundaries that separate them. Ecological systems include everything outside the individual; family, friends, community, school, and work, as well as less direct influences such as laws, social attitudes, and politics. The rules and relationships that exist within a system and those that exist outside a system differ (Berger, 2001; Bronfenbrenner, 1989; Schickedanz, Schickedanz, Forsyth, & Forsyth, 2001). Ecological systems that exist within an individual's life are multidirectional, interactive, and incorporate different levels of hierarchies. Each system has smaller subsystems within it that exist and operate concurrently within a larger system. Influences of each system have an impact on the level within and outside of it as shown in Figure 1.

Philosophical beliefs and achievements of individuals are interdependent on the biological aspects of their development and the ecological environments with which they collaborate, such as a teacher's predisposition to form supportive social relationships within a school or training setting, or the characteristics that

allow an individual to successfully accept changes in his or her personal beliefs and practices (McDevitt & Ormond, 2004; Nelson, 1999). All of an individual's subsystems had to be interacting and supportive of the new information being presented during MLPP training in order for transference of new knowledge into actual classroom practice to occur (Figure 1). Figure 1 illustrates the ecological approach to building knowledge. The ecological circles illustrate how the subsystems in which an individual lives and works has influences on his or her beliefs, values, practices, and experiences. Ecologically, Square A, Participant level, demonstrates how individuals come to each new experience with existing schemas in which to base understandings of new information and practice. Circle B, Environmental level, demonstrates how the smaller subsystems in which an individual participates on a daily, face-to-face basis, influences his or her values, beliefs, practices, and experiences. Circle C, Societal level, demonstrates how the decisions, mandates, and influences made by others that may not occur face-to-face with the participant still affect the individual's daily decisions, beliefs, and practices. Area D, Global level, illustrates how larger global issues can have an affect on an individual's values, beliefs, practices, and experiences (Adapted from Bronfenbrenner, 1989).

Figure 1 Ecological influences on congruence and MLPP training



Social Constructivist Theory. The ultimate goal of any educational reform is to obtain transference from training into practice. In order for pedagogical change to occur in the field of early childhood education, teachers must learn about, experience, and find support and success in the new pedagogical practice. The social constructivist approach to learning and teaching is one perspective that has been gaining momentum in recent years. The social constructivist perspective emphasizes the active role learners' play in acquiring knowledge and the cultural and social contexts in which they occur and are supported (Windschitl, 1999). Its central idea is that human learning is *constructed*, in that

learners build new knowledge upon the foundation of prior knowledge. The recent surge in professional development is one area of educational reform that has embraced the social constructivist approach to learning. Social constructivist professional development opportunities give teachers time to make sense their understandings of learning. Furthermore, such professional development provides opportunities for teachers to test their understandings and build new ones. Training that affects student-centered teaching takes place in systemic, long-term opportunities that allows practice and reflection. It is also useful to remember the saying, Teachers teach as they are taught, not as they are told to teach. Thus, trainers in constructivist professional development sessions must model learning activities that teachers can apply in their own classrooms. It is not enough for trainers to describe new ways of teaching and expect teachers to translate from talk to action; it is more effective to engage teachers in activities that will lead to new actions in classrooms. Teacher learning, in part, depends on the nature of the professional development interaction processes (Abbott & Ryan, 1999; Hoover, n.d.; Terwel, 1999).

When MLPP training was presented, a variety of professional development models were incorporated across the State of Michigan in an effort to influence teachers' instructional delivery. Professional development models differed in their scheduling techniques and instructional content, yet all the training regions included theoretical information and teaching implications for the social constructivist approach to learning in their training.

The level of change in one's beliefs and practices is based on the interactions among a number of overlapping educational and personal

environments- in other words, support from his or her ecological subsystems. These interactions play a large role in the personal acceptance and changes in one's beliefs, ideals, perceptions, and the ability to adapt to changing societal expectations and practices. These interactions are related to the congruence of belief and practice scores as self-reported by teachers taking part in this study. According to Garbarino (1992) the changes that may occur within teachers happen because of other contextual interactions within or outside their immediate ecological environments. Garbarino (1992) neatly marries social constructivism to the ecological model when he said, "the action of one influences the status of others" (p. 12).

Overlapping Ecological and Social Constructivism Frameworks

The ecological approaches to building new knowledge from a social constructivist perspective drives this research in that the past experiences and knowledge teachers bring to their classrooms drives their instructional beliefs and decisions. Teachers participate in both voluntary and mandatory professional development opportunities. These experiences, philosophies, and environments teachers encounter have a great deal of influence on their attitudes and acceptance of the new information presented. Professional development facilitators must be aware of the ecological influences of their participants and plan appropriate strategies (Chen, et al., 2001; Windschitl, 1999).

The ecological theory drives this study because of the fact that participants have formulated their personal theoretical beliefs and practices prior to attending the MLPP professional development trainings. Participants vary in their beliefs and practices based on their past ecological influences, such as family,

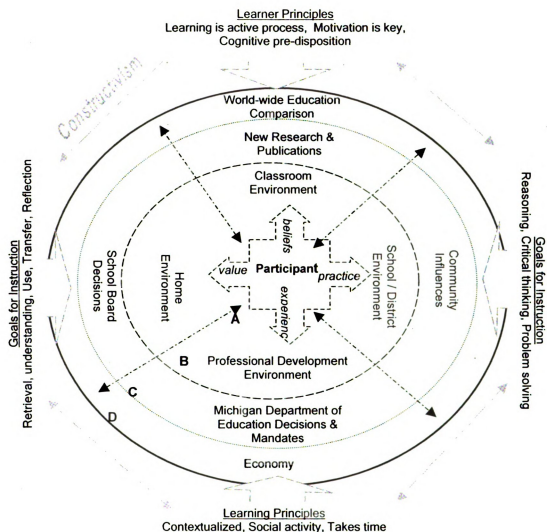
education, and work environment influences. Ecologically this study had to take into consideration that during training, outside influences such as peer influences, personal beliefs, values, and morals, and district mandates may have had some influence on how individuals' were accepting and adapting to the information shared during professional development training. We also had to take into consideration the MLPP trainers and the individual RLTC's ecological influences on how they may have planned and delivered the training. These ecological influences based on past experiences may have had an influence on how individuals completed the survey measurements throughout their professional development training experience. Educational paradigm shifts in the field of education are in constant motion. Since the development of an education system we have seen educational theories such as maturationism and behaviorism come into practice and fall out of favor as a result of new research being conducted on the human brain and how learning occurs. Social constructivism emphasizes learning as it takes place through interactions with other students, teachers, and the world-at-large. Social constructivism works in conjunction with the ecological perspective (Figure 2) in that we can view teaching and learning from contexts that should be meaningful to learners based on their personal and social history, inquiry through class discussions, peer collaboration, small group learning with projects and tasks, and valuing meaningful activity over one correct answer (Applefield, et al., 2000; Chen, et al., 2001; Life Circles, 2004; Windschitl, 1999).

Figure 2 illustrates the ecological approach to building knowledge from a social constructivist perspective. The ecological circles illustrate how the subsystems in which individuals live and work influences his or her beliefs,

values, practices, and experiences. Ecologically, Square A, Participant level, demonstrates how individuals come to each new experience with existing schemas in which to base understandings of new information and practice. Circle B, Environmental level, demonstrates how the smaller subsystems in which an individual participates on a daily, face-to-face basis, influences his or her values, beliefs, practices, and experiences. Circle C, Societal level, demonstrates how the decisions, mandates, and influences made by others, which may not occur face-to-face with the participant, still affect the individual's daily decisions, beliefs, and practices. Area D, Global level, illustrates how larger global issues can have an affect on an individual's values, beliefs, practices, and experiences. The arrows and area surrounding and intersecting the ecological model represent how social constructivist learning should be part of one's "culture" for learning. Learning from a social constructivist perspective is innate, connected to one's experiences and existing schemas, is a social activity, and takes time to master. When we weave together the influences from the ecological subsystems in which an individual interacts everyday, with the idea that learning is innate, connected to one's experiences and schemas, is a social activity, and takes time to master, we have an ecological approach to knowledge construction supported by a constructivist perspective.

Figure 2

THE ECOLOGICAL APPROACH TO BUILDING NEW KNOWLEDGE FROM A SOCIAL CONSTRUCTIVIST PERSPECTIVE



Conceptual and Operational Definitions

Dependant Variables:

Teacher beliefs and practices

Conceptually, beliefs are propositions held by teachers accepted as true. Beliefs consist of one or more assertions held by teachers (Reuda & Garcia, 1994). Conceptually, practices include the instructional planning and actual implementation of instruction within a classroom along a continuum from traditional to eclectic to constructivist. Conceptually, a constructivist teacher uses primarily integrated and holistic instruction and views students as using prior knowledge to construct meaning. Another practice includes: a traditional teacher using traditional instructional methods such as basal reading instruction, employing primarily direct instruction, and delivering information to students. Eclectic teachers on the other hand combine both traditional and constructivist instructional methods. They use conflicting instructional practices such as expecting problem-solving strategies from students during times of conflict and at other times they employ coercion conflict management (Lenski, et al, 1998). Operationally, constructivist teacher beliefs and practices were measured by participants' total scores (belief subscale + practice subscale) on the Literacy Orientation Survey (LOS) (LOS total score).

Congruence

Conceptually, congruence was the degree of similarity between teachers' philosophical beliefs about pedagogy and their actual classroom practice. Operationally, congruence was adjusted belief scores minus adjusted

practice scores on the LOS. The belief sub-scores were totaled using survey items 1, 3, 5, 7, 8, 11, 12, 13, 19, 21, 22, 24, 26, 27, 29. The practice sub-scores were totaled using survey items 2, 4, 6, 9, 10, 14, 15, 16, 17, 18, 20, 23, 25, 28, and 30.

Independent Variable:

MLPP Training

Conceptually, MLPP training was the mandatory 35-hour training provided to kindergarten through third grade teachers based on common statewide instructional protocols provided by five RLTC's prior to classroom implementation of the MLPP in district classrooms (Michigan Department of Education, 2001). Each of the five RLTC's implemented their own training models, which included the training duration. Two locations implemented moderate durations, two locations implemented long durations, and one location implemented a short duration. Duration models differed by span of time between the first day of training and the last day of training.

Operationally, MLPP training provided by the different RLTC locations were delivered using three different training durations: 1) the short training duration which was completed in less than two weeks; 2) the moderate training durations which were completed in less than two months; and 3) the long training durations which were completed in seven months.

Time

Conceptually, time was the number of days between the pre-survey at the onset of training and the delayed-post survey 60-days following the last day of training.

The time that lapsed between the pre-survey and the delayed-survey varied between 65 and 270 days.

Operationally, time was measured by the pre-, post-, and delayed-post LOS survey measurements.

Covariates:

Education Level

Conceptually, educational level was the degree held by participants.

Operationally, participants' education levels included categories of high school, bachelor's degree, master's degree, master's degree plus thirty credits, education specialist, or Ph. D and were self-reported on the Teacher Information Sheet.

Certification

Conceptually, certification was the teaching endorsement issued by the State of Michigan.

Operationally, certification had two categories, elementary certification and the early childhood specialization certification of ZA. Certification was self-reported on the Teacher Information Sheet.

Research Questions and Hypotheses

This study was designed to answer the following research questions:

Question 1: Do teachers hold more constructivist beliefs and practices as a result of MLPP training?

H₀₁ Teachers will not hold greater constructivist beliefs and practices as a result of training, as measured by the Literacy Orientation Survey totals.

H_{A1} Teachers will hold greater constructivist beliefs and practices as a result of training, as measured by the Literacy Orientation Survey totals.

Question 2: Is there greater congruence in teachers' self-reported teaching beliefs and self-reported teaching practices as a function of MLPP training?

H_{O2} Teachers who participated in MLPP training will not exhibit greater congruence between their theoretical beliefs and practices as self-reported and measured by the Literacy Orientation Survey.

H_{A2} Teachers who participated in MLPP training will exhibit greater congruence in their theoretical beliefs and practices as self-reported and measured by the Literacy Orientation Survey.

Question 3: Do different MLPP training delivery durations (short, moderate, or long) facilitate greater congruence in teachers' beliefs and practices?

H_{O3}: Congruence of self-reported beliefs and self-reported practice scores will not increase as a function of training delivery duration (short, moderate or long term delivery duration).

H_{A3}: Congruence of self-reported beliefs and self-reported practice scores will be highest when teachers experienced a long-term delivery.

Assumptions

In order to carry out the objectives of this research most effectively, the following assumptions will guide this research:

1. The regional literacy-training areas will participate voluntarily in this study.
2. Participants will answer the survey questions honestly and accurately.

3. All RLTC's across Michigan follow the MLPP training protocols as established by the Michigan Department of Education and the RLTC Coordinators.
4. Teachers across Michigan had diverse teaching beliefs and practices prior to MLPP training.

CHAPTER TWO

Review of Literature

A review of literature will be presented relative to: the constructivist approach to learning and teaching; beliefs and practices and their influence on pedagogy; professional development; and the development of the Michigan Literacy Progress Profile (MLPP).

Constructivist Approach to Learning and Teaching

Recent reform efforts have allocated more discretion for the reform initiatives to individual schools, teachers, students, and parents. In particular, teachers have been given more autonomy to construct their own meanings and interpretations of what will improve classroom teaching and learning (Airasian & Walsh, 1997; Applefield et al., 2000). Taking into account the autonomy educators and administrators have in making classroom teaching and learning decisions, it becomes imperative to also understand that personal histories and past models of instruction guide teachers' behaviors in commanding ways. Most teachers are products of traditional instruction. As reform efforts bring constructivist views and practices to the attention of educators, it is vital that this model of "knowing" be presented as a classroom "culture" and not a set of instructional strategies. Many of the challenges teachers face when posed with embracing a new theory emerge when familiar norms of behavior must be transformed into new patterns. Teachers are more likely to be influenced not by instructional theories alone, but also by familiar images of what is appropriate and possible in the classroom setting (Airasian & Walsh, 1997; Windschitl, 1999).

Therefore, when presenting suggested changes in beliefs and practices appropriate professional development and modeling needs to be in place.

Recent reform initiatives towards constructivism have left many teachers questioning whether their idea of good teaching aligns with their daily instructional decisions. Teacher beliefs and teacher practices are guided by their accepted theoretical orientation. These beliefs become evident in how teachers establish classroom instructional plans, behaviors, and classroom interaction patterns (Applefield et al., 2000; Lenski, et al., 1998). Student learning is ultimately influenced by teachers' beliefs and practices.

Constructivism builds its base on the belief that learners "actively create, interpret, and reorganize knowledge in individual ways" (Windschitl, 1999, p. 1). It focuses on the process of how knowledge is built rather than on its products (Lenski, et al., 1998). The core ideas that frame constructivism are those of Dewey, Piaget, and Vygotsky, although the works of Brunner and Gardner have also had an influence (Berger, 2001; Brewer, 2001; Gregory, 2000; Southwest Educational Development Laboratory, n.d.). Constructivism is an approach to teaching and learning based on the understanding that cognition, or learning, is the result of "mental construction". It is a philosophical explanation that provides a model of knowing and learning. Constructivists believe that the context in which ideas are taught and the learner's beliefs and attitude affect learning (Airasian & Walsh, 1997; Applefield, et al., 2000; Lenski, et al., 1998; North Central Regional Educational Laboratory, 1998; Rainer, Guyton, & Bowen, 2000).

Classrooms that support and practice the principles of constructivism embrace the idea that learners make sense of their world by combining

prior knowledge with new experiences. Teachers set up the environment so that students are encouraged to think, discuss, demonstrate, and evaluate, as opposed to just delivering knowledge to empty heads. Students in constructivist classrooms are responsible for constructing their own understanding of the world and how it fits together (Henson, 2003; Lenski, et al., 1998). Brooks and Brooks (1999) offer five guiding principles for establishing classroom practice based on constructivist theory: 1) pose problems of relative importance to students; 2) set up learning around broad concepts, focus on self-initiated inquiry, and allow for frequent student interactions; 3) encourage higher order thinking by valuing all students' points of view; 4) establish what students already know, then build bridges between the old and new information and; 5) student learning is assessed in the context of instruction and is used to inform teaching and learning.

The principles of constructivism are fundamental to effective teaching. They offer a framework for developmentally appropriate practices. Many teachers are in the process of learning about and accepting a constructivist approach to teaching. They are examining their beliefs about teaching and learning (Lenski, et al., 1998; Primeaux, J. Jul 2000; Windschitl, 1999).

Teachers' Beliefs and Practices

Lenski et al. (1998) believes that teachers' beliefs and practices are guided by an organized set of beliefs or theories that influence teaching practices. Teachers tend to develop theories about instruction that are foundations for decision-making and are consistent with their personal belief systems. Theories

held by teachers are frequently implicit, personal, and informal, but theory building is the natural outcome of transactions among teachers, students, texts, researchers, administrators, parents, and personal experiences (Nespor, 1997; Simmons, Emory, Carter, Coker, Finnegan, & Crockett, et al., 1999). For teachers, the process of developing theories and beliefs about teaching and learning are gained through their experiences. Beliefs, which are often implicit, demonstrate themselves in the form of instructional behaviors transmitting through classroom interaction patterns (Lenski, et al., 1998; Simmons, et al., 1999). Harste and Burke (1997) suggest that personal beliefs have an impact on teachers' goals, procedures, materials, and daily decision-making regarding instruction. Therefore, the instructional practices of teachers tend to be consistent with their beliefs about effective instruction (Olson & Singer, 1994; Rainer, et al., 2000). There are a multitude of variables that mediate the relationship between beliefs and practices in teachers, including one's knowledge on the nature of learning, the roles of schools and society, quality of one's professional preparation, years of experience, work conditions, difficulty in working with parents, and cumbersome work loads (Levitt, 2001; Nespor, 1997).

According to researchers (Nespor, 1997, Windschitl, 1999) there are three personal perceptions that influence beliefs and practices: 1) teachers' philosophies about education to include beliefs about the impact of teaching and their understanding of how children learn; 2) perceptions of themselves as teachers; and 3) beliefs in how events in the classroom are contingent upon the teachers' own actions. Each of these plays a critical role in actual teaching practice and classroom decisions.

Professional Development and Teacher Effectiveness

Educators have always felt the desire, and the pressure, of serving students in the most effective manner and in the manner dictated by the state in which they work. As state curriculum frameworks become more challenging, the expectation for student achievement also increases. The increase in state standards and benchmarks augmented student achievement accountability forcing a paradigm shift in the understanding of new methods of instruction, assessment, and accountability (Mid-Continent for Education and Learning, 2005). Teacher effectiveness has never been at a higher premium than it is now. Reform initiatives in almost every state have been introduced to require teachers to improve their abilities by addressing higher student expectations and raising instructional expectations (United States Department of Education, n.d., Michigan Department of Education, n.d., Hartle & Weiss, 1997; Kent, 2004). According to Sparks and Hirsh (2000), executive directors of the National Staff Development Council, increasing teacher effectiveness is paramount to improving student learning. But how do teachers themselves deepen their own knowledge, skills, and effectiveness? What constitutes teacher effectiveness? Schulman (1987) believes that teacher effectiveness is made of the teacher's content knowledge, understanding of the learning process, child development, and pedagogical skills. He suggests that teachers need three critical areas of knowledge. First, they need content knowledge—a deep understanding of their disciplines, typical of advanced study in the discipline. Second, they need pedagogical content knowledge—knowledge about how to teach appropriately for the age-level in which they are assigned. And third, they need pedagogical knowledge of subject-

specific teaching strategies. In a more recent study, Goldhaber & Anthony (2003) found that teachers' effectiveness depended on several factors based on standards set by The Council for the Accreditation of Teacher Education (NCATE).

These factors include:

1. demonstrating an understanding of the learning process through which children learn, and committing to furthering students' learning;
2. displaying solid knowledge of subject discipline and being able to convey this knowledge to children through student inquiry;
3. reflecting on their own teaching pedagogy and adjusting their practice according to students' needs; and
4. developing relationships with members of the broader educational community and furthering their knowledge through professional development.

The National Commission on Teaching and America's Future supports the fact that ongoing development of teachers' knowledge and skills does matter (Darling-Hammond, 2003). The literature on describing "best practices" in professional development is quite large, however relatively little systematic research has been conducted on the effects of professional development on improvements in teaching (Garet, Porter, Desimone, Birman, & Yoon, 2001).

Highly qualified teachers. As discussed earlier in this paper, publications such as A Nation At Risk, Goals 2000, and No Child Left Behind (NCLB) have called for higher academic expectations as our nation calls for higher student achievement and greater teacher accountability (Applefield, et al., 2000; Franks,

2000; Goldberg, M., et al., 1983; Harste & Burke, 1997). As Michigan pushes for educational reform with the introduction of the MLPP as a reform initiative, its success hinges, in large part, on the qualifications and effectiveness of teachers (Garet et al., 2001).

With the introduction of NCLB law, came minimum requirement provisions for highly qualified teachers. The provisions for highly qualified teachers in the NCLB law were based on research evidence indicating that teachers are one of the most critical factors in student achievement (No Child Left Behind, 2004). Hoban, (2002) defines the “craft of teaching as...a repertoire of skills or competencies that are accrued over time” (p. 10).

NCLB requires that all teachers in core academic areas be highly qualified in core subject areas by the end of the 2005-2006 school year. Requirements for highly qualified teachers include: holding a bachelor's degree; full state certification, as defined by the state; and demonstrated competency, as defined by the state for each core academic subject taught (State of Michigan State Board of Education, 2003). Novice teachers generally have taken the Michigan Test for Teacher Certification (MTTC) basic skills test and the comprehensive elementary exam when they graduated. Individuals with early childhood certification must pass an exam in this area also. Experienced teachers must meet three basic requirements by the end of 2005-2006 school year. Along with holding a bachelor's degree and state certification, they must provide evidence of one of the following:

- Pass the MTTC exam and any subject area examination for which the teacher is endorsed, OR

- Hold a graduate degree or coursework in an approved major subject area directly related to elementary teaching, OR
- Achieve National Board Certification or credentialing in any subject at an appropriate developmental level(s), OR
- Complete the high objective uniform state standard of evaluation (HOUSSE):
 - Have at least three years of teaching experience at the elementary level and have completed, since the issuance of the Provisional teaching certificate, a minimum of eighteen semester hours in a planned standards-based SBE-approved endorsement program or a master's or higher degree in an area appropriate for elementary education, OR
 - Have at least three years of teaching experience and before the end of the 2005-2006 school year, have completed an individual professional development plan approved by the local school improvement team, including completion of professional development activities that are aligned with the state professional development standards and consisting of at least ninety contact hours or six semester hours of coursework in a standards-based subject/content area program related to the current teaching assignment, and documented with the local district on the state approved form, OR

- Demonstrate competence of subject matter knowledge and teaching skills using a standards-based performance assessment reflecting the entry-level standards for Michigan teachers approved by the State Board of Education. The performance assessment must be conducted by a local professional development review team/school improvement team and may include classroom observations, and/or videotaped lessons, and/or an individual portfolio using the Michigan Content area portfolio guidelines (State of Michigan Department of Education, 2003, p. 7-8).

A key feature to working with highly qualified teachers is fostering coherence between teachers' existing knowledgebase and the goals of the professional development. Activities should be linked to teachers' other experiences, aligned with other reform efforts, and encourage professional communication among teachers. When professional development efforts meet these guidelines, change in teaching practice occurs (Garet, 2001).

Modes of training. In the field of education, three types of training have been practiced: inservice training, staff development, and most recently, professional development. Inservice, workshops, and staff development are considered to be traditional forms of teacher training.

Inservice training, or workshops, consist of short-term, awareness-type programming and usually occurs outside teachers' classrooms. Guided practice formats are frequently used, along with large-group presentations, discussions, workshops, demonstrations, role-playing, simulations, and microteaching. This

format usually includes an exploration of theory, modeling of skills, simulated practice, and feedback on performances. This training model is efficient and cost-effective, although as a standard training model, it offers limited opportunities for choice or individualization. Attendance at these trainings is usually mandatory, with scheduled times for attendance. Presenters from outside the school system generally lead the inservices/workshops. Presenters are considered the “expert” in the subject matter to be presented.

Staff developments, or institutes, are similar in characteristics to the inservice/workshop formats, but focus especially on correcting teaching deficiencies by providing opportunities to learn new methods of instruction in multi-day sessions. Neither inservice nor staff development allows for any formal, pre-planned follow-up to the new information. The MLPP training reflects this traditional model.

The reform initiative of professional development involves planned, comprehensive, and systematic programs designed for long-term systemic change in individuals and organizations (Bellanca, 1995; Garet, et al., 2001; Guskey, 2000). Guskey (2000) states the defining characteristics of professional development as intentional, ongoing, and systemic. According to Bellanca (1995),

as schools become familiar with the works of researchers such as Piaget, Vygotsky, and Feuerstein, they begin to understand the concept of systemic professional development. These researchers, called “constructivists”, challenged the more conventional behaviorist and

humanistic theories of learning. The basic tenets of the constructivist beliefs about learning seem to hold not only for children, but also for adults (p. 14).

The prime goal in any “training” is learning transfer. This knowledge-to-long-term-practice transfer is the most important element in the learning process. The old model of staff development designed to “fix” teachers or fill in the information gap is losing ground to the professional development model which empowers educators to develop new understandings for improving how to deliver information (Bellanca, 1995; Guskey, 2000).

Sustained change. Hassel (1999) states that the more professional development is embedded in core school activities, the easier it will be to sustain changes that directly affect student learning. To engage in this process of continuous renewal, teachers must be lifelong learners in order to stay abreast of and incorporate best practices into teaching, learning, and leadership. Teachers will have to be not only seekers of knowledge, but also creative in recognizing and overcoming barriers to becoming more effective learners themselves.

To be effective, teachers must become lifelong learners. Professional staff development can be instrumental in supporting the learning that educators seek, but it must be utilized in a thoughtful manner, keeping in mind that effective teachers must have strong content knowledge, understand child development, and be cognizant of the learning process. Professional staff development must provide today’s educators with planned, comprehensive, and systematic programs designed for long-term systemic change in order to best prepare students for tomorrow. It should not only include the actual training, but also

ensure that participants are ready to accept new beliefs and begin to create classroom “cultures” for learning (Bellanca, 1995; Guskey, 2000; Hassel, 1999).

A school’s instructional capacity is enhanced when its programs for students and staff development are coherent, focused on learning goals, and sustained over time. This learning capacity is affected by policies and programs initiated at the school, district, state, or federal levels. Such was the case in the development of the MLPP and subsequent professional development required of all kindergarten through third grade teachers in Michigan.

Development of the Michigan Literacy Progress Profile

The MLPP is a research-based, instructional system that provides strategies for collecting, documenting and analyzing student data about literacy development through the use of assessment tools, student profiles, and progressive portfolios. This collective information is then used to inform classroom practice and instructional planning.

During the 1998 State-of-the-State address then-Governor Engler said that 51% of the fourth-graders in Michigan could not perform at grade level. He also stated that research conducted by the National Institute of Health indicated that it “is realistic to teach almost 100 percent of our kids to read at grade level if they are screened early for learning difficulties and are taught using effective methods” (Engler, 1998, p. 7). Former governor John Engler challenged Michigan: “Reading by the fourth grade. Best in the nation. No exceptions. No excuses” (Engler, 1998, p. 7).

It was from this forum that the Reading Plan for Michigan was developed, and, with it came the directive to the Department of Education to:

- assure that every child is assessed from the first day of school with the best diagnostic tools to determine reading readiness;
- see that every child is monitored on an ongoing basis to insure reading progress; and
- design a model summer reading program to reinforce reading year-round (State of Michigan Department of Education, 1999).

Due to the urgency of Michigan's reading dilemma, very short, strict time-lines were established for developing this new assessment tool. First, the Early Childhood Literacy Committee was formed, made up of teachers, teacher-educators, researchers, and parents. Their job was to create an effective assessment tool in a short amount of time.

Their first order of business was to research which assessment model would be best suited for our students. In order to do this the committee had to define the guiding principles that would be used to construct the MLPP. Ten research-based principles, developed by the Center for the Improvement of Early Reading Achievement (1998), were used to guide the development of the MLPP and in it's subsequent trainings. They are described below.

1. Home language and literacy experiences are key to the development of key print concepts. Programs that assist families in initiating and sustaining these types of activities show positive benefits in reading achievement.
2. Preschool programs are beneficial for children who do not experience rich learning opportunities in their homes.

3. Letter-name knowledge and phonemic awareness are the two most powerful predictors of later reading success in young children.
4. Successful reading acquisition depends on primary-level instruction that is consistent, well designed, and focused on foundational literacy comprehension and skills.
5. Successful classroom environments provide opportunities for students to apply what they have learned in teacher-guided instruction to authentic reading and writing.
6. Effective instruction takes into consideration the students' cultural and linguistic diversity and reflects this diversity in the use of background information and texts.
7. ALL children benefit from well-rounded systematic instruction and the opportunities to engage in meaningful and relevant reading and writing. Instruction for all students, including those with reading disabilities, should include one-on-one, small-group, mixed-ability groups and like-ability groups.
8. There are four fundamental features of successful programs that lead to proficient reading by the end of third grade: (1) extensive opportunities to read; (2) the acquisition of new knowledge and vocabulary through reading and integrated instruction; (3) instruction on the different types of texts and on author's organization of the text to influence a reader's understanding; and (4) assisting student's comprehension and reasoning about text.

9. Professional development opportunities for teachers are necessary to improve their ability to analyze data, plan instruction, learn and apply effective practices.
10. Schools working together as communities bring all children to high levels of achievement.

Next, several assessment tools from other states were studied and used as resources. Similar documents have been developed in Texas, New York, California, Nebraska, and North Carolina (P. D. Pearson, personal communication, November 10, 2001; D. Birdyshaw, personal communication, November 11, 2001). The MLPP was field-tested during the spring of the 1998-99 school year. According to the Michigan Department of Education (2001), the school program components were designed to:

- continuously monitor the literacy progress in preschool - grade 3 children
- provide diagnostic information about possible learning difficulties
- report learning progress to parents and educators
- provide intervention strategies to parents and teachers
- create a summer school reading program based on identified “best practices” for children needing additional learning opportunities during the early elementary years (p. 2).

The MLPP includes eleven assessments framed within developmental “stages” of literacy development in two categories- milestone assessments and enabling skills assessments. Milestone assessments appraise behaviors that require multiple skills operating in an integrated manner to achieve literacy

success. Milestone assessments include literacy attitudes, oral language, reading fluency, comprehension and writing (C. Fox, personal communication, November 14, 2001). An enabling assessment allows for deeper diagnosis of the foundational skills needed to perform the complex milestone behaviors. Enabling assessments include concepts of print, letter/sound identification, phonemic awareness, sight word/decodable word lists, known words (spelling), and hearing and recording sounds. The assessments are designed to inform instruction. Data information is not intended, nor designed, to compare students, or schools. Used properly, the data information will show individual growth over time in the critical areas of literacy development and allow educators to dig deeper, if necessary, into delayed literacy skill areas, and consequently plan instruction appropriately, and inform parents on how they might support learning at home.

Eight Regional Literacy Training Centers (RLTC) were established across Michigan. During the MLPP field-test (1998), 1500 teachers from across the state were trained and used the assessment tools in a summer school program. Teachers rated the tool as *very useful* in determining how well students were progressing in their literacy development. More importantly, this tool was found to be useful in determining the most effective teaching strategies specific to individual needs. During the summer of 1999, the Michigan Department of Education revised the MLPP according to teacher input and began training educators within the eight established RLTC areas. A weeklong, trainer-of-trainer model or, master-trainers workshop was completed in the summer of 1999. These regional trainers, in partnership with their local intermediate school districts, were responsible for planning and facilitating the professional

development for teachers within each RLTC across Michigan. As of 2001, over 10,000 Michigan educators had been trained in the use of the MLPP assessments.

The eight RLTC Coordinators agreed upon a set of mandatory elements that would make up the new-user MLPP training sessions. All trainings across the state included:

- 35 hours of training;
- History of the MLPP;
- Theoretical information to include
 - developmentally appropriate instructional and assessment practices
 - constructivist learning theory
 - scaffolding
 - zone of proximal development
- Characteristics of developmental literacy stages;
 - Early emergent
 - Emergent
 - Developing
 - Fluent
- Assessment overviews;
 - Purpose, administration, strategies for each literacy stage
 - Analysis of data
 - Instructional strategies to inform instruction
- Classroom management

- Book leveling and
- Parent communication and educational strategies (Rockafellow, personal communication, May 15, 2002).

Delivery of the MLPP training varied across the five RLTC regions.

Generally topics were broken up into three-hour modules. Some trainers delivered these topics using an appropriate mix of lectures, videos, case studies, independent studies, and small group discussions. Other trainers chose to cover this material using primarily lectures and an occasional small group discussion. Although all MLPP training sessions delivered the required topics set forth by the State of Michigan, how those topics were delivered depended on the beliefs and practices of the individual trainers.

The K-3 MLPP had gone through four minor revisions between 1998 and 2002. It was considered to be a “living-document,” in that as errors were identified and adjustments needed, they were made. This caused some confusion among teachers throughout the state. As a result, in 2000, re-training sessions had to be planned and facilitated for teachers who had previously been trained on the MLPP.

Literacy experts such as David Pearson, Scott Paris, and Joan Firestone had some input into the initial development of the MLPP and have reviewed some of the assessment tools. In February 2003, Paris presented a preliminary research summary on reliability and validity of the MLPP. According to Carpenter (personal communication, May 20, 2002) data were collected during 2001 for test/retest reliability and concurrent validity. In 2002 data was collected for predictive and consequential validity. First-year findings indicated that the test-

retest reliability of the MLPP on tasks that assess enabling skills was very high. The test-retest reliabilities of oral reading tasks were lower. This was attributed to the complexity of the skills involved, text variables, and situational variables. Concurrent validity of the MLPP tasks as measured against the Texas Primary Reading Inventory (TPRI) and the Gates-MacGinitie Reading Test (GMRT) were reasonable, although there were many measurement difficulties in the correlations.

Analysis at the conclusion of the first year of data analyses indicated that the MLPP assessments had “acceptable levels of reliability and concurrent validity, comparable to other assessments of young children’s literacy achievements” (S. Paris, personal communication, September 2, 2003).

The scope of the research in the second year was on predictive, consequential, and content validity of MLPP tasks. Conclusions from year two found the MLPP to have “acceptable levels of validity to support its use in schools” (S. Paris, personal communication, September 2, 2003). The MLPP was reported to have positive consequences for teachers, principals, and administrators who all reported that the MLPP was informative and beneficial to parents and students. According to Paris (September 2, 2003), the “MLPP provides valuable diagnostic tools for teachers and can be incorporated into professional development programs to implement systemic reading assessment and instruction among teachers and schools.”

In the past seven years since the introduction of the MLPP, the number of Michigan’s fourth graders scoring below the satisfactory level on the reading portion of the MEAP has varied. In 2002, 43% of Michigan’s fourth graders were

scoring below the satisfactory level. This represents an 8% decrease in those students performing below the satisfactory level. The MEAP test and scoring were changed in 2003. All fourth graders were tested in reading, writing and English language arts (ELA). Scoring changed from low, moderate, or satisfactory to levels 1-4. The levels range from apprentice (level 4) to exceeded standards (level 1). Reading scores in 2003 indicated 25% of the fourth graders were performing at levels 3 and 4 (basic and apprentice levels). In writing, scores were 48% and in ELA, scores were at 40%. We cannot compare past scores with the 2003 scores, but it does appear that Michigan's students are gaining in their reading abilities.

Summary

Higher demands of accountability and student achievement gains have forced a shift in the accepted paradigm of educational instruction from a "stand and deliver" model to a "discuss and discover" model. As Michigan's RLTC's developed a statewide MLPP professional development outline, they had to take into account appropriate professional development models that supported the constructivist approach to learning and teaching. The overall aim of the MLPP training component was to have teachers learn about and begin to accept the constructivist approach to learning, whereby encouraging teachers to realign their personal beliefs and practices. This study focuses on teachers' realignment of their personal beliefs and practices measured by a Literacy Orientation Survey and effects of the training on beliefs and practices.

CHAPTER THREE

Methods

The primary purpose of this study was to determine if teachers held more constructivist beliefs and practices as a result of Michigan Literacy Progress Profile Training (MLPP) in teachers across Michigan. The secondary purpose was to determine if new-user K-3 MLPP training resulted in greater congruence between participants' self-reported theoretical beliefs and their self-reported classroom practices. The third purpose of this study was to determine if different training durations facilitated greater congruence in teachers' beliefs and practices.

Research Design

This exploratory study employed a single group, pre-, post-, and delayed-post test design.

Variables

The dependant variables included teacher constructivist beliefs and practices and congruence of teacher beliefs and practices. The independent variables were MLPP training and time. Teaching education levels and certification were treated as covariates.

Sample population

Site coordinators from each of the participating RLTC's were contacted in order to identify new-user, K-3 MLPP training sessions. A convenience sample was used in that all teachers attending these new-user training sessions were asked to voluntarily participate in this study. The potential sample population consisted of 159 MLPP participants. The sample population ($N = 10$ participants

per location) was selected from participants taking the early childhood MLPP training; therefore, an equal distribution ratio of males and females was not expected. The final sample was comprised of 49 teachers who completed the LOS at each of the 3 data collection points. Participants used the last four digits of their social security numbers as personal identification numbers to facilitate survey matching across the three data collection points and to maintain anonymity. The University Committee on Research Involving Human Subjects approved this study (Appendix A).

Instrumentation

The Literacy Orientation Survey

According to Lenski et al. (1998), the LOS (See Appendix B) was “designed to measure aspects of constructivism as related to literacy acquisition” (p 226). This survey enabled teachers to examine their beliefs about teaching literacy and their actual classroom practice. The LOS consists of 30 statements, 15 that determine belief score and 15 that determine practice score. Belief items included questions 1, 3, 5, 7, 8, 11, 12, 13, 19, 21, 22, 24, 26, 27, and 29 and were scored on a 1 (strongly disagree) to 5 (strongly agree) likert scale. Sample questions include: *Students should be treated as individual learners rather than as a group; Teachers should read aloud to students on a daily basis; and Subjects should be integrated across the curriculum.* According to LOS models, questions 1, 3, 11, 12, 19, 21, 27, and 29 were reverse coded. Total sub-scores closest to 51 indicated beliefs similar to a traditional teacher, those closest to 61 indicated beliefs similar to an eclectic teacher, and those closest to 69 indicated beliefs similar to a constructivist teacher.

Teaching practice items included questions 2, 4, 6, 9, 10, 14, 15, 16, 17, 18, 20, 23, 25, 28 and 30. According to LOS models, question 28 was reverse coded. Sample questions include: *When students read text, I ask them questions such as "What does it mean?"*; *I use a variety of prereading strategies with my students*; and *At the end of the day, I reflect on the effectiveness of my instructional decisions*. Teaching practice sub-scores closest to 51 indicated practices similar to a traditional teacher, those closest to 56 indicated practices similar to an eclectic teacher, and those closest to 63 indicated practices similar to a constructivist teacher.

Levels and definitions of teaching practices include the following:

1. Traditional teacher- uses traditional instructional methods such as basal reading instruction, employs primarily direct instruction, and delivers information to students. [Total LOS score of 90-110]
2. Eclectic teacher- combines some traditional and some constructivist instructional methods, uses conflicting instructional practices such as expecting problem-solving strategies from students during times of conflict and at other times coercing conflict management; and is unsure of their knowledge of how children learn. [Total LOS score of 111-125]
3. Constructivist teacher- uses primarily integrated and holistic instruction and views students as using prior knowledge to construct meaning [Total LOS score of 126-145] (Lenski, et al. 1998).

The LOS was selected based on its ability to monitor changes in teachers' beliefs and practices over time. It was developed as a self-report survey, which was conducive to this study due to the different time frames of the training

schedules and the distance between the training locations across Michigan. The LOS has wide-ranging implications for continuing professional development in that it provides for teacher self-reflection on their beliefs and practices.

During the original development of the LOS, Lenski used a Test-Retest Cronbach Alpha reliability coefficient to determine whether or not the instrument was reliable. The test-retest reliability coefficient was calculated at .93, sufficient to be determined reliable. The construct validity of the LOS was determined based on defining the principles of constructivism. An item analysis was conducted and items that met the established guidelines were retained for this level of survey development:

(1) 80% of reviewers agreement on each question; (2) it was identified correctly by 80% of the reviewers as a belief or a practice; and (3) the reviewers reported their confidence level about their choices to be 2.5 or higher (Lenski, et al., 1998, p. 225).

A confirmatory factor analysis was conducted to determine which items clustered around the ten principles; fifteen belief statements and fifteen practice statements, scoring .80 or higher, were retained (Lenski, et al., 1998). Criterion validity was determined by designing a process verification models to ascertain whether teachers' responses about practice on the LOS reflected their actual work in the classroom. Results were significant at the .01 level ($F=66.01$). Based on results of these analyses it was determined that the rules for reliability and validity had been satisfied (Lenski, et al., 1998; StatSoft, 2003).

Calculating total LOS and congruence scores for this study. A total LOS score was calculated from the sum of the beliefs subscale and the practice subscale. Higher total Literacy Orientation Survey (LOS) scores indicate beliefs and practices that align with the constructivist view and the congruence score between the belief and practice subscales indicate the degree of match between teachers' self-reported philosophical beliefs and their self-reported practices. Higher scores reflect a constructivist teaching philosophy and practice. The difference (indicating degree of congruence) between belief and practice scores should be small. If belief scores, at any level, are higher than practice scores, teachers have not yet found a way to incorporate constructivist beliefs into their classrooms. If practice scores are higher than beliefs scores, at any level, then teachers should think about why they make the instructional decisions they do; that is, what beliefs are guiding their classroom practices. A target belief score is assumed to be 69 and a target practice score is assumed to be 63 (the targets scores on each subscale). In this study, the two subscale scores were adjusted according to the following, (belief score - 69 = |adjusted belief score|) and (practice score - 63 = |adjusted practice score|). The distance between |adjusted subscale belief score| minus |adjusted subscale practice score| equaled congruence score.

This study used three data sets from repeated surveys. Within each survey, fifteen questions were used to calculate belief scores and fifteen questions were used to calculate practice scores. To measure reliability of the LOS across the three surveys used in this research, a Cronbach's Alpha was calculated.

Reliability coefficients for the LOS teacher beliefs ($\alpha = .72$) and teacher practices scales ($\alpha = .71$) were high.

Data Procedures

Initial contact was made with the eight Regional Literacy Training Center (RLTC) Coordinators to explain the research, survey information, and to solicit permission to conduct this study in their regions. This contact was made via personal visits and phone conversations. Two training regions could not participate. Region seven was one year ahead of the rest of the state in their professional development efforts and was conducting school-based trainings instead of RLTC-based trainings. Due to the time constraints of the RLTC personnel in gathering the necessary information for this study, they chose not to participate. Region one did not receive their professional development funding until late January 2002. This region would have implemented a moderate training duration. Because the survey protocol required waiting 60-days from the last training session to participate in the final survey, it was determined that it was too late to include them in this research as data collection stopped when school ended. The other six regions agreed to participate.

A second contact was made with the actual MLPP trainer(s) who conducted the training sessions in order to convey the same research information and solicit further participation. Participant packets (Appendix B) were assembled, and included an introductory letter, informed consent letter, teacher profile information, and the LOS survey. These packets were sent to all the trainers. Each MLPP training session had between 10 and 36 participants. On the first day of the MLPP training session, trainers explained briefly the purpose of this

research project and asked all participants to volunteer to take the survey. Survey packets were handed out to all participants who initially volunteered. Research participants were asked to complete participation consent forms, teacher profile information, and the pre-training survey. The MLPP trainer collected and returned the surveys to this researcher using a self-addressed stamped envelope.

"Post-training surveys" were handed out to all participants on the final day of their MLPP training. The *"post LOS survey"* was identical to the *"pre-training survey."* Post-profile information included questions on what the participants experienced in the training. MLPP trainers collected the surveys and returned them using a self-addressed, stamped envelope. All participants listed their e-mail addresses and/or their mailing addresses in the collected demographic information. This information was then used to notify participants to take the *"60-day post survey."* According to Guskey (2000), it is critical to provide time during and after professional development to reflect, process, and practice new information. It takes an extended period of time for educators to enhance their professional knowledge and refine their skills. Showers (1987), stated, "For a complex model of teaching (to reach implementation), we estimate that about 25 teaching episodes during which the new strategy is used are necessary before all the conditions of transfer are achieved" (p. 86). This repeated practice is necessary to enable and achieve teachers' full integration of the new strategy into their teaching repertoire and to assure that the new approach will not be lost due to disuse. There needs to be at least 25 follow-up sessions for real transference of a new skill to take place. Most staff development programs do not offer this degree of application: follow-up is critical to the integration of the new knowledge

or skill (Butler, 1992). Taking into consideration the 10-month school year and the fact that several RLTC's did not complete their final sessions until mid-April, a 60-day wait period was selected. This allowed all survey data to be collected before teachers left for summer break.

All participants were given an option to take the "*delayed-post LOS survey*" on the Internet if they desired. An Internet address was provided during one of the last MLPP training sessions. The time-frame between the first training session and the last training session varied from four days to seven months, depending on the regional literacy training area through which training was received. Therefore, data collection took place between August 2002 and June 2003.

The "*delayed-post survey*" was taken approximately sixty-days following the participants' final training session. Participants were given a choice of taking the "*delayed-post survey*" via the Internet or completing a hardcopy sent to them with a self-addressed, stamped envelope. Reminder e-mails and/or letters were sent to all participants according to the type of address provided. In seven cases where final surveys were not returned, data were collected via the telephone. A calendar and participant database was developed to keep track of each RLTC and their final survey dates. Each participant was to complete a total of three surveys. The same survey information was collected each time. All 49 participants in the final sample population completed surveys at all three-time points: pre-, post-, and delayed-post. The last four digits of each participant's social security number were used to match *pre-*, *post-*, and *delayed-post training* surveys. Sixty days following the completion of each MLPP training session,

participants either received the 60-day “*delayed-post*” survey by U.S. mail, complete with a self-addressed, stamped envelope, or were electronically directed to a web address where the survey could be completed electronically.

Completed surveys were collected from all participants. First, second, and third surveys were matched by identification numbers and sorted into training regions. At the completion of the matching and sorting process, surveys were compiled in a notebook and entered into a database.

As mentioned earlier, each MLPP training session had between 10 and 36 participants. The number of participants varied for each training session due to individual RLTC’s training models. Some regions allowed participant’s choices on attending various training sessions on specific topics, while other regions had strict attendance policies requiring make-up classes for absences. Simply stated, some participants were absent from the MLPP training sessions when the surveys were distributed. Therefore, several identification numbers had only two out of three surveys returned. To accommodate varying attendance policies throughout the data collection times, the first ten identification numbers to return all three surveys created the data pool for each region.

The first ten participants from each regional participant pool that returned their completed sets of surveys were then added to the data set. Difficulty was encountered when collecting the second surveys from two of the RLTC regions. These two RLTC’s collected the participants’ post-surveys and mailed them through the United States Postal Service. These survey packets were never received. A lost mail search was filed but this researcher was informed that due to the heightened postal security following the 9/11 attacks, that these envelopes

had most likely been tagged as suspicious mail and destroyed. Contact was made with participants in an attempt to have them retake the post survey. Nine of the ten participants in region five complied. This data set was included in the statistical analysis of this research. Only 4 of the post-surveys were received from region one at the conclusion of the data collection portion of this research.

Therefore, this region was deleted from the study, reducing the total number of participants to 49. Due to the difficulty collecting the last set of surveys, seven were completed via telephone interviews with participants.

Data Analyses

The primary purpose of this study was to determine if teachers held more constructivist beliefs and practices as a result of the MLPP training in teachers across Michigan. The secondary purpose was to determine if MLPP training resulted in greater congruence between participants' self-reported theoretical beliefs and their self reported classroom practices. The third purpose of this study was to determine if different training durations facilitated greater congruence in teachers' beliefs and practices. Participant demographic information was reported across the five training locations including participants' education, years of experience, and specific certifications. Total LOS means scores were also reported in the demographic information.

Participants' total LOS scores for beliefs and practices, as well as belief and practice sub scores were measured repeatedly over three intervals- *pre-*, *post-*, and *delayed-post* training. The dependant variables in this study were teachers' constructivist beliefs and practices (LOS total scores), and congruence of beliefs and practices. The independent variables were MLPP training and time. The

covariates were teachers' education levels and certification. Dependant variables were measured using interval data, while the covariates were categorical. Repeated measure multiple analysis of covariance (MANCOVA) is commonly used when determining what would happen if all cases scored equally on the covariates, so that the effect of the factors over and beyond the covariates can be isolated. A MANCOVA is used to see the main and interaction effects of categorical variables on multiple dependant variables. In this study, multiple scores of teachers' total LOS scores and total congruence scores were used as the dependant variables. The multiple independent variables were MLPP training and time (Gay & Airasian, 2003; Garson, 2005).

A repeated measure MANCOVA was used to address the first research question regarding whether or not teachers held more constructivist beliefs and practices as a function of the MLPP training. This repeated measure MANCOVA used time and MLPP training as the independent variables and the repeated measures of total LOS scores as the dependant variables. Further, it was possible that different educational backgrounds and specialty certifications of teachers' may have confounded the effects of different trainings. In order to filter out these effects, education level and certification were included in the statistical model as covariates.

Question two addressed whether MLPP training resulted in greater congruence between teachers' self-reported theoretical beliefs and their self-reported classroom practices. For this research question, three congruence scores were obtained repeatedly over the pre-, post-, and delayed-post time points. In order to determine if MLPP training had any impact on these repeated

congruence measures after taking into account subjects' education level and certification, a repeated measure MANCOVA was performed using MLPP training and time as independent variables, repeated congruence measures as dependant variables, and education level and certification as covariates.

Question three addressed whether the different training models facilitated greater congruence in teachers' beliefs and practices. In order to determine if the three different MLPP training models (short, moderate, or long) had any impact on mean congruence scores after taking into account subjects' education level and certification, a repeated measure MANCOVA was performed using the three MLPP training durations (sorted by duration type: long; short; and moderate) and time as independent variables, repeated congruence measures as dependant variables, and education level and certification as covariates.

Missing data

According to the National Center for Education Statistics (Kim, 2003; NCES, 1998) missing data are common problems in all survey research. The most frequently used method to compensate for missing items is imputation. Imputation consists of replacing the missing data item with a value. In practice, imputed values are often treated as if they were true values. According to the NCES, this procedure is appropriate for developing estimates, means, and proportions. Missing data in this research was treated with the hot-decking imputation method. Hot-decking is a real-donor method that gives a certain minimum quality level for imputations. In hot-decking, imputed values are selected from respondents who are similar with respect to a set of supporting values (Laaksonen, 1999; Pigott, 2003). The user specifies matching criteria in

the form of variables within the dataset, in order to locate 'donors' from whose observed data that imputed value is subsequently drawn. Respondents and non-respondents are sorted into a number of imputation classes according to a user specified set of auxiliary variables. Missing values are then replaced with values taken from matching respondents (Laaksonen, 1999; Pigott, 2003). In this study there were twelve instances where imputed values were necessary out of a total of 4410 variables. Variables were matched according to the region where training took place, degree held, certification, and years of experience. Pre hot-decking Cronbach's Alpha scores are listed in Table 1 below. Changes in mean scores were quite minimal.

Table 1 Pre and Post Hotdecking

		Pre Hot-decking	Post Hot-decking
Pre Belief	N	49	49
	Excluded	1	0
	M	.71	.72
Post Belief	N	49	49
	Excluded	0	0
	M	.74	.74
Delay Post Belief	N	49	49
	Excluded	0	0
	M	.71	.71
Pre Practice	N	49	49
	Excluded	1	0
	α	.80	.79
Post Practice	N	49	49
	Excluded	2	0
	M	.72	.70
Delayed Post Practice	N	49	49
	Excluded	3	0
	M	.63	.63

Limitations of study

1. Due to the limited number of participating training regions, 5 out of 8 regions, along with the limited number of individual teacher participants,

49, generalizations across the whole of Michigan could not be made.

Statistical power was affected by the small sample size.

2. Several individual questions were left blank by teachers to indicate an answer of 'not applicable.' The imputation of these questions was also a limitation.
3. A pre-, post-, and delayed post-test model was used in this study. Although the LOS was developed as a self-report survey, some sensitization may have occurred between completing the first survey and completion of succeeding surveys.
4. Delayed post surveys were given 60-days following the last day of each training. The sixty-day delay period was chosen based on the varying MLPP training schedules and the ten-month school calendar. The time frame of the sixty day delayed post survey was not necessarily selected based on theory.
5. Each of the five RLTC regions followed the prescribed training outline yet individual regions were able to set their own training schedules. In addition, individual trainers were able to deliver the training based on their own beliefs and practices. Therefore across the five regions, fidelity of the training delivery may not have been consistent.

CHAPTER FOUR

The primary purpose of this study was to determine if teachers held more constructivist beliefs and practices as a result of Michigan Literacy Progress Profile Training (MLPP) in teachers across Michigan. The secondary purpose was to determine if new-user K-3 MLPP training resulted in greater congruence between participants' self-reported theoretical beliefs and their self-reported classroom practices. The third purpose of this study was to determine if different training durations facilitated greater congruence in teachers' beliefs and practices. This chapter will present a summary of demographic information and analysis of research questions.

Demographic Information

Participants' demographic information on education, teaching experience, and certification are presented in Table 2. All participants held at least a bachelor's degree. All participants held an elementary certificate, and had an average of 1-4 years teaching experience.

Table 2 *Teacher Education, Experience Levels, and Type of Certification*

Participant Demographics		Frequency	Cumulative Percent
Education			
	Bachelors	33	70.2
	Masters	10	91.3
	Masters +	3	97.9
	Ph.D.	1	100
	Total	47	
Missing	Data	2	
Total		49	
Teaching Experience			
	1-4 years	28	
	5-10 years	7	
	11-15 years	5	
	16-20 years	3	
	21-30 years	2	
	30 + years	1	
	Total	46	
Missing	Data	3	
Total		49	
Certification			
	Elementary (ELE)	31	97.9
	Early Childhood (ZA)	15	31.9
	Special Education (SP)	1	100
	Total	47	
Missing	Data	2	
Total		49	

Results

Question 1 addressed whether teachers held more constructivist beliefs and practices as a result of MLPP training. A repeated measure MANCOVA indicated that MLPP training across the five different training locations had no significant effects on teacher beliefs and practices, Wilks' Lambda $F(2, 39) = .61, p = .55$, partial $\eta^2 = .03$. Additionally, participants' education and certification levels were found to have no interaction effects on their total LOS scores. Wilks' Lambda for education, $F(2, 39) = .31, p = .74$, partial $\eta^2 = .01$ and certification type, $F(2, 39) = .48, p = .63$, partial $\eta^2 = .02$ on total LOS scores. Likewise, there were no significant between subject effects on MLPP training and teacher beliefs and practices (Table 3).

Between subject partial eta squared is reported in Table 3. A partial eta squared near .00 indicates that the mean differences between MLPP training and total LOS scores were small. Because absolute values were used for all calculations in this study, positive and negative effects were not reported.

Table 3 *Total LOS scores with covariates of education and certification*

Between Subject						
Source	SS	<i>Df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	partial η^2
Intercept	61169.62	1	61169.62	248.06	.000	
Education	349.72	1	349.72	1.42	.24	.06
Certification	.17	1	.17	.001	.98	.00
Location	1663.61	4	415.90	1.69	.18	.14
Error	9863.79	40	246.60			

Although not statistically significant, the following patterns were noted in the data (Table 4). Total mean LOS scores ranged from 116 to 128 points over the three measurement points. Mean scores indicated that locations one and two (moderate training duration) and locations four and five (long training duration) began and ended in the eclectic range of beliefs and practices, with total scores ranging from 111 to 125 points. Mean score indicated that location three (short training duration) began and ended in the constructivist range of beliefs and practices, with scores ranging from 126 to 145 points. Mean total LOS scores indicated that Locations 1, 2, 3, and 4 had scores that were positively influenced by training, increasing an average of 2.5 points of total scores between pre- and post- intervals. Location 5 demonstrated a drop in mean score of .56. Sustained change in belief and practice scores at the delay-post measurement among the training locations varied. Locations 1, 3, and 4 demonstrated decreases in their LOS mean totals by an average of 1.9 points, indicating sustained change in beliefs and practices were not maintained. Locations 2 and 5 increased their

delayed-post scores an average of 1.3 points indicating mean LOS totals were maintained over the three measurement intervals. The mean LOS totals for all five locations showed little variance in scores, maintaining scores in the eclectic range of beliefs and practices across the research intervals and training sites. Overall, only location 2, which was moderate in length, had total mean LOS scores that increased slightly over the three measurement intervals. They began their MLPP training functioning in the eclectic range, 121.10 points, and moved slightly upward to 123.80 points, toward constructivist beliefs and practices, an increase of 2.7 points. At the delayed-post training the mean score had moved to the high end of the eclectic range at 125.30 points, increasing another 1.5 total points.

Table 4 *LOS Mean Totals by Location*

Total by location		Total-pre	Total-post	Total-dpost
Location 1 (Moderate)	<i>M</i>	118.70	119.00	116.00
	<i>N</i>	10	10	10
	<i>SD</i>	13.82	11.41	9.65
Location 2 (Moderate)	<i>M</i>	121.10	123.80	125.30
	<i>N</i>	10	10	10
	<i>SD</i>	12.22	9.93	7.12
Location 3 (Short)	<i>M</i>	126.00	128.30	126.30
	<i>N</i>	10	10	10
	<i>SD</i>	8.14	7.39	8.98
Location 4 (Long)	<i>M</i>	116.40	120.10	119.40
	<i>N</i>	10	10	10
	<i>SD</i>	12.47	12.33	8.88
Location 5 (Long)	<i>M</i>	117.89	117.33	118.44
	<i>N</i>	9	9	9
	<i>SD</i>	6.23	8.32	7.56
Total	<i>M</i>	120.06	121.80	121.14
	<i>N</i>	49	49	49
	<i>SD</i>	11.12	10.43	9.11

Examination of mean LOS totals over time seemed to suggest that the five MLPP training locations, which included one short duration model, two moderate duration models, and two long duration models, had similar scores for all participants and scores moved in the same upward direction regardless of training duration. Total LOS mean scores from pre- to post- measurements show slight increases that appear to show positive movement towards constructivist beliefs and practices. Total LOS mean scores from post- to delayed-post measurements show slight decreases that illustrate a loss in the previous gains in constructivist beliefs and practices. Total mean LOS scores across the three measurement time points illustrated very small changes in means scores across

time and training models. Statistically, results of the repeated measure MANCOVA indicated that there was no significant change of means overtime and among the different training durations.

Teacher experience was analyzed based on research that indicated novice teachers (1-4 years of experience) might lack the experiences, resources and management skills necessary to implement what they have been taught in their pre-service education. Among the participants in this study, 61% were at the novice level of experience. A t-test was completed on novice teachers and those with more than five years of experience. Total LOS scores did not show any significant differences between teachers with less than five years teaching experience (N=27) and those with five or more years of experience (N=18) (Table 5).

Table 5 *Novice and Experienced Teachers Total LOS Scores*

	<i>t</i>	<i>df</i>	<i>P</i>
Pre-LOS	-.57	43	.57
Post-LOS	.58	43	.56
Delayed Post-LOS	-.33	43	.74

Question 2 addressed whether there was greater congruence in teachers' self-reported teaching beliefs and self-reported teaching practices as a function of MLPP training. Correlation between the pre congruence measure and post congruence measure was significant at the .01 level. Correlation between the post congruence measure and delayed post congruence measure was significant at the .05 level. Across the five different training locations, MLPP training had no significant effects on teachers' congruence scores. Congruence scores were

measured by the belief and practice sub-measures of the LOS, covarying teacher education and certification. Training had no effect on bringing teachers' beliefs and practices in closer alignment according to a repeated measure MANCOVA of Wilks' Lambda $F(2, 39) = .96, p = .40, \text{partial } \eta^2 = .02$. Additionally, participants' education and certification levels were found to have no interaction effects on their congruence scores according to the results for the covariates, education, Wilks' Lambda $F(2, 39) = .13, p = .88, \text{partial } \eta^2 = .09$ and certification Wilks' Lambda $F(2, 39) = 2.71, p = .08, \text{partial } \eta^2 = .08$. Across the five RLTC training locations, the role of MLPP training on congruence scores indicated no interaction, Wilks' Lambda $F(8, 78) = 1.14, p = .35, \text{partial } \eta^2 = .08$.

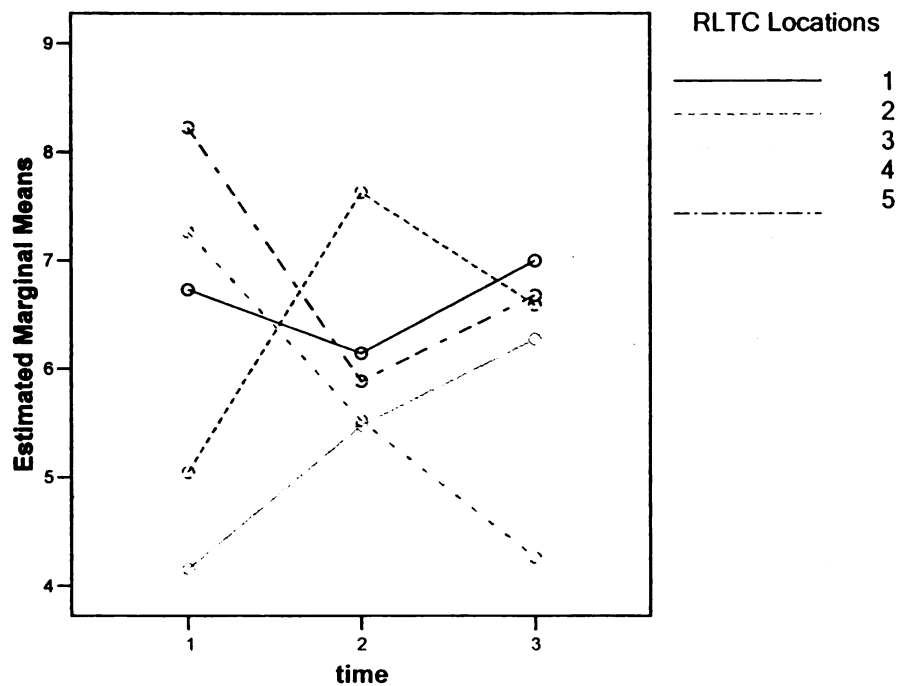
The between-subject analysis yielded a significant difference in mean congruence scores due to teachers' education ($p < .05, \text{partial } \eta^2 = .00$). Low congruence scores indicated closer congruence between teachers' beliefs and practices. Therefore, across the RLTC's, teachers with more education had greater congruence scores than those with bachelor's degrees (Table 6).

Table 6 *Mean Congruence Scores by Education*

Education		Congruence Pre-measure	Congruence Post-measure	Congruence delayed-measure
Bachelor	Mean	<i>6.88</i>	<i>7.24</i>	<i>6.85</i>
	N	<i>33</i>	<i>33</i>	<i>33</i>
	SD	<i>4.87</i>	<i>4.98</i>	<i>5.53</i>
Master	Mean	5.40	2.50	4.80
	N	10	10	10
	SD	3.41	2.12	2.39
Masters +	Mean	2.75	6.25	4.00
	N	4	4	4
	SD	4.19	5.56	3.56
Total	Mean	6.21	6.15	6.17
	N	47	47	47
	SD	4.63	4.89	4.94

The plot figure of estimated marginal means of congruence scores arranged by the different RLTC training locations (Figure 3) demonstrates interaction of mean congruence scores. Mean congruence scores at the pre-measure ranged from 4.0 to 8.56, a mean difference of 4.56 points. Statistically, there were no differences in pre LOS scores at the outset of the training across locations. At the delayed-post measurement, mean congruence scores ranged from 4.5 to 7.0, a mean difference of 2.5 points. Between the pre-measure and the delayed-post measure there was a decrease in the mean congruence scores indicating greater congruence of teachers' beliefs and practices among the five locations.

Figure 3 *Estimated Marginal Means of Congruence Scores*



A t-test was completed on novice teachers' and experienced teachers' total congruence scores to determine if there were any significant differences. . Total congruence scores did not show any significant differences between teachers with less than five years teaching experience (N=27) and those with five or more years of experience (N=18) (Table 7).

Table 7 *Novice and Experienced Teachers Total Congruence Scores*

	<i>t</i>	df	<i>P</i>
Pre-congruence	.65	43	.51
Post- congruence	.59	43	.56
Delayed Post-congruence	1.36	43	.18

Although the analysis of the repeated measure MANCOVA found no significant evidence, the following patterns were found. Table 8 summarizes the means and standard deviations for total congruence scores by RLTC locations. Congruence scores represent the absolute difference between |beliefs scores| minus |practice scores| for each of the three measurement intervals.

Table 8 *Summary for congruence scores by location*

		Congruence -pre	Congruence -post	Congruence -dpost
Location 1 (Moderate)	<i>M</i>	6.30	5.8	7.40
	<i>N</i>	10	10	10
	<i>SD</i>	4.62	4.87	5.06
Location 2 (Moderate)	<i>M</i>	4.50	7.00	6.30
	<i>N</i>	10	10	10
	<i>SD</i>	4.25	3.92	4.17
Location 3 (Short)	<i>M</i>	8.20	6.70	4.50
	<i>N</i>	10	10	10
	<i>SD</i>	5.61	5.54	3.06
Location 4 (Long)	<i>M</i>	4.00	5.30	6.20
	<i>N</i>	10	10	10
	<i>SD</i>	2.94	5.29	5.47
Location 5 (Long)	<i>M</i>	8.56	6.22	6.67
	<i>N</i>	9	9	9
	<i>SD</i>	4.73	4.98	4.87
Total	<i>M</i>	6.27	6.20	6.20
	<i>N</i>	49	49	49
	<i>SD</i>	4.73	4.98	4.87

Summary information indicated that the mean congruence scores for all five locations ranged from |4.0| to |8.56| points across the three measurement-time intervals. A decrease in congruence scores indicated closer alignment of beliefs and practices. Locations 1, 3, and 5 had mean congruence scores from pre- to post-measurements with patterns suggesting a positive effect on congruence

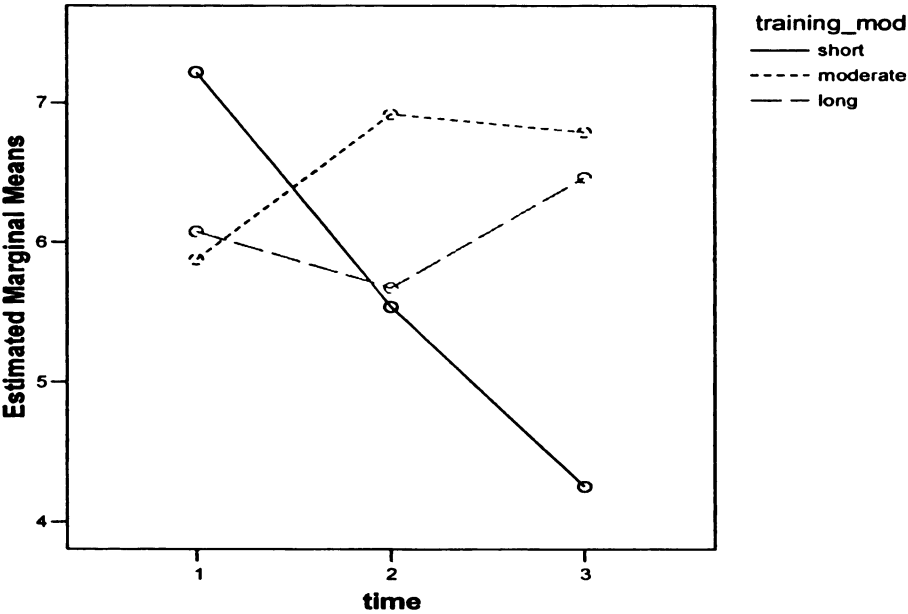
scores, with an average decrease of |1.45| points. Mean congruence scores from post- to delayed-post measurements showed that congruence was not maintained over time. Locations 1 and 5 increased their scores by an average of |1.5| points. Location 3 was the only location to sustain decreased congruence scores over the duration of this study. A decrease of |1.5| points from the pre- to post-measurement, and a decrease of |2.2| points from post- to delayed-post measurement showed that training had a sustained effect in Location 3 on mean congruence scores.

Question 3, addressed whether the three different training durations (short, moderate, or long) facilitated greater congruence in teachers' beliefs and practices. A repeated measure MANCOVA indicated the different training durations of short, moderate or long had no significant effects on congruence scores according to a Wilks' Lambda $F(4, 82) = .98, p = .44, \text{partial } \eta^2 = .10$. Within each training duration, teachers' education levels had no significant interaction effects on their congruence scores according to a Wilks' Lambda of $F(2, 41) = .038, p = .96, \text{partial } \eta^2 = .05$. Teachers' certification levels were found to have marginal interaction effects on their congruence scores according to a Wilks' Lambda $F(2, 41) = 3.01, p = .06, \text{partial } \eta^2 = .10$. The univariate effect yielded significant results for the covariate of education ($p = < .05, \text{partial } \eta^2 = .02$) and training duration on congruence scores.

Examination of the mean congruence scores over time (Table 8) showed that the short MLPP training model had congruence scores that moved closer in congruence across the measurement time points. Whereas the two moderate and two long training models had congruence scores that remained similar or

increased. The plot figure of estimated marginal means of congruence by training duration (Figure 4) demonstrated interaction of mean congruence scores across the three different training models (short, moderate, and long). Estimated marginal means of congruence by training duration are given across the three measurement-time periods.

Figure 4 *Estimated Marginal Means Of Congruence By Training Duration*



CHAPTER FIVE

Discussions

The primary purpose of this study was to determine if teachers held more constructivist beliefs and practices as a result of Michigan Literacy Progress Profile (MLPP) training in teachers across Michigan. The secondary purpose was to determine if MLPP training resulted in greater congruence between participants' self-reported theoretical beliefs and their self-reported classroom practices. The third purpose of this study was to determine if different training durations facilitated greater congruence in teachers' beliefs and practices. This chapter is organized into three sections: discussions of results, conclusions, and recommendations.

The first question addressed in this study was whether teachers held more constructivist beliefs and practices as a result of receiving MLPP training. Results of analysis indicated that the MLLP training had no significant impact on teachers' constructivist beliefs and practices over time. According to researchers (Castellano & Datnow, 2000; Lenski et al., 1998; Simmons et al., 1999), the process of developing and changing teachers' beliefs and practices are gained through their personal experiences and their attitudes towards an innovation, i.e. the new MLPP assessments including the mandatory training. Over the course of their careers, teachers are introduced to a multitude of new teacher strategies, new curriculum programs, and/or new assessment programs. Usually with each new program or strategy, come new professional development programs. Sometimes the new training is voluntary or sometimes, as in the case of the MLPP, training was mandatory. Teachers' past experiences with new programs

and trainings have an influence on how accepting they will be towards another new program. Over the course of a teacher's career, they may change how they think and how they approach their classroom practices based on new research information or new professional development they have encountered. Or they may choose to simply attend the mandatory professional development, while maintaining the attitude of "this too shall pass" similar to other programs that have come and gone in the past.

This study used the MLPP professional development as an independent variable and measured teachers' constructivist beliefs and practices over the course of three measurement-time periods. Teachers' preconceptions about the implementation and mandatory MLPP training may have been influential in the long-term effects of the training. Changes in theoretical orientations will not occur immediately, especially for teachers who have become accustomed to their current norms of classroom practices (Arisian, 1997). As mentioned above teachers' may have entered their MLPP training believing that this new program would be short lived, as so many innovations that have come and gone before the MLPP. Also the implementation of the MLPP strategies required teachers' to possibly change how they currently delivered information to their students. In order to manage students, curriculum, and administering the MLPP assessments, a center-based approach to learning was recommended during MLPP training. If this approach went against some teachers' current beliefs and practices, then individual change may be difficult. Accepting change is an individual process and how one progresses through the process of change depends on their current set

of beliefs and practices and how accepting they may be towards the new innovation.

According to research (Guskey, 2000; Hassel, 1999), the type and duration of professional development training has an effect on sustained change in beliefs and practices. MLPP training occurred in three-duration formats: short, moderate, and long. Each Regional Literacy Training Center (RLTC) implemented the training according to their districts' needs. The MANCOVA results for questions one and two found that MLPP training had no effect on teachers' constructivist beliefs and practices or congruence of teachers' beliefs and practices. Additionally, question three found the training duration had no effect on congruence of teachers' beliefs and practices. According to research (Garet, 2001; Kervin & Turbill, 2003), quality professional development is both sustained over time and involves a substantial number of hours. All of the RLTC's had MLPP trainings that included 35-hours of instruction. What differed across the training models was the duration of time between dates of instruction. The long models, which were spread out across seven-month periods had several weeks in between instructional sessions. The time span between each instructional session allowed teachers to process new information and practice new strategies, then return to training to discuss their trials and errors in a safe environment. The short model, on the other hand, had all instructional sessions conducted in a six-hour per day, one-week training format. This model included 35-hours of instructional training but did not allow teachers time to process information or practice new strategies with any follow-up support.

The common formats for all training models, regardless of the duration were considered to be traditional. Traditional professional development training has been defined as training which occurs outside of teachers' classrooms, involves a leader or person with expertise, and participants attend at a pre-selected time (Garet, et al., 2001). Traditional (Guskey, 2000; Garet, et al., 2001) professional development practices have been widely criticized as being ineffective in providing teachers with sufficient time, activities, and content necessary for increasing teachers' knowledge or for fostering meaningful changes in classroom practices (Garet, et al., 2001).

Mean LOS scores showed patterns of constructivist beliefs and practices increasing from pre- to post-LOS measurements. Gains in constructivist beliefs and practices were lost at the sixty-days delayed post-measurement, where no continual MLPP support efforts were in place. For mean congruence scores three of five RLTC's had patterns showing gains in congruence scores from pre- to post-measurements yet at the 60-day delayed measurement gains were, again, lost.

Literature presented by Garet, et al., 2001 and Shields, Marsh, & Adelman, 1998, indicated that traditional approaches to professional development does foster teachers' *awareness* or *interest* in expanding skills, but are insufficient in altering what teachers teach or how they teach. This statement is based on the fact that traditional professional development does not provide sufficient amounts of time for training and lacks continued follow-up support after training concludes. Although findings from this study indicated MLPP training had no effect on teachers' constructivist beliefs and practices and congruence scores,

the mean LOS and mean congruence score patterns discussed earlier, support the premise that traditional professional development does foster *awareness* in expanding teachers' skills as indicated by the increases in LOS scores and congruence scores from the pre- to post-measurement results. The aforementioned statement is also supported by the loss of prior gains in mean LOS and mean congruence score patterns at the post- to delayed post-measurement scores indicating a lack of sufficient time and follow-up support after training is discontinued.

Statistical analysis did not find that significant changes had occurred in total mean LOS scores over the three measurement time points. Examination of mean scores from each of the training locations did indicate that there was a slight change toward constructivism in beliefs and practices from pre-training to post-training. The fact that this constructivist trend was not maintained through the delayed post-measurement reinforces the importance of support over time to assimilate change in teacher behaviors so that complete transference of what is learned in training can be put into practice in the classroom setting. Learning transfer is essential for successful increase of constructivist change. According to Fogarty (2002), classroom applications including knowledge, demonstration of behaviors, and transference of work occurs 90% of the time when coaching *in* the work setting takes place on a consistent basis. Individuals are constantly taking in new information and trying to make sense of it within their schemata of prior understanding. To the extent that new information is consistent with his or her old understandings, the new information is assimilated into the existing schemata. On the other hand, if new information is in conflict with an individual's existing

schemata, then their brain will do one of three things. It may reject the new data by ignoring it or rejecting its application. It may alter one's understanding to match the expected interpretation. Or the new information may create cognitive conflict that is resolved by accommodating the old schemata, or beliefs, to fit the new information (Paden, n.d.).

The second question addressed whether there was greater congruence in teachers' self-reported beliefs and practices as a function of receiving the MLPP training. Results of the repeated measure MANCOVA found no significant training effects on teachers' congruence scores. The between-subject analysis indicated there was evidence of a significant difference in congruence scores among teachers based on education level. Teachers with master's-plus education levels had the greatest congruence between beliefs and practices, followed by teachers' with master's degrees. Teachers with bachelor's degrees had the lowest congruence between beliefs and practices.

One reason for the educational significance can be demonstrated in the demographic profile of the subjects. Among those who completed all of the surveys, 72% held bachelor's degrees and 98% held elementary certification with 32% of those holding an additional certification in early childhood education.

Research (Cleary & Groer, 1994; Professional Development Continuum, n.d.) has found that professionals move through a developmental continuum in which they progress from novice to expert as they gain experiences within the context of their work settings. As novice teachers move through the continuum towards becoming expert teachers they display three aspects of performance. First, the teacher's working pattern shifts from dependence on abstract principles

to concrete past experiences. Second, as they become more proficient they shift from seeing situations as discreet, unrelated parts to seeing situations as part of a whole. Third, as they perfect their skills their position shifts from detached observer to involved performer.

An explanation for the lower congruence scores for teachers with bachelor's degrees could be the fact that 61% of the participants had one to four years of experience. Novice teachers may lack the experiences, resources and management skills necessary to implement what they have been taught in their pre-service education. It is the time a teacher spends engaged in actual teaching that allows their working patterns to shift from dependence on abstract principles to dependence on their knowledge based on past teaching experiences.

Teaching skills are gradually acquired and "trial and error" is necessary (Kervin & Turbill, 2003; McMullen, 1999). Kervin & Turbill examined teachers early in their careers and their need for ongoing professional learning and suggested a model of training for beginning teachers which allowed them to work through trial and error while functioning in a supportive environment, a model of support not consistent with the MLPP training. A supportive environment for teachers in the early years of their careers linked the pedagogical theories of their preservice training with the practices they experienced in their classroom.

Professional development activities and training that take the form of action research training, a more long-term format, help teachers become more reflective, critical, and analytical when examining their beliefs and teaching styles in the classroom (Levin & Rock, 2003). Professional development activities that span greater time frames have been found to result in transference, where

teachers implement new knowledge into classroom practices (Garet, et al., 2001).

The results of the repeated measure MANCOVA's in this research are contradictory to current research on effective professional development. The small sample size may have been a factor in the results presented in this study. A larger sample size would have resulted in increased power to detect differences. Increasing the number of participants would cause reduction of the variability (standard error) of statistics. It would in turn cause the standardized statistic (such as t) to be greater. Therefore, p -values would decrease (S. Hong, personal communication, December 28, 2004).

This study used a time series survey to collect data. The pre-LOS surveys in each RLTC region were gathered on the first day of training. All post- training LOS surveys were gathered at the conclusion of the 35-hour MLPP trainings. These time intervals varied from 5- to 210 days. The issue of training fidelity could have had interaction effects on the post and delayed-post LOS surveys completed by participants.

CHAPTER SIX

Conclusions

Based on results of statistical analysis and discussion, the following conclusions can be drawn:

1. Traditional approaches to professional development training are insufficient in altering what or how teachers teach.
2. Without continuing local, on-site support post-training, meaningful and long lasting changes in teachers' beliefs and practices will not be maintained.
3. Neither MLPP training nor duration of training had an effect on teachers' constructivist beliefs and practices or congruence scores.
4. The lack of change in total LOS scores over time reinforced the need for ongoing and on-site teacher support.
5. It may be concluded that professional development training must be sustained over time and be directly linked to everyday teaching and events in the classroom.

Recommendations

The following recommendations are based on the results and conclusions of this research.

In future studies on professional development's affect on teachers' constructivist beliefs and practices, it may be useful to take into consideration any on-site coaching and teacher support as it may be insightful in measuring systemic change in individuals and within organizations. According to Fogarty (2000) and King, King, and Rothwell (2001), learning transfer is essential for

successful increases in constructivist change. According to these researchers, classroom applications including knowledge, demonstration of behaviors, and transfers of work occurs ninety percent of the time when coaching *in* the work setting takes place on a consistent basis.

Future MLPP trainings should include professional development best practices including but not limited to;

1. Posted expectations. Posting the school's or training's vision, rubric, or criteria for success and schedules for base groups allows teachers, administrators, discussion groups, and mediators quick and easy access to program information.
2. Display of exemplary applications. A bulletin board displaying photos of classroom applications, students' artifacts, and end-of-year exhibition provides participants with sample possibilities of "hands-on" models.
3. Visual cues. Charts listing the coaching and mediation skills, problem-solving models, and collaborative guidelines should be displayed. These serve both to remind and to reinforce the expectation of the collaborative problem solving.
4. Simulations of best practices. It is important that the trainer model the use of a practice and engage participants in a simulated experience followed by an analyses of the practice.
5. Guided application. Following the analysis of a practice, the trainer should assign small groups of participants with similar classroom assignments to integrate a practice into a lesson or unit.

6. **Application lessons.** Participants should produce curriculum projects that include classroom learning centers, problem-based learning units, and interdisciplinary “hands-on” projects.
7. **Application reflection.** Adult learners need time to reflect using journals or partner discussions.
8. **Continuous encouragement.** Leaving a familiar comfortable way of teaching and beginning a new approach with different methods is a difficult challenge. Trainers and administrators need to accentuate encouragement.
9. **Action research approach.** Trainers should adopt an action research process approach to MLPP professional development training supported by on-site mentoring. Action Research is a way of studying what’s happening at individual schools or classrooms. It allows school staff members to study their progress towards change. It requires regular data collection so that changes and trends in student achievement can be seen. The individual student case study required in some of the RLTC’s MLPP trainings is a good example of action research on a small scale. This case study allowed teachers’ to monitor student achievement as they progressed through the MLPP training (Bellance, 1995; Kervin & Turbill, 2003).

Follow-up and on-site professional development may help sustain changes in practice over time. It may help contribute to develop a shared professional culture in which teachers in a school, or same grade have time to develop a

common understanding of instructional goals, methods, problems, and solutions, thus facilitating change in beliefs and practices.

This study differed from previous studies in that it used a larger sample population and looked at changes total congruence scores over time (pre-, post-, and delayed-post surveys). Continued research should be conducted on the MLPP trainings as they take place in Michigan. RLTC's, local school districts, and several universities continue to offer the MLPP new-user training as well as the newest MLPP training for fourth and fifth grade teachers. Future studies should use larger sample sizes within each location to determine whether or not trends toward congruence of teachers' beliefs and practices could be sustained with greater statistical power. Selecting one RLTC region to represent each of the models- short, moderate, and long and increasing the sample population to 100 participants in each region would increase the statistical power of the research. The larger the sample, the smaller the difference, relationship, or effect needed to reject the null hypothesis (Gall, Gall, & Borg, 2003).

In future studies, using additional methods of data collection may provide additional data. The use of qualitative data collection methods such as training and classroom observations at the pre, post, and delayed post time points may offer additional information on instructional delivery changes. Future researcher may want to consider videotaping MLPP trainings in an effort to gather additional delivery information.

In future studies, breaking out education levels based on where they earned their certification may offer insight into teachers' beliefs and practices as they developed in preservice education programs. Research institutions may present

varying perspectives on theoretical teaching foundations in their pre-service education programs. These varying theoretical foundations may be due to the philosophies of the individuals' education departments and/or to the individual theoretical beliefs of the professors delivering the preservice instruction.

APPENDIX A

Human Subject Approval

**MICHIGAN STATE
UNIVERSITY**

August 19, 2004

TO: Holly E. BROPHY-HERB
3 Human Ecology
MSU

RE: **IRB # 02-470 CATEGORY: 1-1 EXEMPT**
RENEWAL APPROVAL DATE: August 17, 2004
EXPIRATION DATE: August 17, 2005

TITLE: **MICHIGAN LITERACY PROGRESS PROFILE: TRAINING AND ALIGNMENT OF
THEORETICAL BELIEFS AND PRACTICES**

The University Committee on Research Involving Human Subjects' (UCRIHS) review of this project is complete and I am pleased to advise that the rights and welfare of the human subjects appear to be adequately protected and methods to obtain informed consent are appropriate. Therefore, the UCRIHS APPROVED THIS PROJECT'S RENEWAL.

This letter notes approval for the change made in the PI.

RENEWALS: UCRIHS approval is valid until the expiration date listed above. Projects continuing beyond this date must be renewed with the renewal form. A maximum of four such expedited renewals are possible. Investigators wishing to continue a project beyond that time need to submit a 5-year renewal application for complete review.

REVISIONS: UCRIHS must review any changes in procedures involving human subjects, prior to initiation of the change. If this is done at the time of renewal, please include a revision form with the renewal. To revise an approved protocol at any other time during the year, send your written request with an attached revision cover sheet to the UCRIHS Chair, requesting revised approval and referencing the project's IRB# and title. Include in your request a description of the change and any revised instruments, consent forms or advertisements that are applicable.

PROBLEMS/CHANGES: Should either of the following arise during the course of the work, notify UCRIHS promptly: 1) problems (unexpected side effects, complaints, etc.) involving human subjects or 2) changes in the research environment or new information indicating greater risk to the human subjects than existed when the protocol was previously reviewed and approved.



**OFFICE OF
RESEARCH
ETHICS AND
STANDARDS**

University Committee on
Research Involving
Human Subjects

Michigan State University
202 Olds Hall
East Lansing, MI
48824

517/355-2180
FAX 517/432-4503

Web: www.msu.edu/user/ucrihs
E-Mail: ucrihs@msu.edu

If we can be of further assistance, please contact us at 517 355-2180 or via email:
UCRIHS@msu.edu.

Sincerely,

Peter Vasilenko, Ph.D.
UCRIHS Chair

PV: rt

cc: Cara Wicks-Ortega
225 Ronan Hall
Mt. Pleasant, MI 48858

MSU is an affirmative action
equal opportunity institution

APPENDIX B

Initial Participant Packet

Introductory letter

Informed Consent

Teacher data sheet

Literacy Orientation Survey

**Michigan Literacy Progress Profile:
Training & Alignment Of Theoretical Beliefs And Practices**

Dear MLPP Teacher,

My name is Cara Wicks-Ortega. I am conducting my dissertation study on the Michigan Literacy Progress Profile. This study will examine the alignment of teacher beliefs and practices prior to, and following MLPP training. You are being asked to participate in this study because your attitudes, opinions and experiences are important to the continued improvement of this instructional tool and to the development of future professional development opportunities. Participation is voluntary and will take approximately fifteen minutes of your time, on three different occasions: today, at the end of this training session and sixty days following training.

All survey information will be anonymous by county and regional literacy training center. No names will be associated with any of the data. Identification numbers will be used only to help match surveys from the beginning to the end of this study. Your privacy will be protected to the maximum extent of the law. At the conclusion of this research information will be made available on individual teaching styles and how to determine alignment of beliefs and practices.

If you have any questions about this study, please contact me by phone: (989) 774-3296, fax: (989) 774-3152, e-mail: wicks1cj@cmich.edu, or regular mail: 225 Ronan Hall, Mt. Pleasant, MI 48858.

Sincerely,

Cara J. Wicks-Ortega, Ph.D. Candidate
Family and Child Ecology
Department of Human Ecology
Michigan State University

If you have questions or concerns regarding your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact- anonymously, if you wish- Ashir Kumar, M.D. Chair of the university Committee on Research Involving Human Subjects (UCRIHS) by phone: (517) 355-2180, fax: (517) 432-4503, e-mail: ucrihs@msu.edu, or regular mail: 202 Olds Hall, East Lansing, MI 48824.

*Michigan Literacy Progress Profile:
Training & Alignment of Teachers' Self-Reported,
Theoretical Beliefs and Practices*

Informed Consent

This research is based on the following information:

1. All information will be collected anonymously.
2. Participation is voluntary.
3. Withdrawal from this study at any time will be accepted without negative repercussions.
4. The last four digits of all social security numbers will be used to match individual time-series survey responses.
5. Aggregate and not individual results will be reported.

If you have any questions about this study, please contact the investigators: Cara Wicks-Ortega- 225 Ronan Hall, Central Michigan University, Mt. Pleasant, MI 48858, or (989) 774-3296, or wicks1cj@cmich.edu; Dr. Anne Soderman - 107 Human Services Building, Michigan State University, East Lansing, MI 48824, or (517) 355-1895, or soderman@msu.edu.

If you have questions or concerns regarding your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact- anonymously, if you wish- Ashir Kumar, M.D., Chair of the University Committee on Research Involving Human Subjects (UCRIHS) by phone: (517) 355-2180, fax: (517) 432-4503, e-mail: ucrihs@msu, or regular mail: 202 Olds Hall, East Lansing, MI 48824.

I indicate my agreement to participate in this study by signing below.

Participant Signature

Date

Witness Signature

Date

Michigan Literacy Progress Profile Research Study

Teacher Information Data Sheet

Identification Number: _____ (Last 4 digits of social security number)

County of Training _____ County of Employment _____

Address where final survey should be mailed _____

Education

1. Indicate highest level of education

☐ High school ☐ Certificate ☐ Bachelors ☐ Masters

☐ Master + 30 ☐ Education Specialist ☐ Ph.D. ☐ Ph.D. +

2. College /University Major _____ Minor _____

3. Teacher certification for grades Check all that apply

☐ Early Childhood (ZA) ☐ Elementary (K-6) ☐ Middle School ☐ High School

☐ Sp Ed ☐ Reading Specialist ☐ Certificate _____ ☐ Other

Experience

4. Number of years teaching ☐ 1-4 ☐ 5-10 ☐ 1-15 ☐ 16-20 ☐ 21-30
☐ 30+

5. Number of years at Pk-3 grade level _____

6. Current grade level ☐ First ☐ Second

7. Current class size ☐ ≤15 ☐ 16-20 ☐ 21-25 ☐ 26-30 ☐ 31-35
☐ Over 36

Michigan Literacy Progress Profile Training

8. Total number of actual contact, face-to-face MLPP training hours _____

9. Total number of non-contact, out-of- MLPP classroom training hours _____

10. Total number of MLPP new-user training hours _____

11. What methods of training will/did you experience? Check all that apply.

☐ Lecture ☐ Whole group ☐ Small group

☐ Brainstorming ☐ Interactive ☐ Multimedia

- ☐ Cooperative Groups ☐ Guided Practice ☐ Didactic
☐ Modeling ☐ Discussions ☐ Independent practice

Professional Development

12. During the past three years, have you participated in training in any of the following reading programs? Check all that apply.

- | | |
|---|---|
| ☐ Accelerated Reader | ☐ Fountas & Pinnell Workshop |
| ☐ Reading Recovery | ☐ HOST |
| ☐ Richard Owens Literacy Network | ☐ Project Read |
| ☐ Success for All | ☐ Process Writing |
| ☐ 6 + 1 Reading Program | ☐ 6 + 1 Writing Program |
| ☐ Other _____ | |

13. During the past year did you participate in professional development activities? Yes ☐ No ☐

14. Are you anticipating taking any further professional development trainings in the next 90 days?

Yes ☐ No ☐

If yes, what training _____

Aggregate Information

15. ☐ Female ☐ Male

16. Age Group: ☐ 21-25 ☐ 26-30 ☐ 31-40 ☐ 41-50 ☐ 51-60 ☐ 61-70
☐ 71+

17. Are you multiracial? ☐ Yes ☐ No

18. Select the race group that you think applies to you best. If you are multiracial, check all that apply.

- ☐ Hispanic ☐ White (except Hispanic) ☐ American Indian, Eskimo, Aleut
☐ Asian, Pacific Islander ☐ Black (except Hispanic)

Literacy Orientation Survey (LOS)

Date _____
 Last Four Digits of Social Security Number _____
(For tracking purposes only)
 County of Training _____
 County of Employment _____
 Regional Literacy Training Center _____

Directions: Read the following statements and circle the response that indicates your feelings or behaviors regarding literacy and literacy instruction.

1	The purpose of reading instruction is to teach children to recognize words and to pronounce them correctly.
strongly disagree strongly agree 1-----2-----3-----4-----5	
2	When students read text, I ask them questions such as "What does it mean?"
never always 1-----2-----3-----4-----5	
3	Reading and writing are unrelated processes.
strongly disagree strongly agree 1-----2-----3-----4-----5	
4	When planning instruction, I take into account the needs of children by including activities that meet their social, emotional, physical, and affective needs.
never always 1-----2-----3-----4-----5	
5	Students should be treated as individual learners rather than as a group.
strongly disagree strongly agree 1-----2-----3-----4-----5	

6	I schedule time every day for self-selected reading and writing experiences.
never 1-----2-----3-----4-----5 always	
7	Students should use "fix-up strategies" such as rereading when text meaning is unclear.
strongly disagree 1-----2-----3-----4-----5 strongly agree	
8	Teachers should read aloud to students on a daily basis.
strongly disagree 1-----2-----3-----4-----5 strongly agree	
9	I encourage my students to monitor their comprehension as they read.
never 1-----2-----3-----4-----5 always	
10	I use a variety of prereading strategies with my students.
never 1-----2-----3-----4-----5 always	
11	It is not necessary for students to write text on a daily basis.
strongly disagree 1-----2-----3-----4-----5 strongly agree	
12	Students should be encouraged to sound out all unknown words.
strongly disagree 1-----2-----3-----4-----5 strongly agree	

13	The purpose of reading is to understand print.
strongly disagree strongly agree 1-----2-----3-----4-----5	
14	I hold parent workshops or send home newsletters with ideas about how parents can help their children with school.
never always 1-----2-----3-----4-----5	
15	I organize my classroom so that my students have an opportunity to write in at least one subject everyday.
never always 1-----2-----3-----4-----5	
16	I ask parents of my students to share their time, knowledge, and expertise in my classroom.
never always 1-----2-----3-----4-----5	
17	Writers in my classroom generally move through the processes of prewriting, drafting, and revising.
never always 1-----2-----3-----4-----5	
18	In my class, I organize reading, writing, speaking, and listening around key concepts.
never always 1-----2-----3-----4-----5	
19	Reading instruction should always be delivered to the whole class at the same time.
strongly disagree strongly agree 1-----2-----3-----4-----5	
20	I teach using themes or integrated units.
never always 1-----2-----3-----4-----5	

21	Grouping for reading instruction should always be based on ability.
strongly disagree 1-----2-----3-----4-----5 strongly agree	
22	Subjects should be integrated across the curriculum.
strongly disagree 1-----2-----3-----4-----5 strongly agree	
23	I use a variety of grouping patterns to teach reading such as skill groups, interest groups, whole group, and individual instruction.
never 1-----2-----3-----4-----5 always	
24	Students need to write for a variety of purposes.
strongly disagree 1-----2-----3-----4-----5 strongly agree	
25	I take advantage of opportunities to learn about teaching by attending professional conferences and/or graduate classes and by reading professional journals.
never 1-----2-----3-----4-----5 always	
26	Parents' attitudes toward literacy affect my students' progress.
strongly disagree 1-----2-----3-----4-----5 strongly agree	
27	The major purpose of reading assessment is to determine a student's placement in the basal reader.
strongly disagree 1-----2-----3-----4-----5 strongly agree	

28	I assess my students' reading progress primarily by teacher-made and/or book tests.
never 1-----2-----3-----4-----5 always	
29	Parental reading habits in the home affect their children's attitudes toward reading.
strongly disagree 1-----2-----3-----4-----5 strongly agree	
30	At the end of each day, I reflect on the effectiveness of my instructional decisions.
never 1-----2-----3-----4-----5 always	

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