

Empowering Apprentice Teachers: Tracking Instructional Practices with MyiLOGS

by

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ABSTRACT

Growing popularity of alternatively certifying teachers has created challenges for teacher preparation programs. Many non-traditional routes into classroom include no full-time mentor teacher. Absence of a mentor teacher in the classroom leaves teachers with a deficit. This study follows ten teachers on the intern certificate enrolled in both an alternative certification teacher preparation program and the Teach for America organization as they pursue a master's degree in education and state teaching certification from a large southwestern university. The five randomly chosen for the treatment group and the control group contained 1 male and 4 female teachers, some of whom teach at public schools and others at charter schools. All were secondary education language arts teachers ranging in age from 22- 29. The treatment used in this study is a job-embedded, professional development, software tool designed to help teachers track their classroom practices called MyiLOGS. The purpose of this action research project was to study the effect using MyiLOGS had on six of the nine areas evaluated by a modified version of the Teacher Advancement Program evaluation rubric, alignment with Opportunity To Learn constructs, and the tool's influence on the efficacy of these first year teachers. The data generated from this study indicate that the MyiLOGS tool did have a positive effect on the teachers' TAP evaluation performances. Also, the MyiLOGS tool had a large impact on the teachers' instruction as measured by the constructs of Opportunity to Learn and their teaching self-efficacy. Implications suggested the tool was an asset to these teachers because they tracked their data, became more reflective, and self-sufficient.

DEDICATION

I humbly dedicate this dissertation to all of those who played a role in this project. Andrew and Annie, thank you for selflessly giving up time from your parent to allow her to achieve a goal and for reminding me why I began this program in the first place. You two are my joy. Andy, you set the example that it is not good enough only to care about our own children's education. Thank you also for allowing my schedule and goals to mean as much as yours do. Mom and Dad, thank you for demanding more from me because I am a Roggeman and for expecting as much from us girls as you do from the boys. Mom, thank you for making sure all five of us got to college. Rock, K, Jules, and Buckster, thank you for your love, support and for setting the bar so high I had to do something to keep up. Stephanie, Amanda, and Katherine, thank you for the unique and powerful impact you three have on all you do; you are my three beautiful blessings. To my amazing friends- without your love, support, humor, and carpools I would have quit long ago. Deb, thank you for being with me every step of the way with all of your beauty, grace, and humor. I wouldn't have wanted to share this journey with anyone else.

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TABLE OF CONTENTS

	Page
LIST OF TABLES	vi
CHAPTER	
1 CHAPTER 1 CONTEXT.....	1
Context.....	2
Statement of Problem	6
2 CHAPTER 2 LITERATURE REVIEW.....	18
Theoretical Framework.....	20
Research Questions.....	32
3 CHAPTER 3 METHODOLOGY	33
Action Plan.....	34
Data Sources	40
4 CHAPTER 4 RESULTS	52
Research Question 1 Results	52
Research Question 2 Results	70
5 CHAPTER 5 DISCUSSION AND IMPLICATIONS	79
Implications.....	83
Conclusion	87
REFERENCES	90
APPENDIX	
A M-TAP RUBRIC.....	97

B	OPPORTUNITY TO LEARN SURVEY	105
C	SENSE OF SELF EFFICACY SURVEY	108
D	SOCIAL VALIDITY SURVEY	109

LIST OF TABLES

Table	Page
1. Demographic Information Control Group	35
2. Demographic Informaton Treatment Group	36
3. Implementaton Timeline	40
4. M-TAP Pre/Post Test Results	54
5. Opportunity to Learn Survey Data	58
6. Opportunity to Learn Survey T-Test Effect Size Results	61
7. Opportunity to Learn Survey Qualitative Data Codes	67
8. Social Validity Interview Qualitative Data Codes	68
9. TSES Survey Data	72
10. TSES T-Test and Effect Size Results	72
11. TSES Qualitative Data Codes.....	73

Chapter 1

CHAPTER 1 INTRODUCTION AND CONTEXT

Rookie, New-Hire, Plebe: the professions may differ, but these terms all refer to entry-level workers attempting to master a field and get through the “learning curve” stage. This stage refers to the duration of learning and the resulting progress. Whether this curve is steep, gradual, or flat, there are factors that help determine the curve’s gradient. Invariably, a slow learning curve detrimentally affects a profession. The education profession is no different. Teacher preparation programs aim to minimize the time in this stage. However, novice educators are somewhat unique because they are directly responsible for the safety, the management, and the achievement of other people’s children, so the repercussions of a slow learning curve for a new teacher can be devastating.

The growth of alternative pathways to teacher certification in public schools added new challenges to the learning curve for teachers. Currently, the state offers a temporary Intern Teaching Certificate that allows college graduates who have passed the state Proficiency Exam and are currently enrolled in a two year state approved teacher preparation program to hold full time teaching positions in schools (ADE). The intent of this teaching certificate is two-fold. At the time of its creation, the state was experiencing a shortage of secondary science and math teachers, so the hope was that some would take this as an opportunity to fast-track their way into math and science

classrooms, preferably in low income schools who experience greater teacher shortages than their more affluent counterparts.

According to the State Department of Education, there are almost 900 teachers teaching on an intern certificate (M. Cruz, personal communication, November 3, 2010) who have never had any formal instruction in the pedagogy, methodology, strategies, or field experience in the area of education. While the schools where these alternatively certified teachers work may offer induction programs, many do not offer a comprehensive program capable of maneuvering a “rookie” teacher through the learning curve to reach proficiency by the completion of his or her first year.

In 2007, a large university in the Southwest partnered with the nationally acclaimed Teach for America organization (Milken, 2011) to create a Master’s and Certification program (or InMAC) in education. The intent of this partnership was to provide college graduates with a very unique three-pronged learning experience as they faced the challenging task of becoming proficient K-12 teachers in low-income schools before experiencing any formal teacher preparation. This unique three-pronged support team is comprised of university faculty and field supervisors, a Teach for America (TFA) program director, and local K-12 district personnel.

While traditional teacher preparation programs have at least one semester of guided field experience to develop a confidence in and a skill set around the fundamentals of teaching under the close tutelage of an experienced mentor teacher in their classroom, the teacher on the intern certificate enters a

classroom without this previous, formal instruction and with no mentor in their classroom. So, induction needs to happen as quickly and as effectively as possible.

There are many diverse elements comprised in a teacher preparation program in a large university, some of which are difficult to influence. One factor that the university program can influence is the instruction of the novice teacher in his formal teacher education. Essential to the success of this program is focused field support for the intern teacher. An important nuance to address in this university Intern field experience is that the intern is the recipient of guidance, instruction, and demands from three different institutions: the university, TFA, and the K-12 school. Oftentimes, these support people from each institution have no knowledge of each other's agenda for the intern teacher. The potential exists for lapses in key areas of instruction. Without a system and a plan for comprehensive and cohesive support, what could exist is a novice teacher in a low-income school getting disjointed information, advice, and directives infrequently from three different entities.

The result is that it becomes the responsibility of the Intern teacher to fill in the gaps that the three-pronged system has created. Instead of receiving rich, focused, cohesive support from three well-meaning bodies, the intern teacher has the extra burden of managing the various demands of his support team in addition to just maneuvering the regular learning curve. Most importantly, the Intern teacher must meet the daily needs of his or her K-12 students. Daily

lesson planning is one of the most immediate demands on the intern teacher. Often, it is this responsibility that weighs the most heavily on the intern teacher, but ironically, daily planning is an area on which none of the three support entities focus regularly.

A vivid illustration of this gap in instruction is exemplified in the story of a teacher, John Doe. He was placed in a low-SES school where there were a substantial number of students living in a group home; it had a recent history of transitory administrative leadership and had cultivated a culture of low academic expectations. The first year principal in charge of this K-8 elementary school struggled with leadership and openly discouraged teachers from seeking her help. As John Doe's field supervisor, I did not fully grasp the specifics of the school climate until almost the end of the first semester.

On my first visit to John Doe's classroom, it was obvious that he did not know how to engage his students or plan an effective lesson. On this day, a fight broke out in his room. John Doe froze, so I stepped in. I attempted to meet and talk with the principal along with my Teach for America counterpart. The principal could not fit us into her schedule. On my second visit to John Doe's classroom, it was obvious why this class had the potential for fights: the students were bored and unchallenged. Together we met on a bi-monthly basis to work on his instructional planning. However, he continued to struggle to carry out his lessons effectively. I continued to get communications from John Doe that grew progressively more desperate. "Teaching has yet to make me happy. I keep trying to convince myself that it was just a bad day, but I keep

going back to why I wanted to teach in the first place. Believe me, I am terrified.” In March, the principal, the TFA program director, and I finally got together; however, it was too late. That teacher ended up quitting his job and his master’s program.

Another illustration of the support team not meeting the daily planning needs of the novice teacher is the case of Jane Smith. In an email, she wrote, “I am in desperate need of help. I can’t keep up. I have six classes and three different subjects to teach. I have no idea how to give these kids what they need.” The TFA Program Director and I met with this teacher’s principal and set up a plan for individualized support; however, what we discovered is that we could not provide the teacher the daily help she needed in creating a system for her to monitor her own progress and create a plan to keep up. Her frustration continued. A protocol for daily support had not been established or practiced.

Evidence of the extent to which this break down of individual support can reach is in the case of Jane Doe. She was a high achieving Psychology major in her under-graduate work. On week two of her first quarter, she reached out to me with a fellow Teach for America Corp member requesting help planning her subject area. She stated that while her TFA program director calls frequently and assigns her various tasks, what she really needed was help planning in her content area. We met. We worked. We had her set for the next two weeks. Shortly after that two-week period, she called me to tell me

that she was taking a week off, at her doctor's request, because she was battling severe anxiety attacks.

Ideally, the mentors at her site, who see her daily, would have been monitoring her practices and suggesting adjustments to improve instruction. Ideally, we as a team would have been on site daily to support her content, management, and professional needs. However, geography and personnel constraints make this impractical. At the very least, the support team should have worked together to give Jane Doe the pedagogical tools she needed to take control of designing, implementing, evaluating, and adjusting her own classroom instruction.

This did not happen. While there is the implied expectation that we, her instructional team, provide her the support she needs, there is no system in place or tools established to foster the effort necessary to fully aid the new teacher on a daily basis. The end to Jane Doe's story: she quit her teaching job mid-semester and dropped out of both the university and Teach for America.

What these three vignettes have in common is that the "daily-ness" of the teachers' classroom needs was not being addressed. Because the teachers in the alternative certification program do not have a mentor with them on a daily basis, they lack the ongoing feedback from their own classroom practices informing and driving their instructional experience.

Illustrating the impact the teacher preparation program can have, Linda Darling Hammond states that the expertise of a teacher, his or her success in a

classroom, and his or her participation in a formal teacher preparation program is in many areas more significant than the student success related to his socio-economic background (Darling-Hammond, 2006). As much as seven percent variance in a student's performance on a standardized test can be attributed to the practices of an effective classroom teacher (Darling-Hammond, 2006). So, providing teachers with "outside support" that attempts to address the "daily-ness" of their needs would seem to be a powerful improvement to an alternative certification program. One element that these university programs are missing is addressing the "daily-ness" of the apprentice teachers' field experience instructional needs. Because of the unique conditions under which the intern certificate apprentice teachers operate, there is no system to provide them with ongoing daily instructional feedback that they need.

The Intern Teaching Certificate requires that there be some person on the school site who will serve as the mentor for the Intern Teacher; however, there are not guidelines as to the extent of this mentoring process. At times, the building principal is listed as the Intern Teacher's mentor, but with no mentoring requirements stated, there often is no close mentor relationship between the mentor and the intern teacher. This is a reality for many alternative certification programs; and an essential piece of teacher preparation is not fully realized.

The purpose of this study is to investigate the following: What effect does using a personalized professional development (MyiLOGS) tool have on an Intern Teacher's performance in six indicators of the Modified Teacher

Advancement Program (M-TAP) including Standards and Objectives, Activities and Materials, Instructional Plans, Managing Student Behavior, Presenting Instructional Content, and Teacher Knowledge of Students? And what effect does using a personalized professional development tool (MyiLOGS) have on the self-efficacy of the first-year intern teacher?

Chapter 2

CHAPTER 2 REVIEW OF SUPPORTING SCHOLARSHIP

Theoretical framework. To create the background for the proposed MyiLOGS innovation, which attempts to fill a gap in the university's alternative teacher certification program, what follows is a review of the theoretical frameworks that serve as the platform for this innovation. Informing this study is the conceptual and theoretical framework of various ideas, primarily those of a) constructivism, b) social learning and collaboration, c) situated learning, d) opportunity to learn, e) professional development and teacher effectiveness, and d) efficacy.

Constructivism. One theory behind how students acquire knowledge is Constructivism. Constructivist theorists such as Piaget (1954), Dewey (1929) and Vygotsky (1978), hold that students arrive at each learning venture with differing levels of knowledge. This prior knowledge affects a student's acceptance of what is being taught. When the concept of what is being taught causes conflict in a student's previous way of thinking, cognitive dissonance is created. This cognitive dissonance, or conflict, results in the learner adjusting his thinking until he reaches a new conceptual understanding.

Vygotsky's (1978) explanation of learning via a constructivist lens is that learning occurs as a series of negotiations and creations of meanings within the learner. Words and ideas hold no inherent meaning; it is only through the experiences the learner has, that meaning is constructed for the learner. Also, Vygotsky argued that knowledge is acquired among people and within one's

self. This idea denotes the need for a context that includes others and a situation and self-reflection. Creating meaning through reflection on one's experiences in a specific context is one of the main goals for the university's intern teacher during his or her field work.

Social learning. To follow the notion that knowledge is acquired among people, the work of Lev Vygotsky (1978) helped promote the belief that learning is a social activity. Vygotsky studied how learners interacted with each other and to what effect this interaction resulted in a higher mental functioning (Woo & Reeves, 2007). Learning is enhanced by the learner as he applies his knowledge to real world applications as a result of interacting with and socially depending on others (Wertsch, 1991).

Learning by modeling the behavior of others, or observational learning, is another form of social learning; this theory on social learning by Albert Bandura (1989) has had an impact on teacher preparation. Bandura's work supported the idea that successful learning occurs when the learner is in close contact with others. Bandura (1989) spoke about the importance of model behavior coming from an expert. If the learner spent time observing and modeling his behavior after an expert, then in turn, the learner's behavior would be expert as well. The field experience portion of a teacher preparation program demands that the student create meaning within the context of his setting working among colleagues. The university's alternative certification program provides close proximity of a "more knowledgeable other" in the form of the university supervisor, TFA, and K-12 support personnel; however, the

program lacks the opportunity for the intern teacher to model a classroom mentor teacher's behavior which Bandura sites as an essential element for social learning to occur.

Collaboration. It follows that collaboration is essential to social learning. One essential characteristic to the sustainability of a program that attempts to unite professionals is quality collaboration (Hogue, 1993). Peterson (1991) sought to describe varying levels of interaction among collaborative groups and defined three different states: cooperation, coordination, and collaboration. The collaboration stage is realized when group members relinquish some independence to achieve a shared goal (Peterson, 1991). Gadja's (2004) work distinguished among five stages of collaboration. The first principle is that it is an "imperative" in society because of the complexities and degree of social needs and ever-decreasing resources. Second, Gadja (2004) highlights the ambiguity that serves as the backdrop for the definition of what it means to collaborate, which highlights the need for specificity in defining the role of the collaborator. Thirdly, she holds that the result of collaboration is not necessarily the culmination of a project but rather the integration that occurs along the journey of the collaborative venture. Gadja's (2004) fourth principle discusses the need for both personal and emotional connections among those who collaborate as essential to the success of the effort. Lastly, Gadja (2004) defends the idea that bonds in a collaborative effort experience predictable stages as they develop (Gadja, 2004). In teacher preparation, the collaborative experience guides field-work. Collaboration is another area in which the

alternative certification program could improve. Gadja sites that it is necessary to specify roles in collaboration, but because there is no daily interaction between the intern teacher and any of his support personnel, collaborative roles are not as clearly defined as they could be.

Situated learning. Also related to social learning theory is the work of Jean Lave (1991); his situated learning theory posits that learning is an embedded activity. Learning occurs best when it takes place in the normal context and culture in which the knowledge resides. As such, much learning that occurs is unintentional rather than deliberate and much of what is learned is the result of the situation rather than instruction done in the abstract. In the field of education, the idea behind student teaching and all field work supports situated learning theory: the work attempts to recreate an authentic setting in which novice teachers can learn and practice their craft.

There are at least four claims about Lave's (1991) explanation of situational learning that have implications for teacher preparation. One claim is that action must be grounded in the concrete situation in which it occurs for comprehensive learning to take place. Also, Lave argues that knowledge transferred between tasks is not as stable and robust as knowledge acquired from doing the actual task. In addition he claims that training in abstraction results in job performance substandard to training done within a situation. And finally, Lave argues that the most effective instruction occurs in context because only there does the complex, social environment exist in which knowledge will be trusted. Unfortunately, with the lack of a mentor teacher,

the intern teacher is left to interpret his or her situation with no daily guidance from an experienced mentor. The state Department of Education only requires that the intern teacher receive support from a school district or administrator, but the department of education does not detail the extent or the requirements of the support nor does it require a mentor teacher to be in the classroom with the intern teacher (Department of Education, 2010).

Linda Darling Hammond (2010) cites the importance of consulting, learning from, practicing with, and modeling expert teachers as keys to effective teacher preparation. These practices are the foundation for an effective and somewhat traditional apprentice teaching experience that is founded on the theories of constructivism, situated learning, social learning, and collaboration. The traditional apprentice teacher experiences this because the learner is under the close and constant watch of a mentor teacher in the classroom at all times. However, the teacher on the intern certificate is the teacher of record in the classroom. The teacher is the apprentice of no one. As a result, these sound learning theories upon which effective teacher preparation programs are founded, are not fully realized.

Effective teaching and opportunity to learn. The goal of teacher preparation programs is to produce effective teachers. But what defines effective teaching in a teacher preparation program? Some would argue that successful student achievement is what defines effective teaching. With increasing popularity, student achievement is often defined by standardized test scores. By extension, student achievement is used by some to define the

effectiveness of a teacher. However, relying solely on student test scores to define the effectiveness of a teacher fails to describe the practices of an effective teacher that result in increased student achievement. Schochet and Chiang (2010) contend that more than 90 percent of a variation in a student score is due to student-level elements that are not controlled by the classroom teacher.

One theory that attempts to describe the practices of effective teaching is the theory of Opportunity-to-Learn (OTL). Kurz, Elliot, Kettler, Zigmond, & Kloo (2012) define OTL as “the degree to which a teacher dedicates instructional minutes to covering the content prescribed by the standards using pedagogical approaches that address a range of cognitive processes, instructional practices, and grouping formats” (Kurz, Elliott, Lemons, Kettler, Zigmond, & Kloo, 2012). The concept of a student’s opportunity to learn encompasses a variety of variables (Herman, Klein, & Wakai, 1997). These variables that affect student performance, their opportunity to learn, include access to resources and high quality instructional content and delivery strategies, additional school opportunities, and direct preparation for a particular standardized test (Herman, et.al, 1997). These factors are all tied to the providers of the instruction and are not influenced by the learner’s socio-economic status (Stevens, 2007). It would follow that a teacher preparation program that places the apprentice teacher in low-income schools, as the alternative certification university/TFA partnership does, would benefit by focusing its support for teachers in these areas.

At the heart of the idea of the Opportunity to Learn framework are three instructional dimensions. The first is the amount of time devoted to instruction. How classroom time is used has been described as the “single best documented predictor for student achievement across types of schools, classes, student abilities, grade levels, and subject areas” (Vannest & Parker, 2009). The Elementary and Secondary Education Act *Blueprint for Reform* (U.S. Department of Education, 2010) reported that the schools that recorded lower math scores spent fewer minutes on math instruction. Time spent on instruction is a concrete element to discuss when reviewing the variables of a teacher’s performance.

The second instructional dimension of the Opportunity to Learn framework is the instructional content. At the surface, instructional content seems to refer to what is taught. However, a slight deconstruction of the concept of instructional content uncovers the complexity of simply “what is being taught.” In general, it is the goal of a school to have the general curriculum closely aligned to the assessed curriculum, since this is the criterion on which a school is judged. Anderson’s (2002) framework explains the three factors that comprise the instructional environment. The first element is the intended curriculum. This is the content outlined by the state standards. The second is the assessed curriculum. This is the content that is tested. Thirdly, is the enacted curriculum; this is the curriculum that is actually taught (Anderson, 2002). Of interest, factors can affect the enacted curriculum to result in the fourth element: the planned curriculum, which is the individual classroom

teacher's influence on the enacted curriculum. For example, lacking content-area expertise on the teacher's part may cause him or her to either leave out a concept or teach it incorrectly. Also affecting a student's opportunity to learn is one more aspect of curriculum: the engaged curriculum. This is the curriculum that the student experiences as a result of the quality of teaching strategies that inspire a student to become engaged in the teacher's enacted curriculum (Kurz, Elliott, Wheby, & Smithson, 2010). In short, the only curriculum the student learns is the curriculum to which he or she engages. Moving from the intended curriculum to the engaged curriculum is a tall order for even the most talented teacher, but it proves especially challenging for the novice teacher.

A third dimension of the Opportunity to Learn framework is the quality of instruction. Included in this dimension are the cognitive processes demanded from the lesson, the instructional processes a teacher employs, and the grouping formats the teacher use (Walberg & Paik, 2000). Cognitive research in this area found that students must be taught the skills necessary to take control of their own learning (Walberg & Paik, 2000). Writing a lesson plan that models, provides practice, and asks students to apply new knowledge can prove challenging for new teachers.

MyiLOGS. Helping new teachers navigate these Opportunity to Learn instructional dimensions is challenging. One effort both to measure a teacher's ability to align the intended curriculum with the assessed curriculum and to aid in helping a teacher create an effective, deliberately planned lesson in hopes of

positively affecting the engaged curriculum is a tool called MyiLogs (Kurz, Elliott, & Shargo, 2009). The conceptual foundation for the different instructional practices that MyiLogs measures is based on the instructional dimensions of Opportunity to Learn (Kurz, Elliot, & Kettler, 2010). This tool is intended to embed professional development in daily instructional practice and encourage and reinforce the aspects of teaching that are malleable. This technology-based software tool allows teachers to plan and track three aspects of their instruction: time on instruction, content of instruction, and the quality of instruction.

One idea that serves as the platform for this tool is access to instruction.

Instructional time is lost to many different classroom tasks and to addressing classroom management issues. When using the MyiLOGS tool, the teacher predicts how much time he/she will allot to instruction. After the class is taught, the teacher records the actual time spent on instruction. By comparing the intended and the actual time spent on instruction, the teacher has concrete data about how effectively instructional time was spent. This data gives teachers a realistic view of where improvements can be made to increase instructional time, thus, raising the quality of that teacher's reflection on instructional practices.

Also, the tool tracks **the content** that is taught. The teacher can access the Common Core Standards through the tool. The tool generates reports for the teacher to see which areas of the Common Core curriculum are covered and how much time is devoted to teaching custom skills. This is helpful to the

teacher, since the state adopted the Common Core State Standards in June, 2010 and these are the standards the schools use to assess students and the criteria on which the student, the teacher, and the school are judged (Common Core State Standards, 2013). The teacher plans which aspects of the curriculum will be taught and then records what is enacted. This holds the teacher accountable for teaching the assessed curriculum and concretely reports to the teacher when non-assessed standards are the focus of instruction.

In addition, the MyILOGS tool records different aspects of the **quality of instruction**. The teacher tracks the range of cognitive processes demanded from the student, the different instructional practices the teacher uses, and the grouping formats used in instruction. From these reports the teacher sees trends in classroom practices. The teacher has the capability to use his or her own classroom assessment data in conjunction the instructional quality practices that the teacher tracks on MyiLOGS to inform himself about what practices are successful for particular standards. This information is then used to guide instructional planning.

Essentially, teachers plan their instruction, track their actual behaviors in these three areas, and reflect on the results, which are generated in the forms of graphic reports. Their performance data can be shared electronically with anyone who has a vested interest in their success (Kurz, Elliott, & Shargo, 2010). Each MyiLOGS user has a username and a password, but anyone who has access to the user name and password, such as an administrator, can view the user's data. This tool provides a measure of teacher performance in

addition to just the traditional standardized test data. Perhaps more importantly is the potential for this tool to be a catalyst for collaboration in the support of new teacher preparation. When diagnosing different needs, the classroom teacher and the support personnel have actual classroom events on which to focus.

Another helpful element included with this tool is the **Professional Growth Plan** feature. The teachers are trained to use their MyiLOGS data to create targets for growth. Unlike other efforts, the MyiLOGS professional growth tool lets the data drive the focus for growth. Once the target is set, the teacher then creates a performance goal for each target. For each performance goal, the teacher writes a Goal Attainment Scale that concretely describes different performance levels ranging from 1-no growth to 5-outstanding growth. Since the teacher's classroom data is what determined the focus of the goal, the data is the subject used to describe specifically what each level of performance contains. The strength of this tool is that it teaches the teacher how to gather evidence from his or her own practice to plan for improvement; thus helping to create a self-sufficient practitioner.

This tool offers a facsimile of what the university alternative certification teaching experience is missing due to the absence of a mentor teacher present in the classroom: daily feedback on instructional practices. Although this feedback is not delivered face-to-face from a mentor teacher, the tool provides the intern teacher with immediate feedback based on what happened in his or her classroom that day. In addition, the MyiLOGS data can be accessed by

other people. It provides a snapshot of what happened in the teacher's class that day. The university supervisor can log on to the intern teacher's MyiLOGS account. This information can serve as the basis for a conversation about the teacher's instructional practices. It is imperative that teacher preparation programs provide teachers with the tools to improve their practice. The MyiLOGS tool is a cohesive, systematic, collaborative, measurable approach to improving practice.

Professional development. Increasing the effectiveness of teachers is the goal of professional development. Historically, professional development in education has had varying levels of effectiveness. At its least effective state, many educators merely “endure” professional development opportunities in order to appease mandated requirements (Guskey, 2012). The “One Shot, Sit and Get” workshops geared toward disseminating information on specific topics determined by those far removed from the classroom do not have lasting effects (Darling-Hammond, 1998).

However, effective professional development has been the subject of research in attempt to articulate common characteristics of what works. Sparks (2002) highlights five characteristics that contribute to successful professional development. First, it must focus on deepening both content and pedagogical skills. Also, it must include ample opportunity to practice, research, and reflect on practices. Another factor important to the success of professional development is a structure that allows it to be embedded in the daily work of teaching. To follow, it must also be constructed so that it will be sustained

over time. And lastly, successful professional development must incorporate collegiality and collaboration.

If these factors are present, is it possible to say definitively that a professional development effort is a success? Guskey (2007) suggests that measuring the effectiveness of a professional development effort poses challenges. It is such because there are many factors involved in the complex practice of teaching, and it is difficult to collect proof that one factor is directly responsible for success.

Teacher Advancement Program (TAP). One effort to unite both teacher evaluation and professional development is the Teacher Advancement Program (TAP). This system was created in 1999 in an effort to draw, retain, inspire, and mold effective teachers (“The TAP System,” 2012). This tool was adapted from the work of the Milken Family Foundation in an effort to create a comprehensive school reform model that offered a plan for multiple career paths, professional growth, instructional accountability, and performance-based compensation (“Understanding,” 2004).

The TAP system promotes a comprehensive school reform that claims to offer multiple career paths, provide professional development, and hold teachers accountable. This system uses various measures of performance, but one measure is the *Teaching Skills, Knowledge and Responsibilities Performance Standards*, more commonly referred to as the TAP Instructional Rubric. Schools that adopt the TAP System have teachers evaluated from four to six times a year using this rubric that measures teachers in multiple

performance areas. There are twenty-three performance standards divided into four domains: instruction, environment, planning, and professionalism (Tennessee Educator Acceleration Model, 2011).

By the onset of the Fall of 2011 semester, the university required all of its faculty who work in the field experience area of the teacher's college to have Teacher Advancement Program (TAP) certification. Certification included a four-day training on the use of the evaluation instrument and extensive practice on the instrument. The researcher participated in and passed the TAP Certification training in June of 2011.

The TAP certification training teaches a four-step process by which to evaluate teachers. The first step is scripting a complete lesson. Next, evidence from the scripting process is identified that applies to each of the areas evaluated. The evidence is numerically rated according to a rubric in each area. Lastly, based on the rubric scores, an area of reinforcement and an area of refinement are outlined for the teacher, and an explanation of the reasoning for these choices is communicated in narrative form.

M-TAP. The college adopted a modified version of the TAP rubric (**M-TAP**) to use in evaluating the field performance of the teacher-candidates (See Appendix A). This form contains nine of the twenty-three performance standards that the full TAP Instructional rubric includes. These nine areas are taken directly from the original TAP Evaluation Form. Even though the university form is much shorter than the original TAP form, the same four-step process is followed for each evaluation.

The university uses the M-TAP evaluation elements in an effort to create a detailed, evidence-based description of classroom practices in an attempt to positively affect instruction of the Intern teacher.

There exist similarities among the elements of the theory of Opportunity to Learn which serves as the platform for the MyiLOGS tool and six of the nine M-TAP indicators. One similarity exists in the area of ***Standards and Objectives***. Both the M-TAP and the MyiLOGS tool ask for evidence that the teacher's daily lesson include activities that support specific learning objectives that are aligned with state standards. The calendar feature of the MyiLOGS tool requires that the teacher list the standards that are taught each day, and the M-TAP has as a criterion for this category that teachers have state standards guide the lesson. Also, both the M-TAP and the MyiLOGS tool outline the sort of ***Activities and Materials*** the teacher's lesson includes. Both require a description of the cognitive levels at which students are operating in the activities the teacher assigns to support the day's objective. ***Instructional Planning*** is one more element where both the MyiLOGS tool and the M-TAP tool have similarities. Both ask for evidence that the teacher has provided differentiated instruction and instruction that is aligned to state standards. In addition, both tools ask for evidence of ***Managing Student Behavior***. The MyiLOGS tool has teachers track how much instructional time is lost to "non-instructional activities." Some of this time is lost to occurrences that cannot be avoided such as announcements and procedural tasks; however, the teacher accounts for how all time is used. This allows for reflection on time

management in the classroom. The M-TAP asks for evidence about disruptions to instruction due management issues. Another area that includes similar behaviors as evidence for both the M-TAP and the MyiLOGS tool is the area of *Presenting Instructional Content*. Both tools list evidence in this area such as providing visual representations and modeling behavior. Finally, both tools address the teacher's knowledge of individual student needs. The MyiLOGS tool does so in having the teachers track their attempts to give the students feedback on their performances in the forms of asking questions, providing guided feedback, and providing reinforcement. The M-TAP asks for evidence in the area of *Academic feedback*. This overlap in tracking and providing documentation in these six areas demonstrate similarity between the MyiLOGS tool and the M-TAP tools. There are three indicators from the M-TAP evaluation tool that have only minimal overlap with the MyiLOGS tool, so they were not used as a measure for this study. They are the M-TAP categories of Teacher's Knowledge of Students, Teacher Content Knowledge, and Respectful Culture.

Efficacy. One concept that has been linked to having a positive effect on instruction is self-efficacy. Perceptions of self-efficacy are beliefs one has about his or her ability to perform (Bandura, 1994). A strong sense of self-efficacy means the difference between approaching a task with a sense of impending success or failure. Bandura (1993) holds that self-efficacy affects outcomes for the simple reason that believing that one will achieve success translates into more a more tenacious, confident, committed attitude.

According to Bandura, the main source of self-efficacy is mastery; success breeds success (1993). Cognitive, motivational, affective, and selective processes all play a role in building and sustaining self-efficacy. In short, the person who takes an optimistic view of his potential tends to look past initial failure or set-backs to persevere (Bandura, 1993).

In education, teacher efficacy is the measure of a teacher's belief in his or her capability to affect student performance (Berman, McLaughlin, Bass, Pauly, & Zeligman, 1977). The RAND Corporation published a study that reported student achievement in reading among minority students had a relationship to teacher efficacy (Berman et al., 1977). The RAND Corporation developed a two-item scale with which to measure a teacher's self-efficacy (Armor, Conroy-Oseguera, Cox, King, McDonnell, Pascal, Pauley, & Zellman, 1976). Bandura (1997) further defined the concept and created his own Teacher efficacy scale. His work allows for the possibility that a teacher's sense of self-efficacy may differ depending on the type of task that is asked of the teacher. As a result, he developed a 30-item instrument with seven sub-scales (Bandura, 1997).

Further deconstruction of the topic of teacher self-efficacy explores efficacy beliefs among novice teachers. Self-efficacy for this group is related to stress and devotion to the profession (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998). More confident teachers gave higher ratings of their own capabilities and to the support around them. And just as Bandura (1997) held that success breeds success, efficacious beginnings lead to greater optimism

and commitment to the profession. An important distinction in the study of teacher self-efficacy is that self-perception has to do with perceived competence rather than actual competence (Tschannen-Moran, Woolfolk Hoy, and Hoy, 1998). The study of teacher self-efficacy has implications for teacher preparation.

Collective efficacy. Along with modeling expert behavior, Bandura (1997) also developed the idea of self-efficacy and collective efficacy. If self-efficacy is the belief that one is capable of achieving and performing at an effective level; the concept of collective efficacy is that same belief grown from a group setting through a group effort (Carroll, Rosson, & Zhou, 2005). As an extension of Bandura's idea of collective efficacy, one could argue that fostering efficacy in the group charged with educating the novice teacher is crucial to effective teacher preparation.

Efficacy in education is necessary because it has been identified as one of the most influential factors responsible for a teacher's belief that he or she can positively affect student achievement, even in the most unmotivated students (Guskey, 2007). According to the work of Ashton and Webb, teacher efficacy is derived from one of two beliefs: either that a strong classroom teacher will positively affect student achievement or that the educator is the exception to a failing educational setting that will positively affect student achievement (1986). So, the teacher needs to believe in either the power that teachers have or the power the he or she has individually. Both of these factors rely on a confidence in capabilities: capabilities that are not innate.

Simply stated, an efficacious teacher believes he or she is effective. It would follow that one goal of a teacher preparation program should be to help teachers have high efficacy. In education, high efficacy is often associated with successful student performances on standardized tests. And while some would argue that formal teacher preparation programs are unnecessary for content area experts, as much as seven percent variance in a student's performance on a standardized test can be attributed to the practices of an effective classroom teacher (Darling-Hammond, 2006). The factors of the expertise of a teacher, his or her success in a classroom, and his or her participation in a formal teacher preparation program are in many areas more significant than the student success related to his socio-economic background (Darling-Hammond, 2006).

The commonalities of successful teacher preparation programs may vary in form, but there exist some specific similarities. The commonalities fall under the categories of imparting knowledge, conceptualizing knowledge, constructing curriculum, assessing knowledge, and creating an effective clinical experience (Darling-Hammond, 2006). Linda Darling-Hammond's research found that the more closely interwoven the novice teacher's learning experience was to the experiences of effective veteran teachers and faculty at the university, the more potential for improving the novice teacher's performance there was (2006). First year Intern teacher effectiveness relies on a number of variables. These variables include among others: the teacher's level of dedication, his or her intellectual capabilities, the placement of that

teacher during his or her first year, and the quality of outside support (Darling-Hammond, 2006).

While economic and political trends may argue that formal teacher preparation programs are unrelated to teacher success, in many instances the reality is that even the most talented in their fields fail in front of a class of thirty K-12 students (Protheroe, 2008). Using the theory of efficacy, it follows that attention to beliefs should be the central focus of teacher preparation. Knowledge is different from believing (Pajares, 2007). When preparing potential teachers to enter the classroom, a teacher must believe in a concept, or structure, or strategy; otherwise, it will not be successfully executed (Pajares, 2007). Perhaps the most essential belief that teacher preparation programs need to instill lies in the study of teacher efficacy.

Effective teaching. In order to instill confidence that a program can produce an effective teacher, agreement about what makes an effective teacher still needs to be articulated. The quest to define teacher effectiveness began with the onset of the profession (Doyle, 1977; Rabinowitz and Travers, 2007). Historically, teachers have been rewarded for their level of education and number of years of teaching experience. Supervisor or principal evaluation was later added to this definition of effectiveness. More recently, the variable of student achievement on standardized tests has become the focus in defining teacher effectiveness; this is the result of the empirical nature of test scores and the recent ease in accessibility to and quantity of student data relating to standardized tests (Harris & Rutledge, 2010). Professions other than education

define effectiveness based on worker outcomes: what is the work of education supposed to produce? In education, the “outcomes” are defined in a number of ways (Harris & Rutledge, 2010). Standardized test results, however, are just one measure of a teacher’s performance.

Certainly student achievement is a desired outcome in measuring teacher effectiveness. But is it the only desired outcome? The education profession itself has yet to concretely define student achievement. Current research in teacher effectiveness relies heavily on objective measures such as student test scores; yet, other professions rely on subjective measures as well such as the supervisor’s evaluation, which allows for acknowledgement of the worker’s value in a number of areas (Harris & Rutledge, 2010; Rabinowitz & Travers, 2007). Possibly, the effective teacher may be more of an abstract idea based on someone’s judgment than a scientific, quantifiable occurrence.

Effectiveness, judged by a specific criterion, has not been universally accomplished by the field of education in regard to what constitutes and effective teacher (Rabinowitz & Travers, 2007). However, teacher preparation programs continue to operate and attempt to turn out “great” teachers.

A student who has a highly effective (or “great”) teacher for three consecutive years can score up to 50 percentile points higher on a standardized test than a student who has a less effective teacher for three consecutive years (Varlas, 2010; Sanders & Rivers, 1996). But this is just one measure. To reduce the definition of an effective teacher to one criterion- test scores- is to

deny the conceptual shift that looks at education from what the teacher does to what the students are able to do.

This conceptual shift has produced some common criteria for what happens in a classroom that produces high achievement. One contribution from the study of student achievement is the idea of the “value added” factor (Harris & Sass, 2010). The “value added” takes a longitudinal look at a student’s test data to compare the student’s rate of achievement improvement among his different teachers. One attempt to predict and plan for teacher effectiveness is to find correlations between a high “value added” score and specific teacher traits. There exists some correlation between teacher “value added” and some human capital traits such as subject area knowledge, expertise in teaching skills, intelligence, and a willingness to collaborate (Harris & Sass, 2010). Other studies echo many of these human capital traits. However, one trait that appears on numerous “necessary” lists for a great teacher is the willingness and ability to collaborate (Barker, 2010; Varlas, 2010).

Empowering intern teachers with a personalized, ongoing, job-embedded tool for daily reflection on one’s practice and professional development makes sense. Allowing teachers to collect their own instructional performance data and make informed instructional design decisions based on that data could take them one step closer to becoming more effective, self-sufficient teachers. This tool, along with the guidance from and collaboration among their instructional team members, has the potential to create a unique and personalized teacher

preparation experience. This proposal describes the use of the MyiLOGS tool as innovation for ten first year teachers on the intern certificate.

Research Questions

The two research questions that drive this action research project are shaped by the problem: alternatively certified, first-year teachers have a need due to the lack of a full time mentor; and the supporting scholarship:

- What effect does using an ongoing, embedded, personalized professional development tool (MyiLOGS) have on the first year intern teacher's performance in six of the nine indicators of the M-TAP Evaluation instrument?
- What effect does using an ongoing, embedded, personalized professional development tool (MyiLOGS) have on the efficacy of the first-year intern teacher?

Chapter 3

CHAPTER 3 METHODOLOGY

To answer these two research questions, this study employed data collection sources that measure and describe the effects that the use of the MyiLOGS tool had on the first-year intern teacher's performance in the following areas: Standards and Objectives, Activities and Materials, Instructional Plans, Managing Student behavior, Presenting Instructional Content, and Academic Feedback. To begin, this chapter outlines elements addressing the practicalities of this study. Next, the data collection tools and the methods employed is presented as well as the data analysis plan. The chapter concludes with a discussion of efforts to ensure reliability and validity in this study.

Action Plan/Innovation

This study followed ten first-year teachers who hold a temporary Intern Teaching Certificate and are enrolled in both a university Master's and certification program and the Teach for America organization. Five of these teachers used the MyiLOGS software tool to guide and inform their instructional practices.

Participants. The ten participants are university graduate students pursuing their Master's degree in education along with teaching certificate. They are all employed as language arts teachers. They all hold the intern certificate and teach in low-income secondary schools, with their teaching assignments ranging from seventh to the twelfth grade. These participants

are members of the 2012-2013 Teacher for America cohort. Each has earned a Bachelor’s degree in an area other than education from universities around the country. The Teacher for America selection process is rigorous and competitive, so members were all high achieving, academically, in their under-graduate programs. The tables below illustrate the specific demographic information for both the Treatment group and the Control group:

Table 1

Demographic Background for Treatment Group Teachers

Participant	Age	Undergraduate Degree Major	Ethnicity	Gender	Grade level	School Type
1	22	English	Caucasian	M	10,11	Public
2	29	Criminology	Caucasian	F	9-12	Chart.
3	22	Justice Studies	Latino	F	7	Public
4	22	Sociology	African American	F	7,8	Chart.
5	22	English/Sociology	Caucasian	F	9,10	Chart.

Chart.=charter school

Table 2
Demographic Background for Control Group Teachers

Participant	Age	Undergraduate Degree Major	Ethnicity	Gender	Grade level	School Type
1	22	Psychology	Caucasian	F	11,12	Chart.
2	22	Psychology	Asian Indian	F	7,8	Chart.
3	22	Information Technologies Management/ Latino Studies	Latino	F	7	Public
4	23	Women's Studies	Latino	M	7,8	Chart.
5	22	English/Psychology	Caucasian	F	7,8	Public

Chart. = charter school

Each participant has an Intern Certificate which is valid for three years and allows the holder to teach in any content area where he or she has passed the state's teaching proficiency assessment, but the holder must also be enrolled in a state approved alternative path to teaching certification program ("Teaching Intern Certificate," 2012). These teachers had a two-week student teaching experience during the summer of 2012 run by TFA. The researcher serves as the Clinical Instructor from the university for all of the participants. Through random selection, five teachers were chosen to make up the treatment group and the other five make up the control group.

Treatment. In September, 2012, the participants in the treatment group were given a three-hour training on the use of a technology-based, job-embedded professional development tool to guide instructional planning: MyiLOGS. This training included a criterion assessment at its conclusion

that required participants to achieve a certain performance rating on their use of the different elements of the MyiLOGS tool. Each participant passed the assessment at the end of the training. The tool, Instructional Opportunity Learning Guidance System or MyiLOGS (Kurz, Elliott, & Shargo, 2009), is used on a daily basis as teachers plan and carry out instruction. The tool includes a calendar feature where teachers record the standards taught on each day and their prediction of the number of minutes that they will devote to teaching each standard. After the lesson, the teacher records the actual minutes that were spent teaching the standard. Periodically, the calendar feature on the tool alerts the teachers of “detail days.” On these “detail days,” the teachers recorded the minutes spent on different cognitive skills, instructional groupings, and instructional practices. Lastly, teachers also recorded the results of their daily assessments. The participants were expected to use the planning calendar for daily lesson planning.

The tool generates feedback reports for the teacher to review. The creators of the tool report evidence that supports there is high fidelity in teachers’ ability to log their own data (Kurz, Elliot, & Kettler, 2010). Because of the tool’s ease of use, participants reported that this took no more than five minutes a day. These reports display how instructional time was spent in the classroom. Teachers can compare how time was spent to the assessment results to modify or adjust their instructional plans.

The participants had access to the MyiLOGS tool throughout the duration of the Fall semester of 2012 to practice using the tool. In January,

2013, the participants were re-trained on the use of the tool and they also were re-tested on their mastery of the use of the tool. This re-training was done just before the participants began using the tool on a daily basis.

The role of the researcher. Throughout the semester, the researcher's interaction with the participants was two-fold. The university Clinical Instructor's role includes acting as field supervisor, supporting and evaluating the teachers in their field experience, and teaching them in their Master's classes. As field supervisor, the researcher served as both a resource for support in the classroom and an evaluator, performing one formal evaluation each quarter. Secondly, all participants were enrolled in the courses *English/Language Arts Teaching Methods for Secondary School Teachers* (SED 511) and *Content Area Literacy* (SED 507) taught by the researcher. These courses provided a survey of curriculum and lesson planning theory and techniques.

Timeline/procedure. The duration of this study was from August 2012 until March 2013 as displayed in Table 3

Table 3
Implementation Timeline

August 2012	Researcher is trained on the MyiLOGS tool
August 2012	Efficacy pre-test for all participants
August/Sep 2012	Observation/evaluation pre-test for all participants
Sep 2012	3 hour professional development training on MyiLOGS for treatment group
Fall 2012 Semester	Treatment group practices using MyiLOGS tool in their classrooms
January 2013	Treatment group participates in a 90 minute review training over the use of the tool.
January-March 2013	Treatment group uses the MyiLOGS tool in their classrooms
March 2013	Observation/evaluation post-test for all participants Instructional Dimensions Survey for all participants Exit survey for Treatment group
Ongoing	Weekly check in with all participants
	Weekly check in to MyiLOGS accounts

In August of 2012, the researcher was trained on the use of the MyiLOGS tool by one of the co-developers of the tool. This training included comprehensive practice on the use of the tool. At the end of this training process, the researcher took and passed the summative assessment required for all who use the tool.

On September 17, 2012, the five teachers in the treatment group participated in one three-hour professional development session conducted by one of the co-founders of the MyiLOGS tool. These five teachers were given access to the MyiLOGS software tool for the duration of the 2012-2013 school year. During this training, the teachers defined the different teaching practices they would track. They were also taught how to use the MyiLOGS

software. For the Fall semester of the 2012 school year, the five participants of the treatment group had access to the tool in their daily practice. In January, the creator of the tool led a ninety minute review-training session for the participants on the use of the MyiLOGS. In January of 2013, the treatment group began daily use of the MyiLOGS tool. Starting in January, the researcher logged into each teacher's MyiLOGS account on a weekly basis in order to view usage of the tool and the instructional practices happening in the teachers' classrooms. Ongoing throughout the study, the researcher conducted weekly check-ins with the participants' MyiLOGS accounts.

In mid March of 2013, the treatment group attended a one-hour professional development meeting. There, the teachers reviewed the reports generated from their classroom data and learned about the six-step Instructional Growth Plan element that accompanies the MyiLOGS tool to create targets for growth ("MyiLOGS Instructional Learning," 2011). The teachers learned about the "5 Level Goal Attainment Scale" ("MyiLOGS Instructional Learning," 2011) for each learning target. This finalized scale articulates varying performance levels, where the teacher describes the evidence necessary to attain each level of growth, ranging from No Growth to Outstanding Growth ("MyiLOGS Instructional Learning," 2011).

In an effort to incentivize the active participation of the treatment group, steps were taken to relieve students from the extra burden of learning and using the intervention. First, the treatment group was excused from the

one hour Webinar requirement that the all apprentice teachers in the university Master's program must complete each semester. Also, the training on the growth plan took place while during regularly scheduled classes, so they would not have to expend personal time. In addition, the treatment group was allowed to use their work with MyILOGS to replace a portion of a unit planning assignments. Additionally, all members of the treatment group received \$25 gift cards to show appreciation for their participation in this study.

Data sources. Data sources for research question 1, the effect of the MyILOGS tool on teacher performance in six of the nine areas of M-TAP, included classroom observations and formal evaluation using the M-TAP and an Opportunity to Learn survey (OTL Survey). The data source for research question 2 (teachers' sense of self-efficacy)-was a pre-test/post-test of the Teachers' Sense of Self Efficacy Survey (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998). Finally, an exit survey was give to the five teachers who made up the Treatment group of teachers.

The timeline for data collection is listed in Table 1. The sense of self efficacy survey pre-test was administered in September of 2012 after the ten teachers had been teaching for at least two weeks, so they had a more realistic picture of what it was like to be on their own in the classrooms. In an effort to have more authentic pre-test/post-test data on the formal teacher evaluation, the first quarter evaluations were completed by the first week of October

2012, which was as close to the beginning of the school year as possible. The third quarter formal evaluations occurred in the last two weeks of March 2013 to provide as much time as possible between the first and fourth formal observations. The Opportunity to Learn survey and the Exit survey occurred in March, 2013.

Formal classroom evaluations. The M-TAP was administered twice during this study. (see Appendix A). Six of the nine areas of the M-TAP (standards and objectives, presenting instructional content, activities and materials, academic feedback, instructional planning, and managing behavior) were used as data to measure the effects of the MyiLOGS tool.

Additionally, the M-TAP has a section for the evaluator's suggestions for areas for refinement and for reinforcement. In this section of the instrument, the evaluator provided a short narrative to explain and justify the evaluator's decision on the areas to refine and reinforce. All ten teachers in this study will experience the same evaluation process. The first evaluation served as the pre-test and the third evaluation served as the post-test.

Opportunity to Learn (OTL) Survey. An OTL Survey (see Appendix B) served as a second data source to study how the teacher's performance aligned with the constructs of OTL. This survey was administered in September 2012 and in March 2013 to all ten participants. Because the Opportunity to Learn framework serves as the platform on which the MyiLOGS tool was created, this tool served as the proximal measure for Research Question One of this study.

Each survey question offered the respondent a six point Likert scale ranging from **1-Strongly Agree** to **6-Strongly Disagree**, with each rank in the continuum accompanied by a differing degree of a related adjective, representing a single, well-defined dimension (Fowler, 1995). So, on this survey, a lower score indicated more closely aligned practices to OTL.

This survey is based on the three instructional constructs of the Opportunity to Learn framework detailed in Chapter Two. The first section examines the respondents' judgments of their use of **class time** that is used; these questions address the actual minutes spent instructing students. Eight questions in this section ask the teacher/respondent to rate impressions of how class time is spent, and how much time is lost to non-instructional activities such as administrative tasks and classroom management issues.

The second construct area of this survey focuses on the **content** coverage of the teacher's instruction. Of the eight questions in this section, two questions ask how much time is spent on instruction of the objectives related to the Common Core curriculum. In addition, questions in this area focus on time spent on the objectives that are assessed by standardized tests.

The third construct area of the OTL survey can be described as the **quality of instruction**. This section includes ten questions about the cognitive processes, the instructional practices, and the grouping formats that manifest in the teacher's classroom. The cognitive process questions are based on the revised Bloom's taxonomy (Anderson, et al., 2001). The MyiLOGS tool has teachers track the level at which their instructional

practices expect students to complete tasks. The low end of this range includes merely attending to tasks; the higher end includes tasks where the students must create, generate, or design artifacts to demonstrate mastery of a concept or skill. For example, one question in this construct asks respondents to what degree they agree that their instructional plans regularly require students to apply or execute a skill or concept that was taught. Another set of questions in this section ask the respondents to what extent they agree that their plans engage students in variety of instructional practices such as questioning techniques, independent practice, and assessment. The last set of questions in this construct area asks the teachers to what degree they agree that they use different grouping formats on a regular basis in their classrooms.

The final section of this survey includes three open-ended response questions. Each of these questions isolates one of the three constructs and asks the respondent what resources were helpful to them in regarding planning and how and why these resources were helpful. An open-ended question asks what problems the respondent has in the area of planning instruction. The purpose for the open-ended questions at the end of this survey is to provide the respondents the opportunity to fill in any holes that the quantitative survey data might leave.

Teachers' Sense of Efficacy survey. This survey was administered as a pre-test to all ten participants after they had all experienced at least two weeks of teaching. This survey was administered in the *English/Language*

Arts Teaching Methods for Secondary School Teachers (SED 511). In March 2013, this survey was administered again as a post-test to all participants.

This survey (See Appendix C) is the measure of the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001). It measures the respondents' sense of efficacy in three constructs: efficacy in **student engagement**, efficacy in **instructional strategies**, and efficacy in **classroom management**, three factors that are moderately correlated. This survey instrument has been validated with alpha scores of .81 for Student Engagement, .86 for Instructional Practices, and .86 for Classroom Management (Tschannen-Moran & Woolfolk Hoy, 2001). The respondents are asked to mark their responses to twelve questions using a nine point Likert-type scale where 1=nothing and 9=a great deal.

This survey includes three open-ended response items. Each open-ended response items focused on one of the three construct areas. The first open-ended response item asks what if any factors affect the teacher's efficacy in the area of student engagement; the second asks what if any factors affect the teacher's efficacy in the area of instructional practices; and the third asks what if any factors affect the teacher's efficacy in the area of classroom management. The purpose of including open-ended response items in the post-test is to use this qualitative data to add details that the quantitative data may not provide. By including both qualitative and quantitative response items in this survey, a richer data set will help to answer Research Question Two.

The constructs of these three tools: M-TAP, the OTL Survey, and the Sense of Self Efficacy survey, include ideas that are similar or even repeat (See Appendices A, B, and C).

Social Validity Interview. A social validity interview was conducted with the five members of the Treatment group at the completion of the study in attempt to generate some qualitative data. This interview consisted of three questions. The first question asked what (if anything) did the teachers *like* about using the MyiLOGS tool. The second asked what (if any) *support* did the teachers get from using the tool. The third questions asked how (if at all) using the tool *affected* their teaching.

Quantitative analysis. The participants' numeric scores for M-TAP rubric, the Sense of Self Efficacy survey, and the OTL Survey were identified by a code. The data were analyzed using descriptive and inferential statistics including mean and standard deviation. Next, t-tests (Gay, Mills, & Airasian, 2009) were run for the pre and post-test scores on the M-TAP, the OTL survey and the Sense of Self Efficacy survey. From this data, the researcher compared the pre-test to post-test changes for the two groups on each construct.

In order to describe the magnitude of the impact of the innovation, *effect size*, using Cohen's *d*, were calculated on the OTL survey and the TSES survey scores (Gay et al., 2009, p. 96). Cohen (1992) supported the following scale to describe the magnitude of an innovation's effect: .20 small effect, .50 medium effect, and .80 and higher large effect.

Qualitative analysis. To discover a grounded description (Glaser & Strauss, 1967) of the data, analysis of the open-ended answers from the surveys, the narrative feedback from the M-TAP, and the Social Validity Interview was conducted. Grounded theory occurs when discoveries are made from data by systematically gathering and analyzing that data (Glaser & Strauss, 1967). Responses to these areas were reviewed using an open coding process (Corbin & Strauss, 2008) in search of themes or reoccurring phrases that surfaced in more than one evaluation or open-ended response. Once the themes were articulated, axial coding methods were employed to look for any relations or connections among these themes. Ongoing throughout this process, a review of the raw data from the evaluations and surveys was conducted to allow any new patterns from the raw data to surface.

Mixed methods analysis across data sources. After each data source was analyzed individually, the next phase of data analysis included a review of the themes and codes that surfaced during the qualitative analysis stage and a comparison of these to the results that emerged from the quantitative analysis. The intent of this mixed methods inquiry was to examine different aspects of the same variable to provide a richness or complementarity to the description of results (Greene, 2007). For example, if participants scored themselves similarly on the same survey construct also have similar themes to their open-ended response items for that construct, then a deeper description of that phenomenon resulted. The value of a mixed methods approach is that some stories unfold that might otherwise not have been told (Greene, 2007).

Multiple methods of “knowing” allow the researcher to see more clearly some of the subtle complexities that accompany social and educational research (Greene, 2007). From these comparisons across data sets, the warranted assertions that address the research questions evolved. In addition to warranted assertions that answer the research questions, this analysis across data sources also noted any contrasting results.

Reliability, validity, and generalizability. Periodically, the researcher participated in practice evaluations with her colleagues at the university using the M-TAP evaluation.

The fidelity of the implementation of this study affected by the following: the researcher holds a TAP certification; the researcher was trained on the MyiLOGS tool, and the researcher monitored the participants’ usage of the MyiLOGS tool weekly.

A reliability analysis (Santos, 1999) using a Cronbach’s Alpha (Santos, 1999) was run for each construct and each item of the OTL survey, using a cut score of 0.70 to determine its reliability. The OTL pre-test scored a .960 for an alpha score; the pos-test scored a .846. The Teachers’ Sense of Efficacy survey is a validated instrument that has been field-tested and proven reliable (Tschannen-Moran & Woolfolk Hoy, 2001).

In an effort to add reliability and validity to the qualitative data collection and analysis, a critical friend reviewed 25% of the qualitative data to corroborate on the choices for open coding and axial codes.

Regardless of the attempts to eliminate them, potential threats to reliability exist in this study. One threat to the internal validity of this study is the threat of mortality. This threat occurs when participants must leave the study for some reason (Eeva-Mari, & Kihn, 2011). In each of the previous fall semesters, some students have left the TFA program because of the demands accrued by pursuing a degree in higher education while trying to survive the first year of teaching. Another threat to the validity of this study is diffusion. Diffusion occurs when the behavior of the control group is affected as a result of taking part of a study (Eeva-Mari, I., & Kihn, L., 2011). Because the students are grouped in cohorts and there is a fair amount of interaction among the students, it is reasonable to expect that some of the practices that the treatment group members are doing as a result of the intervention may be discussed and tried by the control group. These potential threats must be acknowledged in any statement about the results the study yields. Also, because the researcher supports each participant in their K-12 classrooms and in their course work, there exists the possibility that the researcher unconsciously treated members of the groups differently. In an effort to minimize this effect, the researcher attempted to avoid discussion with the treatment group members about the tool and instead referred all questions to the tool's creator, Alexander Kurz.

Generalizability may not be an outcome of this study. Perhaps this is so because of the unique program that will serve as the focus of this study, or because of the small sample size used for this study; or perhaps this is so

because of the choice of data collection tools. However, this study was constructed on research-based theories that serve the body of literature on teacher effectiveness, teacher preparation, and field experience. As such, this study adds a new perspective to the literature that exists in support of the innovation, the MyiLOGS tool. This new perspective potentially will reach similar communities who could benefit from the outcomes of this study.

Chapter 4

CHAPTER 4 RESULTS

Chapter 4 presents the results from this study. First, the quantitative data, the qualitative data, and the summary of these results are discussed for the methods employed to address research question one: What effect does using a personalized professional development (MyiLOGS) tool have on an Intern Teacher's performance on the M-TAP evaluation indicators: Standards and Objectives, Activities and Materials, Instructional Plans, Managing Student Behavior, Presenting Instructional Content, and Academic Feedback? Next, the quantitative data, the qualitative data, and the summary of these results are discussed for the methods used to address research question two: What effect does using a personalized professional development (MyiLOGS) tool have on Intern Teacher's sense of self-efficacy? Lastly, there is an overall summary of the findings this study generated.

Research Question 1: What effect does using a personalized professional development tool (MyiLOGS) have on an Intern Teacher's performance on 6 of the 9 M-TAP evaluation indicators?

Quantitative Results

M-TAP evaluation instrument scores. From the pre-test evaluations, the means for each indicator were calculated for both the control group teachers and the treatment group teachers. The difference in means

between pre-test and post-test for each group were calculated, and these differences were compared. Table 4 illustrates the data for the M-TAP.

Table 4

M-TAP Pre/Post Results

M-TAP indicator	Pre-Treat		Post-Treat		Pre-Con		Post-Con		<i>p</i> (5)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Standards/Obj	2.6	.37	3.0	.31	2.4	.20	2.5	.24	.128
Pres. Inst.	2.7	.4	3.6	.37	2.7	.40	3.1	.20	.250
Con									
Activities/Mat	2.6	.37	3.6	.37	3.3	.21	3.1	.20	.077
.									
Academic	2.7	.24	3.6	.44	2.7	.21	3.0	.00	.025*
Feedback									
Instr. Planning	2.6	.37	3.1	.20	2.2	.24	2.8	.24	.045*
Managing	2.9	.20	4.0	.00	2.5	.44	3.2.	.24	.102
Behavior									

*Note. N=5 for Treatment group. N=5 for Control group. Treat=Treatment Group of teaches, M= mean, SD= standard deviation, Con= Control group of teachers, p =0.05**

As shown in Table 4, the pre-test scores were slightly higher for the treatment than the control group in 4 indicators, with a difference in mean scores in the beginning from .2-.4, indicating basic similarities in skills between the two groups at the start of the intervention. The teachers who used the MyiLOGS instrument had an average .5 higher rating in this category than did the Control group teachers. The difference in means for the treatment group was larger in five of the six indicators than the difference in means was for the control group. The indicator of Academic Feedback was the area where the treatment group had the greatest margin of growth over the control

group, with a difference in means from pre to post test of .9 and .3 for the control group. This indicator describes the level of feedback the teacher gives to students regarding their performance. It also describes to what degree the teacher uses student performance to guide instruction.

Once a week, the MyiLOGS calendar has teacher actions recorded on “Detail Days.” Teacher Actions from the MyiLOGS tool that are accepted as evidence of academic feedback on the M-TAP were: Asked Questions, Provided Guided Feedback, Provided Reinforcement, and Assessed Student Knowledge (“MyiLOGS Instructional Learning,” 2011). These results indicate that reflecting on and self-recording these each week is associated with a higher score in the Academic Feedback indicator on the M-TAP evaluation.

The indicator where the treatment group had the second highest margin of growth over the control group was in the area of Presenting Instructional Content. The treatment group scored a 3.6, and the control group scored a 3.1. In MyiLOGS report on Detail Days, the teacher records behaviors in the areas of Providing Direct Instruction, Providing Visual Representations, Asking Questions, and Eliciting Think Alouds (“MyiLOGS Instructional Learning,” 2011). Each of these teacher actions is behavior evidence included on the TAP for the area of Presenting Instructional Content.

The TAP indicator for Managing Student Behavior was another area where the Treatment group had more growth from pre-test to post-test than the Control group did. The M-TAP rubric asks for evidence that students are on

task. The MyiLOGS tool requires that teachers record “Time Not Available for Instruction” (“MyiLOGS Instructional Learning,” 2011). The Treatment group teachers were held accountable for calculating their number of minutes of lost instruction time; while the control group was not. Of note, the post-test mean for the Treatment group was a 4 and the Control group was a 3.2. On the M-TAP rubric a score of 5 indicates that the teacher demonstrates “exemplary” behavior in an area (Arizona State University, 2011).

Treatment group teachers also showed slightly more growth than the Control group teachers on the TAP indicators of Standards and Objectives and Activities and Materials. The difference between post-test means for the Treatment group was .4; while the difference for the post-test means for the Control group was a .1. Again, the MyiLOGS Detail Days required the Treatment group teachers to record certain behaviors that are listed as evidence in each of these areas on the TAP rubric. For example, the TAP rubric lists “eliciting a variety of thinking” and “communicating state standards and sub-objectives” (Arizona State University, 2011). These are similar to the Detail Day requests for time spent on the different levels of Bloom’s Taxonomy and the requirement of listing the different standards and skills taught.

Of note, the TAP area of Instructional Planning was the one area where the Control group’s gain was greater than was the treatment group’s. However, the treatment group’s post-test mean for this indicator was still .3 higher than the post-test mean for the control group.

Opportunity to Learn survey instrument (see Appendix B).

Because the MyiLOGS tool asks teachers to record their practices in areas that serve as evidence for behaviors of practices supportive of the M-TAP rubric indicators, this survey intended to measure the outcomes of that recording on teachers' perceptions of OTL. The OTL survey measured how teachers rated their instructional practices. The questions on this survey are grouped according to the constructs of the theory of Opportunity to Learn: time spent on instruction, content of instruction, and quality of instruction (Anderson, et al., 2001). The teachers rated themselves on a Likert scale ranging from 1- strongly agree to 6- strongly disagree. The questions are written so that the **lower** the teachers score themselves, the **more aligned** they feel their instruction is with the three constructs of the theory of Opportunity to Learn, which is the foundation for the MyiLOGS tool ("MyiLOGS Instructional Learning," 2011).

The OTL survey was administered as a pre-test during the first quarter of the school year to all ten participants. All ten teachers took this same survey again at the beginning of the fourth quarter of their school year to serve as a post-test. A grand mean was calculated for each group's pre-test and the post-test. Because each group's grand mean demonstrated an improved score, more detailed statistical tests were run. For each construct area, means were calculated for the control group and for the treatment group for both the pre-test and the post-test results. On the survey, the teachers rated their level of awareness, satisfaction, and control they felt over their instructional practices

in the areas of class time usage, content coverage, and instructional quality.

Table 5 shows the results of the pre-test and the post-test surveys.

Table 5

Opportunity to Learn Survey Data

Construct	Pre-Treat		Post-Treat		Pre-Con		Post-Con	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Time on instruction	2.85	.73	2.17	.56	3.77	.770	2.82	.58
Content of instruction	3.02	.23	1.95	.56	3.67	.233	2.77	.56
Quality of instruction	2.44	.17	1.60	.346	3.44	.527	2.44	.40
Grand Mean	2.74		1.86		3.62		2.6	

Note. N=5 for both groups, Treat= Treatment group of teachers, Con= Control group of teachers M= mean, SD= standard deviation

The questions in the area of **Time** had teachers rank their awareness, satisfaction, and the amount of control they felt about how their class time was used. The Control group's perception of their performance experienced greater growth than the Treatment group did. However, the final post-test mean score for the Treatment group was 2.175, **indicating a closer alignment** to the OTL construct than the higher Control group score of 2.85, a difference of .65 points between means scores. Of note, the Control group was not asked to keep track of how class time was spent; while the Treatment group recorded time estimates daily. To account for this, the possibility exists that the Treatment group had a more realistic, data-based perception of how class time was spent.

In the **Content** group of questions the teachers rated their perceptions of their awareness, control, and satisfaction over how much of their instruction was devoted to Common Core Standards and Custom Standards. In this area the Treatment group's difference from pre-test to post-test was 1.0 and the Control group's difference was .7. Also, their mean post-test score was 1.95, which is .825 higher than the Control group's post-test mean. The MyiLOGS tool includes a menu that lists the Common Core State Standards for ease of planning with the tool. It also allows teachers to record the non-Common Core State Standards that they teach as Custom Standards. The possibility exists that the Treatment group teachers benefitted from the easy access to information about the Common Core State Standards.

The third group of questions on the Opportunity to Learn survey focused on the construct area of the **Quality** of their instruction. Here, the teachers rated their perceptions of their awareness of, satisfaction with, and efforts to deliberately plan for their students to operate on varying levels of Bloom's taxonomy. This section also included questions about how deliberately teachers planned to vary instructional practices and grouping strategies. Again, the Control group of teachers had greater growth in this area (1.0) than did the Treatment group of teachers (.84). However, the post-test mean of the Treatment group of teachers was **lower** (1.6), and therefore more aligned with OTL, than the Control group (2.4). Because the MyiLOGS tool asks the teachers to log their practices in the areas this section

of the survey covers, the possibility exists that the Treatment group based their survey responses on realistic, data rather than their perceptions.

Table 6 shows the results for the independent t-test that was run on the gain scores for both groups. This test communicated a significant difference in the results for two of the three construct areas. In addition an *effect size* test was run to describe the magnitude of the impact of an innovation (Gay et al., 2009, p. 96). For this survey, a Cohen's *d* was used to calculate effect size. Cohen (1992) supported the following scale to describe the magnitude of an innovation's effect: .20 small effect, .50 medium effect, and .80 and higher large effect. This calculation is derived by dividing the difference of two groups' post-test means by the pooled standard deviations. Because the survey demonstrated greater satisfaction as the ratings moved down the Likert scale, according to the Cohen's *d* calculations, the MyiLOGS innovation measured as having a large impact on the three constructs surveyed in the Opportunity to Learn survey. Each area demonstrated over a .80 level.

Table 6

OTL Survey T-Test and Effect Size Results

Construct	Treatment Gain Score		Control Gain Score		p value	Cohen's d
	M	SD	M	SD		
Time on Instruction	-0.675	.074	-0.95	.021	.063	1.124
Content of Instruction	-1.075	.000	-0.725	.010	.042*	1.146
Quality of Instruction	-0.84	4.13137E-06	-1.0	.000	.022*	2.22

Note. N=5 for both groups, $p \leq 0.05$, M= mean, SD= standard deviation

Qualitative Results

In an effort to use multiple means of research methods to explore the same research question, thus achieving a mixed methods approach (Greene, et al., 1989), three sources of qualitative data were included in the exploration of research question 1: M-TAP narrative portions, OTL Survey open-ended response items, and the Exit Survey questions.

The last section of the **TAP Evaluation** was used as qualitative data to inform analysis of the results for Research Question 1. Research question 1 looks for any impact the use of the MyiLOGS tool had on six M-TAP Evaluation indicators: Standards and Objectives, Activities and Materials, Instructional Plans, Managing Student Behavior, Presenting Instructional Content, and Teacher Knowledge of Students. The last section of the M-TAP

Evaluation instrument requires that the evaluator use the evidence gathered from the formal classroom observation to suggest an area of **reinforcement** and an area of **refinement** for the teacher (see Appendix A). The extended notes on the last section of the post-TAP Evaluation include the basis of the choice for the area of reinforcement and the area of refinement. The areas of highest achievement and the areas in greatest need for improvement are determined by the classroom observation, the evidence collected, and the criteria on the TAP rubric. An analysis of these notes served as a qualitative source of data. The process of open coding was used to look for themes that surfaced among these notes.

Reinforcement

For the M-TAP evaluation, after the classroom observation is completed, the evaluator uses the evidence collected under each indicator to determine an area of strength that will be reinforced during the post-conference portion of the evaluation cycle.

Reinforcement for Control group. Two points surfaced in the study of the notes for reinforcement for the Control group of teachers. The first was a **positive classroom climate**. This theme had to do with any mention of a favorable classroom environment. This idea surfaced five times in the notes to the Control group teachers. One such note is as follows: *You have dedicated much effort to getting to know each of your students and their abilities and as a result, your classroom climate is conducive to learning.* Comments in this area included behavior among students, the teacher's encouragement, and the

attitudes of the teacher and the students. A second area in the Control group's refinement notes was described as **management**. This was defined as the behaviors by both the teacher and the students that had to do with positively running the class. An example of comments from this category is the following: *What I see is that YOU are in control of the pace of your class. You have very few (and minor) behavior issues that you have to address in your class.* The idea of management appeared four times for this group.

Reinforcement for the Treatment group. The two most frequently occurring ideas in the notes for reinforcement for the Treatment group of teachers were **effectively communicating learning goals** and **using a variety of instructional strategies**. Each of these ideas appeared four times in the notes for reinforcement. The first, **effectively communicating learning goals**, included reference to clearly articulating and defining daily objectives. Raw evidence of this appeared in notes as the following: *You regularly modeled, provided formulas and strategies, explained, and defined all that you asked your students to do.* Interestingly, the first request on the MyiLOGS lesson-planning tool is for the teacher to add the learning goals for the day. The possibility exists that the MyiLOGS tool held the teachers accountable for designing instruction focused on specific learning goals. Tied with the first area, **using a variety of instructional strategies** was also referenced four times in the notes for reinforcement for the Treatment group of teachers. Comments mentioning multiple teaching methods qualified notes for this area. The following example demonstrates raw data for this theme: *You varied the ways your students were*

going to approach the material being tested so that your lesson leading up to the actual test was interesting. The Detail Day reports on the MyiLOGS tool asks the teacher to record the different grouping strategies and the different teacher actions and cognitive processes the teacher employs. Again, the possibility exists that the overt recording designated by the MyiLOGS tool in this area may have impacted teacher performance.

Refinement

Areas of refinement were also different for the Treatment and the Control groups. The Treatment groups had comments indicating need for Refinement in the areas of Academic Feedback, Activities and Materials, Standards and Objectives, and Knowledge of Students. The Control group's areas of concern were Presenting Instructional Content, Standards and Objectives, and Knowledge of Students.

Refinement for Control group: Of note, the area of Presenting Instructional Content was suggested for refinement for three of the five Control group teachers on the post M-TAP evaluation. None of the Treatment group teachers had this suggested area for refinement.

In the area of refinement, certain points surfaced among both the treatment and the control group. Interestingly, from the three teachers who had Presenting Instructional Content as a refinement suggestion, one of the ideas that surfaced through the open-coding process was **low student engagement**. This theme included statements that had to do with increasing student involvement in the lesson. The following illustrates one such suggestion from

this area: *By paying attention to the lulls in student engagement, you can better plan to avoid the pitfalls that lead students off task.* From the three teachers for whom Presenting Instructional Content was suggested, this topic appeared six times. Another idea that appeared in the refinement notes for the Control group teachers was **low academic expectations**. Comments that contained any messages about raising classroom rigor were included in this area. An example of raw data that contained this idea follows: *The effect of raising expectations is that you will naturally challenge all of your students by concretely outlining a higher level of performance.* This idea appeared three times.

Refinement for Treatment group. Among the refinement notes for the Treatment group were **need for differentiation** and **adding relevancy**. Comments under the area of **need for differentiation** had to do with varying instruction for the individual student and for different groups in a class. An example of this idea is as follows: *I would like to see you plan to address your students' different needs through the activities you assign your students.* Many teachers struggle with achieving differentiation in their instruction. The theme of **adding relevancy** occurred with the next highest frequency. This theme included comments about connecting classroom learning to real life experiences. An illustration of this theme is: *Also, by making sure to communicate what and why the students are learning what they are, the students will see more of a connection to larger goal.* Perhaps what is most interesting about the comments to the Treatment group of teachers is what is *not* suggested for refinement. There was an absence of comments about poor

use of instructional time or negative comments about running a classroom.

By contrast, three teachers of the Control group had post-test suggestions for refinement in the area of Presenting Instructional Content, which includes running a classroom.

Opportunity to Learn survey

The **Opportunity to Learn Survey** included one open-ended response item after each construct grouping. These open-ended responses served as a source of qualitative data to address Research Question 1. The process of open coding was used to search for any themes that surfaced among the responses. There was an open-ended response item at the end of each construct grouping of questions. Each of the three groups of questions ended with the following item: What resources (if any) are helpful to you in managing your instructional time/instructional content/instructional quality? Table 7 details the themes that surfaced from the open-ended response items:

Table 7

Opportunity to Learn Survey Qualitative Data Codes

Code	Treat	Con	Descriptor
Category-Time			
Lesson Planning	4	2	Activities that help prepare for instruction
MyiLOGS	3		Reference to the MyiLOGS tool
Time		3	Using a time
Category-Content			
MyiLOGS	3		Reference to the MyiLOGS tool
Standards	2	1	References to state standards or CCSS
Study Island		2	Reference to Study Island software tool
Content-Quality			
College classes	3	2	Information from college classes
TFA PD	1	1	Information from TFA classes
MyiLOGS	2		Reference to the MyiLOGS tool
Collaboration	2	2	Working with fellow colleagues
Total Comments	20	13	

Note. T= Responses from teachers in Treatment Group, C= Responses from teachers in Control Group.

The Treatment group teachers offered seven more responses to the open-response item questions. Also, the MyiLOGS tool was mentioned eight times. In addition, the MyiLOGS tool was mentioned as a resource in each of the three construct areas, so at least two teachers saw it as a resource in each area.

Finally, **Social Validity Interview** (see Appendix D) served as another source of qualitative data in addressing Research Question 1. This written interview was given to each of the members of the treatment group at the beginning of their fourth quarter of teaching. An open coding analysis was done for each of the three questions in search of themes that might surface to inform any insight in response to Research Question 1. Indeed, themes did surface. Table 8 provides a description of the themes that surfaced from each question:

Table 8

Social Validity Interview Qualitative Data Codes

Code	Descriptor
Q1-What you liked	
Ease of use	Reference to minimal efforts the tool required
Common Core	Drop-down menu with the CCSS
Q2-Support from the tool	
Common Core	Familiarized users with CCSS
Engagement	Helped keep students on task
Time management	Provided realistic data about use of class time
Q3-Effect on Teaching	
Time management	Aided in controlling use of instructional time
Instructional planning	Improved efforts to make lessons effective
Engagement	Tracking involvement lead to increased time on task
Reflection	Any practice of thoughtfully considering instructional practices

Each participant in the Treatment group made mention of how easy the tool was to use. This is critical because the teachers are asked to log their information frequently. As first year teachers, much of their first year is spent learning new practices, so the fact that they found the MyiLOGS tool convenient possibly aided in their compliance with this study. The many references to how the tool benefitted the teachers in learning and using the Common Core State Standards is notable because these standards are new to all teachers in the state. The teachers commented numerous times about the benefits of the drop-down CCSS menu. Their comments highlighted that the menu helped them cover more standards because the list was readily available to them. The tool possibly could set teachers up for a smooth transition to the CC shift.

The teachers also commented in two of the three questions about how the tool aided them in the area of student engagement. Many of their comments had to do with the fact that the tracking of student engagement led them to have a more realistic view of what was happening in their classrooms and how they needed to make adjustments to instruction. The comments in the engagement category also made mention of how the different tracking requests forced them to vary instructional practices which also aided in increasing student engagement. Along with engagement, the teachers commented favorably about how the tool helped with instructional planning. Among these favorable comments were references to increasing

differentiation in instruction, varying instructional practices, and aligning curriculum with state standards more closely.

The most frequent code mentioned was time. The literature on Opportunity to Learn cites that time spent on instructing tested standards is one of the factors that has been linked to greater student achievement (Walberg & Paik, 2000). The teachers overwhelmingly perceived the MyiLOGS tool as an asset to their instructional time management. One teacher wrote, “The tool gave me a realistic picture of how I was using my class time.” Three commented on how the use of the tool helped minimize lost instructional time because they were held accountable for tracking it. Another stated that the tool taught her to focus on being in control of instructional time, rather than being controlled by external factors.

Finally, it appears that one of the areas of impact that the teachers perceived from the MyiLOGS tool was reflection. The teachers made mention of the many realizations the tool highlighted. They also spoke about how the tracking of their data gave them realistic views of their teaching practices. The teachers spoke of what they learned from the tool and the practices they adjusted as a result of using the tool. All of these actions are the result of an effective reflection catalyst: MyiLOGS.

Research Question 1: Summary of Results

Both the quantitative and the qualitative data collected to study the impact that using the MyiLOGS tool had on six of the indicators for the M-TAP presented evidence that the Treatment group teachers benefitted from

the tool. They scored higher in five of the six post-test M-TAP indicators. The qualitative data analyzed from this tool presented evidence that supported these higher scores. In addition, the OTL Survey revealed that while the control group teachers had greater growth in the areas of instructional areas of time, content, and quality, the treatment group teachers finished with higher overall scores in each construct area. Additionally, the innovation had a high magnitude of impact in each of these three areas when their effect size was calculated. Both M-TAP indicators and the OTL construct areas favored the teachers who used the MyiLOGS innovation.

Section Two-Research Question 2: What effect does using a personalized professional development tool (MyiLOGS) have on the efficacy of the first year teacher?

Quantitative Results

The **Teachers' Sense of Self Efficacy** survey instrument (Tschannen-Moran & Woolfolk Hoy, 2001) was administered as a pre-test during the first quarter of the school year to all ten participants. All ten teachers took this same survey again at the beginning of the fourth quarter of their school year to serve as a post-test. The questions on this survey are grouped according to the constructs of the theory of Self Efficacy: efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management (Tschannen-Moran & Woolfolk Hoy, 2001). First a grand mean was calculated for each group's pre-test and post-test. Because each group's grand mean demonstrated an improved score in perceived efficacy, more

detailed statistical tests were run. For each construct area, means were calculated for the control group and for the treatment group for the pre-test and the post-test results. Table 9 depicts these results:

Table 9

TSES Survey Data

Construct	Pre-Treat		Post-Treat		Pre-Con		Post-Con	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Engagement	3.575	.272	4.22	.56	2.55	.357	3.6	.44
Instruction	3.65	.457	4.22	.56	2.97	.494	3.85	.44
Management	4.125	.935	4.35	.346	2.8	.387	4.02	.18
Grand Mean	3.79		4.33		2.77		3.81	

Note. N=5 for both groups, Treat= Treatment group of teachers, Con= Control group of teachers M= mean, SD= standard deviation

An independent t-test on the gain scores for the two groups was run to see if there existed any significance. Table 10 illustrates this t-test and an Effect Size test.

Table 10

TSES T-Test and Effect Size Test

Construct	Treatment Gain Score		Control Gain Score		p value	Cohen's d
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Engagement	0.65	.006	1.1	.000	.008*	1.552
Instruction	0.75	.003	0.85	.004	.005*	1.552
Management	0.225	.103	1.225	2.67688E-06	.017*	2.22

*Note. N=5 for both groups, $p \leq 0.0*5$, M= mean, SD= standard deviation*

Of note, the post-test mean for the treatment is .625 higher in the area of efficacy in student engagement than the control group score. When recording classroom data on Detail Days for the MyiLOGS tool, the teachers

are asked to record the level of student engagement, and daily, they recorded their estimates for their “time not available for instruction.” The possibility exists that these recordings may have lead the treatment group teachers to base their efficacy in engagement scores on actual data; thus, recording a more realistic score than the control group teachers did. In the construct area of Efficacy in Student Engagement both the treatment and the control groups of teachers reported growth. A comparison of the amount of growth reveals that the control group experienced .45 more growth than did the treatment group. However, a closer look at the scores for both groups in this area shows that the control group teachers started with a lower score for their mean in this area on the pre-test. This demonstrates that this group had a greater potential for growth.

As in the Efficacy in Engagement construct area, the treatment group recorded a higher post-test mean in this area, .4 higher. Once more, there exists the possibility that the MyiLOGS tool may have played a role in these scores as well. When tracking their instructional practices data, the treatment group of teachers had to evaluate the cognitive processes, grouping formats, and differentiation efforts among other details. This accountability may have served as a reminder of how much more room for improvement their instructional practices have; whereas, the control group of teachers did not have this hard data upon which to reflect when scoring themselves.

The third construct area-*efficacy in classroom management*- proved similar to the first two constructs. Once again the control group teachers experienced

greater growth in their scores; while, the treatment group of teachers finished with a higher overall mean on the post-test.

One more calculation that was valuable in interpreting TSES results is *effect size*. From these scores, the MyiLOGS innovation can be described as having a large effect on the three construct areas in the Teacher Self Efficacy Survey according to the Cohen's *d* formula because each is above .80.

Qualitative Results

To view the data exploring Research Question 2 from a mixed methods perspective, both quantitative and qualitative data collection methods were employed.

Sense of Self Efficacy survey. The survey included three open-ended response items at the end of the survey. The three questions asked the following: What factors affect your efficacy in the areas of student engagement, instructional strategies, and classroom management? These open-ended responses served as a source of qualitative data to address Research Question 2. The process of open coding was used to search for any themes that surfaced among the responses. Table 12 details the themes that surfaced from the open-ended response items:

Table 11

TSES Qualitative Data Codes

Code	T	C	Descriptor
Category-Engagement			
Planning	3	2	Activities that help prepare for instruction
Student interests	3	3	Material that students find engaging
Lack of support	1	3	An absence of resources
Category- Instructional Strategies			
Planning	4		Activities that help prepare for instruction
Lack of knowledge	2	2	An absence of content mastery
Lack of resources		3	An absence of resources
Category- Management			
Planning	3	2	Activities that help prepare for instruction
Lack of support		3	An absence of resources
Consistency	1	2	Persistent behavior lacking contradiction
Total	17	20	

Note. T= Responses from teachers in Treatment Group. C=Responses from the teachers in Control Group.

In the area of efficacy in student engagement, both groups of teachers remarked about the role that lesson planning plays in holding students' interests. Of note, two of the three teachers in the treatment group had messages about how a well-planned lesson adds to student engagement, "Good planning and chunking of my lesson keeps my students on task." By contrast, the two comments that came from the control group teachers talked about the results of poor planning, "When I have no time to plan, my class is out of

control.” Another insightful point highlighted in their comments was the three comments from the control group of teachers about how deficient they felt in running their classrooms. One teacher wrote, “I have no support from my school or administration about how to better manage my students.” Unlike a traditional student teaching setting, these teachers did not see a mentor on a daily basis.

In the comments about what factors affect the teachers’ feelings of efficacy in the area of instructional strategies, the teachers using the MyiLOGS tool remarked positively about their confidence in their ability to include a variety of different instructional strategies in the planning stage. One teacher wrote, “I start with a CCSS and design my lesson to support that.” Because the CCSS are new to all teachers in the state, teachers are not able to rely on veteran colleagues for support in that area; however, the MyiLOGS tool includes a listing of the new CCSS in its lesson-planning feature. The teachers in the control group remarked about how their lack of resources such as technology, prep time, and district resources left them with feelings of inadequacy in the area of instructional strategies.

In the third efficacy construct of classroom management, both groups of teachers mentioned that planning played a role in affecting their efficacy. The comments about planning echoed earlier sentiments in the first two constructs. Both groups noted that the more prepared their lessons were, the better their classroom management was. The trend from the control was that they perceived a lack of support in this construct area. These comments

highlighted a lack of support from their building administration, school policy, and parents.

Research Question 2: Summary of Results

A review of both the qualitative data and the quantitative data provided evidence that the teachers who used the MyiLOGS tool perceived a higher degree of efficacy in student engagement, instructional strategies, and classroom management. The quantitative data revealed that the control group of teachers experienced greater growth from pre-test to post-test in their feelings of efficacy, but the teachers using the MyiLOGS innovation reported higher post-test scores of efficacy in each of the three constructs. The qualitative data provided further description of the classroom experiences. The control groups listed a lack of support from outside sources and resources as the most frequently mentioned explanation. Finally, the effect size calculation revealed a magnitude of large impact in each of the three construct areas for a teacher's sense of self-efficacy.

Section Three- Overall Summary of Findings

The quantitative and qualitative data collected to answer Research Question 1 on the effect of using a personalized professional development tool (MyiLOGS) has on an Intern Teacher's performance on six of the TAP evaluation indicators revealed that the innovation did appear to have an impact. The quantitative data from the TAP evaluation and the OTL survey demonstrated higher post-test scores for the teachers who used the innovation. In addition, the effect size test run on the OTL survey resulted in magnitude

scores of a high impact for the innovation. The qualitative data told a story that highlighted that the teachers using MyiLOGS had a realistic perception of their classroom practices. In addition, these same teachers did not communicate a feeling that they lacked the resources to necessary to do their job effectively.

For Research Question 2- the effect of using a personalized professional development tool (MyiLOGS) have on an Intern Teacher's sense of self efficacy, both the quantitative and qualitative data illustrated higher efficacy for the teachers who used the innovation. The Treatment group of teachers using MyiLOGS finished the study with higher post-test scores in all three efficacy constructs even though the Control group of teachers reported greater growth in efficacy. Additionally, the effect size score revealed that the innovation had a large magnitude of impact. The themes that surfaced in the qualitative data used to study Research Question 2 illustrated a feeling from the control group of teachers that they felt they lacked resources and support necessary to do their jobs effectively. All ten teachers noted how their ability to plan effectively impacted all three areas of teacher efficacy; however, the comments from the teachers who used the MyiLOGS tool contained a sense that their planning positively affected their practices.

The data collected in this study revealed that innovation of using a personalized professional development tool (MyiLOGS) did have a favorable effect on teacher practices and teacher self-efficacy.

Chapter 5

CHAPTER 5 DISCUSSION AND IMPLICATIONS

The purpose of this study was to examine whether or not the use of a personalized, professional development tool (MyiLOGS) affected the efficacy and the performance on six TAP indicators for first-year teachers holding the Intern Teaching Certificate. The innovation for this study was chosen based on the lack of daily support the first year intern teachers receive due to the absence of daily interaction with a mentor teacher. The analysis of both the quantitative and the qualitative data collected in this study supports the claim that the performance and efficacy of the five teachers who used this innovation was positively affected. The participants from both the control and the treatment groups were homogeneous in the support they received from the university and Teach for America. Their teaching assignments were also very similar. Although all setting details could not be controlled between the two groups, in general the teachers shared many common variables. Because of this, the comparison between the two groups warrants discussion.

The findings regarding the positive effect of the innovation on teacher performance on the six TAP indicators (standards and objectives, activities and materials, academic feedback, instructional planning, and managing behavior) are supported by both the quantitative data and the qualitative data. Although both groups demonstrated growth in all six indicators from pre-test to post-test, the teachers who used MyiLOGS earned higher post-test scores on the TAP rubric. As was detailed earlier, the theory of Opportunity to Learn serves as

the basis for the MyiLOGS tool. The construct areas for OTL (time, content, and quality) are closely related with the six TAP indicators under scrutiny in this study. Further supporting the positive effect of the use of MyiLOGS, teachers using the tool had more favorable post-test scores in the three OTL constructs than the control group of teachers did. This was especially notable because the teachers using the tool had the concrete data from their instruction to drive their responses on the OTL survey, while the control group teachers were basing their responses on impressions of their classroom performance rather than data from their classrooms.

Perhaps the area where the teachers using the innovation were in most agreement is that by tracking their classroom practices, they became more reflective about them. This was especially true in awareness of instructional time. The comments from the exit interview ranged from them being satisfied to unsatisfied with their ability to make good use of instructional time. Even those teachers who were unsatisfied with their use of time expressed appreciation for being held accountable for tracking how effective they were. As first year teachers, it is often difficult to master different teaching strategies, but time management is clear, concrete, and impactful on student achievement. The MyiLOGS tool made it easy to track time, and the teachers could set concrete goals for themselves. The same was true for the other instructional strategies that the teachers tracked either daily or on Detail Days. They were held accountable for tracking cognitive practices, grouping strategies, and differentiated efforts. While, the teachers may not have been satisfied with

their performances, each left the experience able to set concrete, measurable goals for improvement. The themes that surfaced in the qualitative data both from the TAP evaluation and the open-response items on the OTL survey were in support of what the innovation was trying to achieve: making first-year classroom teachers more self-sufficient and effective in their instructional practices, given that they lacked a full-time mentor teacher.

In an effort to study another effect of this innovation, the teachers' sense of teaching efficacy was also measured. Teaching efficacy has been linked to student achievement (Berman et al., 1977). The survey tool created by Tschannen-Moran & Woolfolk Hoy (2001) revealed that the teachers who used the MyiLOGS tool had a greater sense of efficacy in all three areas: engagement, instructional strategies, and management. The recording of practices demanded by the MyiLOGS tool is related to all three constructs of efficacy. Once again, the qualitative data revealed that the teachers saw value in tracking their own classroom practices to establish goals for improvement and topics for reflection.

For both research questions, there were two topics that surfaced from the different sources of qualitative data that seemed to affect the participants' teaching experience. First, many of the teachers commented on how valuable it was to **track their own practices**. The data requested from the MyiLOGS tool is based on the literature from the theory of Opportunity to Learn. The practices that MyiLOGS tracks are instructional strategies and practices that are tied to student achievement. They are also connected to teacher practices

rather than the socio-economic circumstances of the students (Herman, Klein, & Wakai, 1997). Perhaps the reason the tracking had such a powerful impact on the teachers is that their practices, both the successes and the failures, were clearly communicated to them. This form of feedback was detailed through the lens of the teacher himself; therefore, it was credible.

The second topic that surfaced as having influence on the teachers was the **reflection** that resulted from using the MyiLOGS tool. It is not unusual for a teacher to reflect on his or her practice, but it is not as common to have concrete data to serve as the focus of one's reflection. The data the teachers recorded were seen only by that teacher. Perhaps this allowed the teachers to honestly track their performances. Only the teachers and more importantly- their students- would judge their performance as effective or ineffective.

This university program, like most alternative certification programs and TFA, does not provide a mentor teacher for the daily support most new teachers need. Unlike many traditional certification programs, the alternatively certified teacher does not have an expert mentor teacher sitting in the room, scrutinizing all aspects of the new teacher's performance, providing daily guidance. While the MyiLOGS tool did not replace the experience of face-to-face daily feedback, it did provide the valuable resource of objective daily feedback for the teacher to use in reflection. Although it was up to the new teacher to capitalize on this resource, these teachers did have additional support that the program lacked before this innovation. To a certain degree, the Treatment group of teachers became more reflective practitioners than did the

teachers in the Control group. For alternative certification programs, it is important for the teachers to become self-sufficient as soon as possible.

Implications

With the increase of availability for alternative pathways to teacher certification, teacher preparation programs have come under greater scrutiny than ever. There is pressure to make certification faster, cheaper, and easier to attain. The problem is that while these alternatively certified teachers scramble to master the art of teaching with little guidance, their students suffer due to this inexperience. This college program, in collaboration with TFA, is an alternative pathway to traditional teaching certification. It does not offer the guidance of an apprentice-teaching mentor in the classroom. The teachers in this program do not get daily feedback on their instructional practices or have reflective conversations with a mentor on a frequent basis. The findings of this study suggest that a personalized professional development tool (MyiLOGS) could serve to fulfill some of the needs of the intern teachers.

Documenting instructional practices was beneficial to the new teachers in a variety of ways. The MyiLOGS tool held teachers accountable for documenting their practices by tracking their data. In tracking their data, teachers were held accountable for being more cognitively aware of their instructional practices. This increased awareness led to reflection that was based on realistic data rather than other less reliable factors. Tracking their practices also allowed teachers to compare their student assessment scores in relation to their instructional practices. Teachers monitored their actions and

adjusted them based on student needs. The MyiLOGS tool targeted areas that have been proven to increase student achievement, and the recording process was easy and resulted in clear data reports for the teachers. The process also encouraged the teachers to hold themselves accountable, as opposed to relying on an outside person or source to enforce accountability. The teachers had a positive reaction to holding themselves accountable. Meanwhile, their efficacy, their ratings on TAP indicators, and their alignment to the theory of OTL increased. The implication is that this process of using a personalized software tool to track their instructional practices lead to improved performance.

Becoming a reflective practitioner also proved to benefit the teachers who used the MyiLOGS tool. Tracking teaching practices and adjusting them based on student needs is only one part of the process of using the MyiLOGS tool. The second stage involves using student performance data along with the instructional practices data to target professional areas in need of growth. The professional development aspect of the tool takes the teachers through a reflective exercise to determine targets for growth based on the concrete data that the teacher has been tracking. In addition to creating a target for growth, the teachers also write a rubric or scoring guide by which they can judge to what level they have achieved their target for growth. This growth plan is created by and tailored to the individual needs and goals of the teacher. So, in addition to the reflection they do daily by logging in their lessons and the periodic reflection they do by reporting the data requested on Detail Days, the

teachers also reflect on a much larger scale to establish long term professional goals. The implication is that the teachers improve because they are constantly going through a guided reflection process.

Achieving self-sufficiency in a teacher's instructional practices may be a bi-product of using the MyiLOGS tool. Because the data reports illustrate areas where the teacher is succeeding or deficient, the teacher can use this data to determine for him or herself where adjustments in instruction are needed. In addition, the software tool web site defines and explains the different practices the teacher is asked to record. Many of the comments from the teachers in this study remarked about how helpful the Common Core State Standards menu was because it was an easy, efficient way to learn the Common Core standards. In addition, the teachers are being asked on a regular basis to report the different cognitive levels their instruction is demanding. Imagine the scenario where a new teacher gets feedback from an evaluator that he or she needs to make his instruction more rigorous. That is not as helpful as seeing that students are being asked only to operate on the lowest levels of Bloom's taxonomy. The MyiLOGS tools would show the teacher this. The implication is that this tool is effective because it includes the information necessary for the teacher to help himself.

Suggestions for replication. Three suggestions for ways to improve the experience for the teachers throughout the duration of this study include the following: earlier training on the tool, using the professional growth function of the tool more completely, and soliciting feedback about needs.

The teachers were selected and trained shortly after they began their school year. In retrospect, it would have been helpful to introduce the teachers to the tool before they began their school year. Once the school year began, the teachers became inundated with demands from their new jobs, their university courses and their TFA commitments. Ideally, the teachers would have been introduced to the tool, trained on the tool, and made aware of all the resources the tool offers before they set foot in their classrooms. The teachers reported that the use of the MyiLOGS tool was an “additional” task that they performed; yet, if they had been trained before they started teaching, perhaps they would have come to see the tool as an essential part of their daily practice, perhaps even replacing traditional lesson planning. Also, the MyiLOGS website offers resources that help instruct the users about the different teaching practices they are asked to record. The teachers in this study did not report using much of the website besides the tracking function; thus, they missed out on a valuable resource. Because the teachers were focused on mastering the use of the tool during the training, much of the additional information about the MyiLOGS website was not retained.

Also, because the study only lasted for eleven weeks, the teachers did not have the opportunity to generate the quantity of data necessary to take full advantage of the professional development phase of the MyiLOGS tool. Because this feature offers such a unique way to reflect on one’s specific instructional practices, the professional development feature has large potential. Aside from tailoring targets for growth for the individual, the

professional growth feature teaches the user how to create descriptive, concrete evidence as criteria for goal achievement. This sophisticated task is presented in a step-by-step, accessible process. By not completing this process, the participants missed out on the full potential of this tool.

One other aspect of this study that fell short of its potential was the lost opportunity to solicit instructional needs from the participants. Future studies using this tool would benefit by taking advantage the MyiLOGS users' newly found expertise at describing their instructional practices to open a dialogue about what areas the teachers felt inadequate. As the University Supervisor for these teachers, the data the teachers were collecting was rich with potential for discussion that could target specific needs of the teachers. In essence, the tool helped to teach the teachers in what aspects their practices fell short. Ideally, soliciting this feedback would have been done frequently.

Conclusion

Alternative pathways to earning teaching certification are here to stay. The partnership between the university and TFA provides more support than some alternative certification programs. According to Linda Darling Hammond (2010), effective teacher preparation programs offer an apprentice experience where the novice teacher gets to consult with, receive caring from, practice with, and model expert teachers. The intern teacher gets none of these experiences on a daily basis. But just as a teacher's goal is to help a student become a self-reliant learner, so might the teacher preparation program work to help the novice teacher take control of his professional development. The

MyiLOGS tool generated the valuable resource of instructional practice data. With minimal training, the teacher mastered how to interpret this data to inform and adjust instruction.

What this study revealed is that a creative innovation can begin to address some of the deficiencies of both the college alternative certification program and TFA. But the intern teacher must become an active partner in the process. The Intern teacher begins the job already trying to catch up to those teachers who experience a traditional year-long apprenticeship. Innovation is key. The MyiLOGS tool did not fill every hole the university/TFA partnership has, but it did offer teachers the chance to learn from and take control of their own instructional practices with the help of a tool to guide them. The extra resource of the MyiLOGS tool held a mirror to the everyday experiences of a novice teacher and helped him to see clearly what was being addressed and what was being missed. It was up to the teacher to decide whether or not to reflect and whether or not to try to improve, but like most good teachers, they rose to the occasion and began to take control of their professional experience because they knew their students needed them to.

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APPENDIX A

MODIFIED TEACHER ADVANCEMENT PROGRAM (M-TAP)

TEACHER NAME:
CLINICAL INSTRUCTOR:
DATE OF OBSERVATION:

This portfolio addresses InTASC Standard #1 (Learner Development), Standard #2 (Learning Differences), Standard #3 (Learning Environments), Standard #4 (Content Knowledge), Standard #5 (Application of Content), Standard #6 (Assessment), Standard #7 (Planning for Instruction), and Standard #8 (Instructional Strategies).

PERFORMANCE ASSESSMENT GUIDE

- ✓ Arrange the day/time of your lesson and post-conference with your clinical instructor
- ✓ Complete the **Planning Narrative** prior to the observation (at least 24 hours in advance) and post to Blackboard
- ✓ Post **Lesson Plan** to Blackboard prior to the lesson (at least 24 hours in advance)
- ✓ Teach the entire lesson (see syllabus as video will be needed for the Quarter 2 observations)
- ✓ Participate in **Post-Conference** with your clinical instructor
- ✓ Complete the **Post-Lesson Reflection** and post to Blackboard
- ✓ Note: see syllabus for **Video Reflection** requirement for Quarter 2

PLANNING NARRATIVE

1. What were your areas of reinforcement and refinement from your previous lesson? How are they being addressed in this lesson? What evidence will indicate that you have progressed toward your goals? *Note: may not be applicable on first observation.*
2. What evidence do you have that your lesson plan will be appropriate for the age, knowledge, and interests of all learners?
3. What skills would your students demonstrate to indicate mastery of your objective? How are you measuring those skills in your formative assessment? How are you measuring those skills in your summative assessment?
4. What do you need to know about the content in this lesson to be successful teaching it?
5. Other reflective thoughts regarding this lesson?

APPRENTICE TEACHING EVALUATION

Standards and Objectives	Exemplary (5)	Highly Proficient (4)	Proficient (3)	Approaching Proficient (2)	Unsatisfactory (1)
SCO RE:	• All learning objectives and state content standards are	Evidence in both columns 3	• Most learning objectives and state content standards are communicated.	Evidence in both columns 1 and 3	• Few learning objectives and state content standards

	<p>explicitly communicated.</p> <ul style="list-style-type: none"> • Sub-objectives are aligned and logically sequenced to the lesson's major objective. • Learning objectives are: (a) consistently connected to what students have previously learned, (b) know from life experiences, and (c) integrated with other disciplines. • Expectations for student performance are clear, demanding, and high. • State standards are displayed and referenced throughout the lesson. • There is evidence that most students demonstrate mastery of the objective. 	<p>and 5</p>	<ul style="list-style-type: none"> • Sub-objectives are mostly aligned to the lesson's major objective. • Learning objectives are connected to what students have previously learned. • Expectations for student performance are clear. • State standards are displayed. • There is evidence that most students demonstrate mastery of the objective. 		<p>are communicated.</p> <ul style="list-style-type: none"> • Sub-objectives are inconsistently aligned to the lesson's major objective. • Learning objectives are rarely connected to what students have previously learned. • Expectations for student performance are vague. • State standards are displayed. • There is evidence that few students demonstrate mastery of the objective.
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Presenting Instructional Content	Exemplary (5)	Highly Proficient (4)	Proficient (3)	Approaching Proficient (2)	Unsatisfactory (1)
<p>SCORE:</p>	<p>Presentation of content always includes:</p> <ul style="list-style-type: none"> • visuals that establish the purpose of the lesson, preview the organization of the lesson, and include internal summaries of the lesson; • examples, illustrations, analogies, and labels for new concepts and ideas; • modeling by the teacher to demonstrate his or her performance expectations; • concise communication; • logical sequencing and segmenting; • all essential information and; • no irrelevant, confusing, or nonessential information. 	<p>Evidence in both columns 3 and 5</p>	<p>Presentation of content most of the time includes:</p> <ul style="list-style-type: none"> • visuals that establish the purpose of the lesson, preview the organization of the lesson, and include internal summaries of the lesson; • examples, illustrations, analogies, and labels for new concepts and ideas; • modeling by the teacher to demonstrate his or her performance expectations; • concise communication; • logical sequencing and segmenting; • all essential information and; • no irrelevant, confusing, or nonessential information. 	<p>Evidence in both columns 1 and 3</p>	<p>Presentation of content rarely includes:</p> <ul style="list-style-type: none"> • visuals that establish the purpose of the lesson, preview the organization of the lesson, and include internal summaries of the lesson; • examples, illustrations, analogies, and labels for new concepts and ideas; • modeling by the teacher to demonstrate his or her performance expectations; • concise communication; • logical sequencing and segmenting; • all essential information and; • no irrelevant, confusing, or nonessential information.

Activities and Materials	Exemplary (5)	Highly Proficient (4)	Proficient (3)	Approaching Proficient (2)	Unsatisfactory (1)
SCORE:	<p>Activities and materials include all of the following:</p> <ul style="list-style-type: none"> • support the lesson objectives; • are challenging; • sustain students' attention; • elicit a variety of thinking; • provide time for reflection; • are relevant to students' lives; • provide opportunities for student-to-student interaction; • induce student curiosity and suspense; • provide students with choices; • incorporate multimedia and technology and; • incorporate resources beyond the school curriculum texts (e.g., teacher-made materials, manipulatives, resources from museums, cultural centers, etc.). <p>In addition, sometimes activities are game-like, involve simulations, require creating products, and demand self-direction and self-monitoring.</p>	<p>Evidence in both columns 3 and 5</p>	<p>Activities and materials include most of the following:</p> <ul style="list-style-type: none"> • support the lesson objectives; • are challenging; • sustain students' attention; • elicit a variety of thinking; • provide time for reflection; • are relevant to students' lives; • provide opportunities for student-to-student interaction; • induce student curiosity and suspense; • provide students with choices; • incorporate multimedia and technology and; • incorporate resources beyond the school curriculum texts (e.g., teacher-made materials, manipulatives, resources from museums, cultural centers, etc.). 	<p>Evidence in both columns 1 and 3</p>	<p>Activities and materials include few of the following:</p> <ul style="list-style-type: none"> • support the lesson objectives; • are challenging; • sustain students' attention; • elicit a variety of thinking; • provide time for reflection; • are relevant to students' lives; • provide opportunities for student-to-student interaction; • induce student curiosity and suspense; • provide students with choices; • incorporate multimedia and technology and; • incorporate resources beyond the school curriculum texts (e.g., teacher-made materials, manipulatives, resources from museums, etc.).

Academic Feedback	Exemplary (5)	Highly Proficient (4)	Proficient (3)	Approaching Proficient (2)	Unsatisfactory (1)
SCORE:	<ul style="list-style-type: none"> • Oral and written feedback is consistently academically focused, frequent, and high quality. • Feedback is frequently given during guided practice and homework review. • The teacher circulates to prompt student thinking, assess each 	<p>Evidence in both columns 3 and 5</p>	<ul style="list-style-type: none"> • Oral and written feedback is mostly academically focused, frequent, and mostly high quality. • Feedback is sometimes given during guided practice and homework review. • The teacher circulates during instructional activities to support engagement and monitor student work. • Feedback from students 	<p>Evidence in both columns 1 and 3</p>	<ul style="list-style-type: none"> • The quality and timeliness of feedback is inconsistent. • Feedback is rarely given during guided practice and homework review. • The teacher circulates during instructional activities, but monitors mostly behavior. • Feedback from

	<p>student's progress, and provide individual feedback.</p> <ul style="list-style-type: none"> • Feedback from students is regularly used to monitor and adjust instruction. • Teacher engages students in giving specific and high-quality feedback to one another. 		<p>is sometimes used to monitor and adjust instruction.</p>		<p>students is rarely used to monitor or adjust instruction.</p>
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Instructional Plans	Exemplary (5)	Highly Proficient (4)	Proficient (3)	Approaching Proficient (2)	Unsatisfactory (1)
SCORE:	<p>Instructional plans include:</p> <ul style="list-style-type: none"> • measurable and explicit goals aligned to state content standards; • activities, materials, and assessments that are aligned to state standards. <p>are sequenced from basic to complex. build on prior student knowledge, are relevant to students' lives, and integrate other disciplines. provide appropriate time for student work, student reflection, and lesson and unit closure;</p> <ul style="list-style-type: none"> • evidence that plan is appropriate for the age, knowledge, and interests of all learners and; • evidence that the plan provides regular opportunities to accommodate individual student needs. 	<p>Evidence in both columns 3 and 5</p>	<p>Instructional plans include:</p> <ul style="list-style-type: none"> • goals aligned to state content standards; • activities, materials, and assessments that are aligned to state standards. <p>are sequenced from basic to complex. build on prior student knowledge. provide appropriate time for student work, and lesson and unit closure;</p> <ul style="list-style-type: none"> • evidence that plan is appropriate for the age, knowledge, and interests of most learners and; • evidence that the plan provides some opportunities to accommodate individual student needs. 	<p>Evidence in both columns 1 and 3</p>	<p>Instructional plans include:</p> <ul style="list-style-type: none"> • few goals aligned to state content standards; • activities, materials, and assessments that are rarely aligned to state standards. <p>are rarely logically sequenced. rarely build on prior student knowledge inconsistently provide time for student work, and lesson and unit closure;</p> <ul style="list-style-type: none"> • little evidence that the plan is appropriate for the age, knowledge, or interests of the learners and; • little evidence that the plan provides some opportunities to accommodate individual student needs.

Managing Student Behavior	Exemplary (5)	Highly Proficient (4)	Proficient (3)	Approaching Proficient (2)	Unsatisfactory (1)
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SCORE:	<ul style="list-style-type: none"> • Students are consistently well-behaved and on task. • Teacher and students establish clear rules for learning and behavior. • The teacher uses several techniques, such as social approval, contingent activities, and consequences to maintain appropriate student behavior. • The teacher overlooks inconsequential behavior. • The teacher deals with students who have caused disruptions rather than the entire class. • The teacher attends to disruptions quickly and firmly. 	Evidence in both columns 3 and 5	<ul style="list-style-type: none"> • Students are mostly well-behaved and on task, some minor learning disruptions may occur. • Teacher establishes rules for learning and behavior. • The teacher uses some techniques, such as social approval, contingent activities, and consequences to maintain appropriate student behavior. • The teacher overlooks some inconsequential behavior, but other times addresses it, stopping the lesson. • The teacher deals with students who have caused disruptions, yet sometimes he or she addresses the entire class. 	Evidence in both columns 1 and 3	<ul style="list-style-type: none"> • Students are not well-behaved and are often off task. • Teacher establishes few rules for learning and behavior. • The teacher uses few techniques to maintain appropriate student behavior. • The teacher cannot distinguish between inconsequential behavior and inappropriate behavior. • Disruptions frequently interrupt instruction.
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Teacher Content Knowledge	Exemplary (5)	Highly Proficient (4)	Proficient (3)	Approaching Proficient (2)	Unsatisfactory (1)
SCORE:	<ul style="list-style-type: none"> • Teacher displays extensive content knowledge of all the subjects she or he teaches. • Teacher regularly implements a variety of subject specific instructional strategies to 	Evidence in both columns 3 and 5	<ul style="list-style-type: none"> • Teacher displays accurate content knowledge of all the subjects he or she teaches. • Teacher sometimes implements subject-specific instructional strategies to enhance student content knowledge. • The teacher sometimes highlights key concepts and ideas and uses them as bases to connect other powerful ideas. 	Evidence in both columns 1 and 3	<ul style="list-style-type: none"> • Teacher displays under-developed content knowledge in several subject areas. • Teacher rarely implements subject specific instructional strategies to enhance student content

	<p>enhance student content knowledge.</p> <ul style="list-style-type: none"> • The teacher regularly highlights key concepts and ideas and uses them as bases to connect other powerful ideas. • Limited content is taught in sufficient depth to allow for the development of understanding. 				<p>knowledge.</p> <ul style="list-style-type: none"> • Teacher does not understand key concepts and ideas in the discipline and therefore presents content in an unconnected way.
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Teacher Knowledge of Students	Exemplary (5)	Highly Proficient (4)	Proficient (3)	Approaching Proficient (2)	Unsatisfactory (1)
<i>SCORE:</i>	<ul style="list-style-type: none"> • Teacher practices display understanding of each student's anticipated learning difficulties. • Teacher practices regularly incorporate student interests and cultural heritage. • Teacher regularly provides differentiated instructional methods and content to ensure children have the opportunity to master what is being taught. 	Evidence in both columns 3 and 5	<ul style="list-style-type: none"> • Teacher practices display understanding of some students' anticipated learning difficulties. • Teacher practices sometimes incorporate student interests and cultural heritage. • Teacher sometimes provides differentiated instructional methods and content to ensure children have the opportunity to master what is being taught. 	Evidence in both columns 1 and 3	<ul style="list-style-type: none"> • Teacher practices demonstrate minimal knowledge of students' anticipated learning difficulties. • Teacher practices rarely incorporate student interests or cultural heritage. • Teacher practices demonstrate little differentiation of instructional methods or content.

Respectful Culture	Exemplary (5)	Highly Proficient (4)	Proficient (3)	Approaching Proficient (2)	Unsatisfactory (1)
<i>SCORE:</i>	<ul style="list-style-type: none"> • Teacher –student interactions demonstrate caring and respect for one another. • Students exhibit caring and respect for one another. • Teacher seeks out and is receptive to the interests and opinions of all students. 	Evidence in both columns 3 and 5	<ul style="list-style-type: none"> • Teacher –student interactions are generally friendly, but may reflect occasional inconsistencies, favoritism, or disregard for students' cultures. • Students exhibit respect for the 	Evidence in both columns 1 and 3	<ul style="list-style-type: none"> • Teacher – student interactions are sometimes authoritarian, negative, or inappropriate. • Students exhibit disrespect for the teacher.

	<ul style="list-style-type: none"> • Positive relationships and interdependence characterize the classroom. 		<p>teacher and are generally polite to each other.</p> <ul style="list-style-type: none"> • Teacher is sometimes receptive to the interests and opinions of students. 		<ul style="list-style-type: none"> • Student interaction is characterized by conflict, sarcasm, or put-downs. • Teacher is not receptive to interests and opinions of students.
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Reinforcement	Refinement

POST-LESSON REFLECTION
(TO BE COMPLETED AFTER YOUR POST-CONFERENCE)

1. Based upon your instruction and student performance, what can you identify as your strengths and your areas of growth?
2. Considering student achievement: what steps will you take to address students who did not meet the objective (i.e. work with a small group of students during reading time, meet with mentor to determine how he/she will follow up with students, plan to reteach lesson (day and time?), consult with parents and send home supplemental materials, consult with Special Education teacher, etc.)
3. What will you do before your next evaluation to address your areas of growth?
4. In your next lesson, what evidence will show you have improved in those areas?
5. Other reflective thoughts regarding this lesson?

APPENDIX B

OPPORTUNITY TO LEARN SURVEY

Questions will be answered according to the following scale:

- 1- strongly agree
- 2- agree
- 3- somewhat agree
- 4- somewhat disagree
- 5- disagree
- 6- strongly disagree

Time

Definitions:

Instructional activities- activities devoted to teaching the general curriculum

Administrative tasks- tasks related to running the class, not teaching the curriculum, such as taking attendance, reading announcements, passing out breakfast, etc...

Classroom management efforts- all efforts to make sure a lesson runs smoothly

1. I am aware of how much instructional time is spent on non-instructional activities.
2. I am satisfied with how much instructional time is spent on non-instructional activities.
3. I control how much class time is spent on non-instructional activities.
4. I am satisfied with how much class time is spent on administrative tasks.
5. I deliberately plan for how much of my class time is spent on administrative tasks.
6. I am satisfied with how much of my class time is spent on classroom management efforts.
7. I am in control of how much of my class time is spent on classroom management efforts.
8. In general, I am satisfied with the how my class time is used.

What (if any) resources are helpful to you in managing your instructional time?

Content

Definitions:

Common Core Standards: college and career readiness standards created by the NGA

Custom Standards: content standards not included in the Common Core

9. I am aware of how much of my instruction is devoted to the common core standards.
10. I control how much of my instruction is devoted to the common core standards.
11. I deliberately plan for how much of my instruction is devoted to the common core standards.
12. I am aware of how much of my instruction is devoted to custom standards.
13. I am satisfied with how much of my instruction is devoted to the custom standards.

14. I plan for how much of my instruction is devoted to custom standards.
15. I am satisfied with how much of my instruction is devoted to standards that are assessed.
16. In general, I am effective at planning the content of my instruction.

What (if any) resources help you to focus your instruction on standards?

Quality

Definitions:

Cognitive Processes: cognitive performances based on Bloom's taxonomy (attend, remember, understand, apply, analyze, evaluate, and create)

Instructional Practices: teaching methods (direct instruction, questioning techniques, think alouds independent practices, guided feedback, and visual representations)

17. I am aware of the cognitive processes I expect from my students.
18. I deliberately plan for the cognitive processes I expect from my students.
19. My plans call for students to use varying levels of cognitive processes on a regular basis.
20. My plans call for students to use the higher four levels of cognitive processes on Bloom's taxonomy (apply, analyze, evaluate, and create) on a regular basis.
21. I deliberately plan for the different instructional practices I use in my class.
22. I plan to use a variety of instructional practices in my class.
23. I praise my students for positive work on a regular basis.
24. I provide my students with corrective feedback on a regular basis.
25. My plans provide my students with a variety of instructional resources.
26. I plan for different grouping strategies in my instruction.

What (if any) resources are helpful to you when planning the different cognitive processes for your students?

What (if any) resources are helpful to you when planning the different instructional practices for your students?

APPENDIX C

SENSE OF SELF-EFFICACY SURVEY

Teacher Beliefs	How much can you do?				
Directions: This questionnaire is designed to help us get a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential.	A great deal	Quite a bit	Some Influence	Nothing	
	<i>Efficacy in student engagement</i>	5	4	3	2
1. How much can you do to get through to the most difficult students?	5	4	3	2	1
2. How much can you do to help your students think critically?	5	4	3	2	1
3. How much can you do to motivate students who show low interest in school work?	5	4	3	2	1
4. How much can you do to get students to believe they can do well in school work?	5	4	3	2	1
5. How much can you do to help your students value learning?	5	4	3	2	1
6. How much can you do to foster student creativity?	5	4	3	2	1
7. How much can you do to improve the understanding of a student who is failing?	5	4	3	2	1
8. How much can you assist families in helping their children do well in school?	5	4	3	2	1
<i>Efficacy in instructional strategies</i>					
9. How well can you respond to difficult questions from your students?	5	4	3	2	1
10. How much can you gauge student comprehension of what you have taught?	5	4	3	2	1
11. To what extent can you craft good questions for your students?	5	4	3	2	1
12. How much can you do to adjust your lessons to the proper level for individual students?	5	4	3	2	1
13. How much can you use a variety of assessment strategies?	5	4	3	2	1
14. To what extent can you provide an alternative explanation or example when students are confused?	5	4	3	2	1
15. How well can you implement alternative strategies in your classroom?	5	4	3	2	1
16. How well can you provide appropriate challenges for very capable students?	5	4	3	2	1
<i>Efficacy in Classroom Management</i>					
17. How much can you do to control disruptive behavior in the classroom?	5	4	3	2	1

18. To what extent can you make your expectations clear about student behavior?	5	4	3	2	1
19. How well can you establish routines to keep activities running smoothly?	5	4	3	2	1
20. How much can you do to get students to follow classroom rules?	5	4	3	2	1
21. How much can you do to calm a student who is noisy or disruptive?	5	4	3	2	1
22. How well can you establish a classroom management system with each group of students?	5	4	3	2	1
23. How well can you keep a few problem students from ruining an entire lesson?	5	4	3	2	1
24. How well can you respond to defiant students?	5	4	3	2	1

25. What factors affect your efficacy in student engagement?

26. What factors affect your efficacy in instructional strategies?

27. What factors affect your efficacy in classroom management?

How many years have you been teaching at your school?

How many years have you taught in total?

In what year were you born?

Please circle your school type: Public School
 Charter School Parochial

APPENDIX D

SOCIAL VALIDITY INTERVIEW

1. What (if anything) did you like about using the MyiLOGS tool?
2. What sort (if any) support did you get from the MyiLOGS tool?
3. In what ways (if any) did the MyiLOGS tool affect your teaching practice?

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