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Melissa Lloyd

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Walden University
2014

Abstract

Comparing Looping Teacher-Assigned and Traditional Teacher-Assigned Student Achievement Scores

by

Melissa C. Lloyd

MA, Winthrop University, 1989

BA, Clemson University, 1987

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

A problem in many elementary schools is determining which teacher assignment strategy best promotes the academic progress of students. To find and implement educational practices that address the academic needs of all learners, schools need research-based data focusing on the 2 teacher assignment strategies: looping assignment (LA) and traditional assignment (TA). LA is defined as a student remaining with the same teacher for more than 1 sequential year, and TA refers to a student being assigned to a new teacher every year. This study is important to educators for determining if one type of teacher assignment increases the academic performance of students to a higher degree than the other. The purpose of this quantitative study was to compare the achievement scores of students experiencing LA with students experiencing TA. Archived data for 235 students from the Measures of Academic Progress were used in order to conduct the independent sample *t* test. From this sample, 111 students looped and 124 students did not loop. Both groups were heterogeneously formed in order to maintain balance based on race, gender, and exceptionality. The results from this study were non-significant and did not support that students experiencing LA outperformed their TA counterparts academically. The consistency between the mean scores may have been due to resources or initiatives used in classrooms where teachers are expected to use the same curriculum. One recommendation for future study is to isolate the differing instructional strategies and resources used in these classrooms in order to determine if they affect student achievement. With this information, educational stakeholders may begin to view LA classrooms as a viable instructional tool that supports academic achievement to the same extent as TA classrooms.

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Dedication

I would like to dedicate the completion of this study to the memory of my late mother, Virginia K. Cooke, whose infinite wisdom and guidance instilled in me the desire to always push beyond my perceived limits; to my father, Willie Cooke, for being the best father a girl could ever have and for always being that steadfast and supportive rock in my life; and to my son, William Joseph Lloyd, for consistently asking, “Mommy, when will I be able to call you Doctor Mommy?” You are the best little boy in the whole wide world and the reason why this journey is finally over. What a marvelous and scenic ride it has been!

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Many, many thanks to Dr. Richard Braley, Dr. Barbara Calabro, and Dr. Brett Welch for serving as my committee members in my quest towards the completion of this doctoral study. This could not have been possible without your guidance, patience, and support. I sincerely thank each of you.

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Section 1: Introduction to the Study

Background of the Study

When students experience a different teacher each time they are promoted from one grade to the next, there is an inherent learning curve the students must achieve by discovering the assigned teacher's attitudes, rules, techniques, and preferences. Concurrently, the students are new to the teacher and the teacher must invest time in getting to know the students and determine how to best address their learning needs. In my school, two methods of assigning teachers to classes of students emerged: Traditional Assignment (TA) and Looping Assignment (LA). TA refers to the process of students advancing to a higher grade where there is a different teacher assigned to teach them. LA—while by no means revolutionary—is an educational reform that is capturing the attention of many schools, according to Grant, Richardson, and Forsten (2000). The term *looping* refers to the assignment of one teacher to a group of students through several, sequential grades; this teacher, upon completion of a specific grade, "loops back" to the starting grade level and begins the sequence anew with a new group of students (Delviscio & Muffs, 2007).

According to Reeves (2006 – 2007), implementing LA is a challenge when a school's organizational culture is steeped in doing things the way they have always been done. Fusarelli (2008) stated that even with ample professional development, data disaggregation, and hours spent in sessions devouring information and identifying groups of students who are not performing as they should, many teachers and administrators would prefer to continue with the status quo. Though student academic achievement is

not as it should be, many teachers would prefer to remain with what they have historically done than to try something new (Kohn, 2007). While there may be a few adventurous teachers who see the importance in change and trying new things, the majority of the public school faculty workforce does not (Lindsey, Roberts, & Campbell-Jones, 2005).

For this study, TA referred to the movement of students from one grade to a higher grade that has a different teacher assigned to teach that group of students and LA referred to the movement of an assigned teacher with the students who are advancing in grade. Because of *looping*'s simplistic, easy to implement, cost-effective nature, it has the potential to impact several school activities: decreased discipline referrals, improved student attendance rates, decreased numbers of students retained (meaning the student is not permitted to advance to the next academic grade level), reduced numbers of students referred for special education testing, and improved student-teacher relationships (Grant et al., 2000). That potential has not been systematically explored.

According to the systems theory articulated by Lunenburg and Ornestein (2004), every decision or change made to a system's established structure or operating procedure has the propensity to initiate the domino effect. Simply explained, the domino effect is initiated when one change in a system causes other anticipated or unanticipated changes to occur as well. The analogy refers to dominos standing on edge, one near enough to another to cause the nearby domino to fall when impacted by the first domino. The changes, whether positive or negative, which are represented by the domino analogy, may occur even when those changes are sufficiently spaced such that an impact caused

by failed or successful changes will not initiate a domino effect (Lunenburg & Ornestein, 2004). While research supports the positive social and emotional outcomes that occur from looping teacher assignments, there were significant gaps in the literature whereby beneficial or detrimental effects of loop assigned teachers are contrasted to traditionally assigned teachers. Furthermore, loop assigned teachers' student achievement data have not been statistically compared to traditional assigned teachers' student achievement data.

The gap in the literature required additional research pertaining to a concrete, standardized way of measuring looping's teacher assignments academic effectiveness on student achievement by comparing the student achievement levels of students experiencing loop teacher assigned series of classes to traditional teacher assigned series of classes. In Section 2, I will discuss, compare, and contrast in greater detail academic benefits of the process of using looping assignment of teachers to students against the process of using traditional assignment of teachers to a group of students.

Problem Statement

In my work environment there was a paucity of data available to analyze whether loop or traditional teacher assignments were beneficial or detrimental to student academic achievement. That problem exists in many elementary schools. The problem, specifically, was the emphasis placed on academic progress with a concurrent de-emphasis on social and emotional development of students (Burke, 1997; Chirichello & Chirichello, 2001; Gaustad, 1998). Schools must find and implement educational practices that address the academic needs of all the learners in the school, but to do that, schools need research-based data focusing on the two teacher assignment strategies: Looping Assigned (LA)

and Traditional Assigned (TA). I proposed to acquire that data by measuring and comparing the results of student test scores from a looping assigned teacher's student group with the student test scores from a traditional assigned teacher's group.

In this study, the independent variable was the assignment of a group of students either to one teacher for several, sequential school years or to different teachers for each sequential school year. The dependent variables were measurements of each student's academic achievement each year. I believed there could be a positive significant difference between assessment mean scores from the student group that experienced a single, LA (looping assigned) teacher experience for several, sequential years and the assessment mean scores of students who experienced multiple teachers through the TA (traditionally assigned) experience for several sequential years. Pertinent data used in this study were acquired from an archived database. The resulting data provided valuable information to schools concerning placing students in looping classrooms.

Nature of the Study

To compare the academic achievement of two student groups—one group that experienced the "looping" process of teacher assignment (referred to as the LA Group) and one group that experienced the "traditional" process of teacher assignment (referred to as the TA Group)—I obtained archived Measures of Academic Progress (MAP) data from the district's database for both groups of students. The groups had previously been formed at the school levels and possessed either LA or TA experiences. That data provided me the opportunity to collect and analyze testing data that were previously acquired by the district. Approximately 55 students who have looped from kindergarten

to first grade, 35 students who have looped from second to third grade, and 21 students who have looped from fourth to fifth grade, as well as 35 first, 22 second, 44 third, and 23 fifth grade students who have not looped, were studied. Those 235students were enrolled in two rural elementary schools in the same school district in South Carolina. Both sets of students were heterogeneously grouped.

Research Question and Hypotheses

Research question: Is there a significant difference between the mean score calculated from academic assessments completed by the group of students who experienced a looping assigned (LA) teacher and the mean score calculated from academic assessments completed by the group of students who experienced traditional assigned (TA) teachers as measured using the Measures of Academic Progress (MAP) assessments?

Null hypothesis: There is no significant difference between the academic assessment mean score calculated from the Measures of Academic Progress (MAP) assessments completed by the group of students who experienced looping teacher (LA) assignment and the academic assessment mean score calculated from the Measures of Academic Progress (MAP) assessments completed by the group of students who experienced the traditional assigned (TA) teachers.

Alternative hypothesis: There is a significant difference between the academic assessment mean score calculated from the Measures of Academic Progress (MAP) assessments completed by the group of students that experienced looping teacher (LA) assignment and the academic assessment mean score calculated from the Measures of

Academic Progress (MAP) assessments completed by the group of students that experienced the traditional assigned (TA) teachers.

The nature of the study, research question, and hypotheses are discussed in more detail in Section 3.

Purpose of the Study

The purpose of this quantitative study was to identify, document, and compare the academic achievement of elementary-aged students experiencing looping assigned (LA) teachers and students experiencing traditional assigned (TA) teachers (independent variable). For the purpose of research, looping was defined as one teacher instructing the same group of students for more than one year. Archived data collected from the Measures of Academic Progress (MAP) from participants in the looping classroom environments were disaggregated, analyzed, and compared with data from the Measures of Academic Progress (MAP) gathered from students who concurrently did not participate in looping classrooms (dependent variables). The independent variable was the assignment of a group of students either to one teacher for several sequential school years (LA) or to different teachers for each sequential school year (TA). The dependent variable was the measurement of each student's academic achievement each year. The data came from information that was collected as part of the normal academic operations of the school. All data were archived. The student MAP scores were from students currently enrolled in a rural school district in South Carolina. The conjectured relationships between the variables hinged on the hypothesis that positive outcomes of

looping consisted of increased academic performance as measured through archived standardized testing results.

Theoretical Framework

According to Jacobson (1997), looping, also known as teacher-student progression or multiyear grouping, teacher cycling, teacher rotation, or persistence teams (Grant et al., 2000), involves a teacher remaining with the same class for more than one year of instruction. At the end of the looping cycle, the teacher typically loops back to the lower grade level in order to begin the cycle again with another group of students (Delviscio & Muffs, 2007). According to Grant et. al. (2000), a memo from the United States Department of the Interior in 1913 supported looping as a viable educational reform. The memo asked if it was more beneficial to keep students and teachers together for several years so that there would be a continuous scaffolding of learning or if students should rotate through different teachers year after year. Looping is not a new concept as it dates back to the days of the one room schoolhouse. According to Grant et al., Rudolf Steiner, an Austrian educator, scientist, artist, and philosopher living in Germany in the 1900s, looping was prevalent in the early 1900's. Shortly following World War I, Emil Molt, director of the Waldorf Astoria Company in Stuttgart, Germany, approached Steiner about beginning a school for the company's factory workers' children. Steiner's innovative program focused on the physical, emotional, and intellectual abilities of developing children with the usage of a varied curriculum. That curriculum integrated the arts, movement, and practical arts with the areas of humanity, science, math, and technology. He believed in the benefits of long-term relationships between teachers and

students. In Waldorf schools, which currently number over 900 worldwide, the teacher remains with the same group of children for several years, oftentimes from Grades 1 through 8 ("Rudolf Steiner School: History," n. d.).

Definition of Terms

The following definitions were used throughout this study:

Academic achievement: "The achievement by individuals of objectives related to various types of knowledge and skills. These objectives are socially established based on the age, prior learning and capacity of individuals with regard to education, socialization and qualification" (International Observatory on Academic Achievement, 2010, p. #).

Adequate yearly progress (AYP): AYP is the measure that is used to hold schools and school districts accountable under the No Child Left Behind Act (NCLB, 2000). Schools that meet AYP requirements are assumed to be functioning well and enhancing student academic achievement. Schools that fail to make AYP are presumed to be falling short of expectations. To make AYP, schools and districts must meet or exceed AYP targets that are set in terms of the percentage of students who are proficient or above in mathematics and reading or English language arts. Those targets are set each year at levels that increase over the years at rates that lead to the 100% proficiency goal by 2013-2014 (Linn, 2008, para. 2, 3).

Alternative placement: One prerequisite to a successful looping experience is the premise that positive, strong relationships form between the student, parents, and teachers. When these relationships are not positive, there is the option to transfer into another class (McAteer, 2001**).**

*Common Core State Standards:*A consistent, clear understanding of what students are expected to learn, so teachers and parents know what they need to do to help them. (Common Core Standards, 2012).

Continuous-Progress Curriculum: A curriculum which allows for the individualization of instruction and pacing of student learning at variable rates through course content" (Merritt, 2008).

Looping, *teacher-student progression*, *multi-year grouping*, *teacher cycling*, *teacher rotation, or persistence teams*: Teachers remain with the same group of students for more than one year of instruction (Jacobson, 1997, para. 3).

Measures of Academic Progress (MAP): A computerized, standards-based software that dynamically adapts to student's responses as they take the test. Answer a question correctly and the test presents a more challenging item. Miss a question, and MAP offers a simpler item. Because the test narrows in on a student's learning level, students are engaged with content that allows them to succeed (Northwest Evaluation Association, 2010).

No Child Left Behind (NCLB): Signed into U.S. law in 2002, "the NCLB Act is designed to help all students meet high academic standards by requiring that states create annual assessments that measure what children know and can do in reading and math in grades 3 through 8" (United States Department of Education, 2010, p. 8).

Palmetto Assessment of State Standards (PASS): The state department of South Carolina developed a statewide assessment program for all students in Grades 3 through 8. "The Palmetto Assessment of State Standards (PASS) is aligned to the state academic

standards and includes tests in writing, English language arts (reading and research), mathematics, science, and social studies" (South Carolina Department of Education, 2010).

South Carolina Academic Standards (SCAS): The state-approved expectations for students will be called academic standards instead of curriculum standards. In accordance with the South Carolina Educational Accountability Act of 1998, the purpose of academic standards is to provide the basis for the development of local curricula and statewide assessment. Consensually determined academic standards describe for each grade or high school core area the specific areas of student learning that are considered the most important for proficiency in the discipline at the particular level (South Carolina Department of Education, 2010).

Systems theory: Systems theory is a way of viewing schools as learning organizations. An organization must be studied as a whole, taking into consideration the interrelationships among its parts and its relations with the external environment" (Lunenburg & Ornstein, 2004).

Waldorf education: System of Schooling founded by Rudolf Steiner (1861 – 1925), a German-Austrian school philosopher after whom Waldorf schools are named: a key feature of the Waldorf approach to education is continuous teachers, or as they are otherwise known, *looping teachers (*Merritt, 2008).

Assumptions

One assumption was that the scores collected using the research instrument would be completed on each student. The second assumption was that all materials and instruments used to collect and record data would produce reliable and valid results.

Limitations

Several limitations or potential weaknesses existed in conducting this study:

1. The use of this specific population from a small rural school district in South Carolina may render generalization of its results to the overall population difficult.
2. The difficulty in isolating the teaching techniques used in the (LA) classrooms and (TA) classrooms may cause similar results from both groups that have nothing to do with looping, such as differentiated instruction or literacy circles.
3. There is the possibility that the study's results may not generalize beyond the group(s) in the study with the general educational population.
4. The amount of training that each participating teacher has received in looping may alter the results of the study.

Scope and Delimitations

This study was delimited through its confinement to a rural elementary school in South Carolina. Because of that, the results may be pertinent only to this geographic region. From the academic standpoint, South Carolina's Academic Standards and its rigorous testing system have been rated as one of the toughest in the nation (Bluffton,

2010). Comparing standardized testing results between the LA students and the TA students may not adequately depict the positive or negative results. In addition, while this research study focused solely on looping, it did not account for the teaching strategies and pedagogical influences each teacher brings to the classroom environment.

Significance of the Study

With the many demands placed on schools from NCLB (which dictates that stringent guidelines holding schools accountable for increased student performance be put in place), AYP (which measures the percentage of students performing at or above the proficient level in math and ELA), and high stakes testing, this study will be beneficial for several groups of stakeholders, including legislators, lawmakers, administrators, teachers, and parents. Because the purpose of this quantitative study was to identify, document, and compare the academic achievement of elementary-aged students experiencing looping assigned teachers to students experiencing traditionally assigned teachers, the results will provide each of the stakeholder groups with concrete data indicating that while looping may or may not enhance the learning experiences of the students, it will not reduce them. The study is also of significance to the abovementioned groups of people because it proves that looping is a viable instructional tool that provides an educational atmosphere that supports academic achievement. Armed with the resulting data, decisions pertaining to implementing, supporting, and funding looping assigned teacher classrooms might occur. Another significance of the study deals with identifying the instructional practices that provide optimal results in looping assigned teacher classrooms.

The problem is original to the profession because while more schools are implementing looping assigned teacher classrooms as an alternate teaching strategy, research providing concrete, empirical data that support looping assigned teacher classroom academic and social benefits are limited (Bafile, 2009). One hindrance to the documentation process is the fact that in most schools, only one or two teachers loop, according to McAteer (2001), making documentation difficult to obtain. While researchers applaud the positive outcomes that occur from looping, gaps in the research still remain (Chirichello & Chirichello, 200l; Delviscio & Muffs, 2007; Kenney, 2007). One gap in the research pertains to a concrete, standardized way of measuring looping's effectiveness in schools. Schools that utilize looping should complete standardized surveys, tests, and questionnaires annually to analyze and publish the results. The data would provide an unbiased way of determining the successfulness of looping. Documentation thus far in the literature has been limited to a few schools and districts, each of which has used its own formative or summative assessments to determine effectiveness (Bafile, 2009; McAteer, 2001). Using standardized tests, surveys, and questionnaires would allow comparisons to be made that would allow each school to be measured using the same criteria.

While the goal of every school is to raise student achievement in order to ensure that no child is left behind, an in-depth analysis of looping's role as it relates to improving students' performance lacks clarity and support. Positive social change may be promoted because looping may prove to be an educational practice that assists in the improvement of students' academic success. With legislation such as NCLB (2000),

which requires that all students reach high levels of achievement academically, regardless of socioeconomic status, race, sex, or status of giftedness or disability, the results from this study may indicate looping's benefits and therefore looping may become a staple in more schools around the country. In addition, looping may work hand in hand with the implementation of the Common Core State Standards (CCSS), whose purpose is "to help ensure that students are receiving a high quality education consistently, from school to school and state to state" (www.corestandards.org, 2012). The rigor of the teaching process and the learners'depth of knowledge that is required in the implementation of the CCSS may be magnified through the usage of looping.

Summary

In summary, while the literature supports that looping has both positive and negative ramifications, clearly gaps in the research need additional investigating. Specifically, questions pertaining to the effect of looping on student performance require more in-depth documentation from schools presently utilizing the practice. In addition, understanding the effect of looping on reticent participants (both teachers and students) when no alternatives are provided is crucial in order to make data driven decisions concerning looping's overall effectiveness. Looping provides students and teachers with opportunities to build nurturing, long lasting relationships that lead to feelings of trust, raised self-esteem, and increased instructional time. Because looping works well with other traditional educational practices, it is compatible with many existing teaching styles and pedagogies (Gaustad, 1998; Hitz, Somers, & Jenlick, 2007; Nichols & Nichols, 2002). Compatibility is essential to addressing the needs of students with varied

backgrounds, ethnicities, and academic deficiencies or proficiencies. Looping may not be conducive for everyone; therefore, the choice to loop or not must be given to parents and teachers (Delvisico, 2007).

Section 2 provides a literature review that served as the background and foundation of this study, as well as the basis of the proposed research methodology. Section 3 provides a complete description of the research design and statistical testing process of this quantitative study and provides details concerning the process for data collection and analysis. Section 4 provides the actual data analysis performed as well as a detailed summary of the results, while Section 5 provides an abbreviated overview of why and how this study was conducted, reviews the questions that were addressed, and provides a brief summary of the findings.

Section 2: Literature Review

Introduction

The purpose of this quantitative study was to identify, document, and compare the academic achievement of elementary-aged students who experienced LA classrooms and students who experienced TA classrooms. The results of the study are significant because it provides stakeholders—including legislators, lawmakers, administrators, teachers, and parents—with research-based data indicating the effect of LA classrooms on student achievement and provides a research-based comparison of LA classroom student achievement to TA classroom student achievement.

The review of literature was organized according to the subtopics of the study. First, a comprehensive overview of the literature pertaining to the practice of looping is provided. A discussion and presentation of the literature supporting the research design and methodology is presented, and a final summary of the literature review closes the section. Additional discussions concerning methodologies follow in Section 3.

In order to conduct a database research on looping, the strategy utilized was to search using the following terms: *looping*, *teacher-student progression*, *multi-year grouping*, *multi-year teaching, multi-year education, multi-year instruction, multi-year placement, multi-year assessment, multi-year assignment, continuous progress curriculum, continuous teachers, learning communities, long term relationships, looping classroom, Waldorf Education, teacher cycling, continuous learning, teacher rotation, persistence teams, alternative placement, Adequate Yearly Progress (AYP), No Child Left Behind (NCLB), academic achievement, Measures of Academic Progress (MAP),*

Palmetto Assessment of State Standards (PASS), South Carolina Academic Standards (SCAS), Waldorf Schools, Rudolf Steiner, and *Systems Theory.*

The strategy for searching the literature included finding articles from acceptable peer-reviewed and academic journals that included Educational Resources Information Center (ERIC), Education Resource Complete, SAGE Publications, ProQuest Central, Teacher Reference Center, Research Starters – Education, and Academic Search Complete databases. The search also utilized resources on the Walden Library website, present and previous textbooks, and other electronic sources, as well as articles from the journals *Principal* and *Educational Leadership*.

Overview of Looping

Section 2 provides background information pertaining to looping, including a definition, possible benefits of, and situations to consider when implementing. It also includes information on how relationships and instructional time are affected by looping.

Looping Defined

According to Jacobson (1997), looping, also known as teacher-student progression or multiyear grouping, involves a teacher remaining with the same class for more than one year of instruction. At the end of the looping cycle, the teacher typically loops back to the lower grade level in order to begin the cycle again with another group of students (Delviscio & Muffs, 2007; Oberman, 2008). According to Grant et al., (2000), a memo from the United States Department of the Interior in 1913 supported looping as a viable educational reform. The memo posed the question if it was more beneficial to keep students and teachers together for several years so that there is a continuous scaffolding

of learning or if students should rotate through different teachers year after year. As stated by Grant et al.,

> "The notion of finding a new dentist or physician each year for every child seems absurd. Yet for many of these same children, their schools assign them to a new teacher and require them to learn a new set of classroom routines and adult expectations every year" (Potential Gains section, para. 6).

In other words, the idea of assigning students each year to a new teacher should be rethought. The same way patients build trust and rapport with their physicians and return year after year to receive medical services, students and teachers build similar relationships which benefit from continuously learning and working together.

According to McCown and Sherman (2002) and Rodriguez and Arenz (2007), there are four principles governing looping:

1. Teachers keep groups of students together for several years.
2. The teacher or group of teachers progresses to the next grade level with the students.
3. School administrators decide how long the students and teacher remain together.
4. Teachers must be adequately trained and knowledgeable in order to deliver instruction on different grade levels in order to receive the best results.

An Historical View of Looping

Dating back to the colonial days of the one room schoolhouse, looping is not a new concept. Called *petty schools* during this era, these schools were not formed because of preference but out of necessity of educating children living in rural areas (Rodriguez & Arenz, 2007). While looping remains an underused practice in the United States, many schools in Germany, Italy, Denmark, and Japan have used the looping concept in their schools for many years, as stated by Gaustad (1998); Merritt (2008); Thompson, Franz, and Miller (2009); and Walker (2004). Rudolf Steiner, a German-Austrian scientist, educator, and philosopher living in Stuttgart, Germany in the 1900s, was founder of the Waldorf schools and is most commonly credited for the creation of looping. Supported and encouraged by Emil Molt, the owner of the Waldorf-Astoria cigarette factory, Steiner was encouraged to develop an adult education program for the factory workers. The program was begun in order to shift the way workers thought, felt, and acted following the economic and social breakdown that occurred after the war. Because of the success of the adult program, Steiner was encouraged to open the Stuttgart Waldorf School for the workers' children in 1919 (Paull, 2011; Ritter, 2007). Beginning with an enrollment of 150, this number increased to 700 by 1922. Steiner shared the ideology of Swiss psychologist Jean Piaget's theory that children develop in stages and each stage lasts approximately seven years, thus leading to his desire that teachers remain with their students from Grades 1 through 8. Steiner was also a staunch believer that teachers serve as a child's third parent and it was this belief that further supported the need for teachers and students to remain together for multiple years of instruction (Rodriguez & Arenz,

2007). According to Merritt (2008), "Steiner's child-centered pedagogical ideas, concepts, and principles form a theoretical and philosophical foundation for the practice of looping" (p. 1). Steiner also believed in the benefits of long-term relations between teachers and students and it was this philosophy that served as the guiding principle of Steiner's Waldorf schools (Grant et al., 2000; Prescott, 1999).

During that same period, John Dewey and his colleagues introduced the concept of learning communities, and it was that concept that caused American schools to look at looping in terms of improving instruction and forging positive relationships instead of for the sole purpose of convenience, practicality, or necessity (Thompson et al., 2009). In Germany and other countries, teachers and students remain together during elementary or secondary years, while students at the Rudolf Steiner School in New York City remain with their teacher for 8 years (Grant et al., 2000; Prescott, 1999). Today, over 900 Steiner or Waldorf-Steiner schools worldwide utilize looping (Merritt, 2008). In the United States, looping is practiced primarily in early childhood and preschool facilities; however, it can also be successfully implemented in early childhood, elementary, middle, and high school grades (Merritt, 2008). One of the most recent documented examples of looping in the U.S. was in the 1980s in Attleboro, Massachusetts. During the school district's initial experimentation, the schools used multiyear teaching assignments. In the 1990s, the district progressed to mandating that all 1st through 8th grade teachers remain with their classes for 2 consecutive years. According to Merritt (2008), because of the many faceted advantages of looping, looping is not only a concept, but is also an intervention, a model, and an experience. It is a concept based on a "continuous-progress

school curriculum and instructional design with a nontraditional class structure" (Merritt, 2008, p. 1).

A second documented case of looping was from 1993 – 2007 with The Renaissance Charter School of New York City. Monte Joffee served as principal of the school and was a very active supporter of the small school and charter school movements. He utilized Tsunesaburo Makiguchi's philosophy of soka, or value creating education. One vital piece of Makiguchi's work was his multiclass model or work with single room schoolhouse education. Even though Makiguchi did not tag this idea as looping, Joffee and his colleagues incorporated looping into the configuration of their school. Joffee, Goulah, and Gebert (2009) referred to looping as "a collaborative form of school leadership, strong parental involvement, and (a few years later) a unique school building design that promoted a village-like sentiment" (p. 184). In other words, the implementation of looping promoted a sense of community and shared responsibility between school and home.

Relationships Between Students, Teachers, and Parents

Along with the quality of instruction that occurs within each classroom, the atmosphere that permeates a school blossoms when positive, cooperative relationships occur among the students, teachers, parents, administrators, and other stakeholders (Kelly et al., 1998; Merritt, 2008). Those relationships lead to productive learning environments, which ultimately leads to positive academic experiences. In any successful or reciprocal relationship, trust and understanding are key components (Baran, 2010; Merritt, 2008). Classroom relationships are no exception to that rule. Before children can

learn, there are three key prerequisites that educators must be aware of and work to provide. The prerequisites are that children must feel accepted, liked, and safe (Baran, 2010). Looping provides all three of these prerequisites. Baran (2010) further stated, "Looping provides time for teachers to build strong relationships with one another. Long-term relationships result in an emotional and intellectual climate that encourages thinking, risk-taking, and involvement" (p. 2). Once the foundation for learning is set, students are ready to become active, involved learners. Because teachers and students have remained together for 2 or more years, teachers are able to develop a deeper, more intensive understanding of the students' personalities and preferred learning modalities, as well as their areas of weakness and strength. This type of relationship also provides students with a sense of belonging, community, and stability that is extremely important in today's society (Merritt, 2008; Thompson et al., 2009). According to Thompson et al. (2009), "Relationships developed in a looping classroom encourage students to connect in more meaningful ways – students learn to construct knowledge together, problem solve together, and take risks with their learning together" (p. 2). In addition, the emotional connectedness and sense of community nurtured in a looping classroom has shown promise in supporting the needs of special education and second language students (Viessselman, 2008). Merritt (2008) declared that because of the family like environment that is nurtured within the looping classroom, this classroom becomes a refuge away from home and provides the students with a place where they feel safe, supported, cared for, and nurtured. Those feelings of belonging and motivation encourage students to do their best, which leads to improved academic success. Rodriguez and Arenz (2007) further

stated, “The essence of looping is the promotion of strong, extended, meaningful, and positive interpersonal relationships between teachers and their students that foster student motivation, stimulating improved learning outcomes for students” (p. 43). Looping can reduce stress levels within the classroom, allowing optimal learning to take place. According to brain research, a student’s ability to learn is decreased if stress is present (Baran, 2008).

Not only do students have improved attitudes concerning school, their families do as well. Sometimes when parents did not have positive school experiences themselves, it is difficult for them to become fully involved in the education of their children (“Getting Parents Involved in Schools,” 2008). With spending more than one year with the same teacher, parents can become more comfortable and familiar with the teacher’s expectations and methods of teaching, according to Ritter (2007). Dialogue is improved between home and school with both the parent and teacher feeling more at ease about the more difficult conversations that may be needed. Parents become less reluctant to request help for their child, and teachers are more comfortable about discussing the students’ progress. Because of that improved attitude, parents are more apt to be involved and engaged in their students’ education. According to Ritter (2007), parents participating in looping were more involved in school events and supportive than those who were not. Deeper relationships are forged between the home and school, which leads to enhanced partnerships, interactions, and interrelations, according to Merritt (2008).

Jump-Started Instruction

The literature provided by Delviscio and Muffs (2007) and Hanson (2008) clearly supported that instruction is jump started at the beginning of the second (and subsequent) years of looping because immersion into the curriculum is immediate. In addition, there is no need at the beginning of each school year to spend time establishing rules, learning names and personalities, setting procedures or expectations, or pre-assessing because the teacher is already aware of each student's strengths and weaknesses (Kelly et al., 1998; Merritt, 2008). The students are able to continue instructionally where they left off the previous year. According to Merritt, "Keeping discrete groups of students together with their teachers over long time periods and increasingly using small groups and small-group activities demonstrate the efficacy of group persistence and promote academic learning" (p. 3). Because the teacher is able to customize instruction must faster due to already being cognizant of each student's individual personality, competencies, and preferred learning style, there is less chance of repetition. When targeted instruction begins immediately in the looping environment, instructional time is increased (Delviscio & Muffs, 2007). In essence, looping provides students the opportunity to fully understand and synthesize the concepts taught and to extend learning beyond the required grade level content standards. As students master the required skills, new, more challenging material is introduced (Elliott & Capp, 2003). As corroborated by Merritt (2008), "Teachers gain an estimated extra month of teaching time during the second year" (p. 4). Simply stated, because looping allows teachers to immediately begin instruction the first day of school instead of using this time to learn names, teach procedures and expectations, and provide

assessments in order to determine strengths and weaknesses, additional instructional time is gained.

Multiple Groups Benefit

Rodriguez and Arenz (2007) wrote, "Achieving academic success is one of the most critical goals in education today, especially for our diverse groups of students" (p. 43). According to Elliott and Capp (2003), looping is a good alternative that benefits students with varying abilities, needs, and backgrounds. The subgroups that schools typically worry about-students who are the recipients of free and reduced pay meals, English for Speakers of Other Languages (ESOL), African American and Hispanic children, learning disabled children, and gifted and talented students-can each individually receive the instruction they need. According to Pratt (2009), studies show that even though the United States' lowest achieving students are making considerable gains, top students are seeing little or no gains. The disparity in academic growth is often because teachers focus most of their attention on instructing the students who need the most help, leaving little time for the high achievers. At Orchard Park Elementary School, looping was introduced into the gifted and talented (G/T) program. Students who qualified for the G/T program in third grade remained with the same teacher for 3 years. Current and former students who looped were asked to complete a survey. Out of 132 respondents, 96.9% responded that a main strength of the G/T program was having the same teacher for multiple years. The parents of the same respondents replied that the program met their child's academic needs (99.3%), their emotional needs (92.9%), and their social needs (93.6%) (Pratt, 2009).

It has been recognized and documented for many years that the educational system in the United States continues to struggle in meeting the needs of African American students. According to Lindsay, Irving, Tanner, and Underdue (2008), studies reported that to effectively reach that subgroup, teaching strategies should focus on the entire child and not just the academics in order for those students to perform better. When asked, African American students report they do not feel that they belong in their school communities, and they look to their teachers for positive feedback and support that impacts their learning and achievement (Lindsay et al., 2008). The researchers further purported that "constant changing of teachers and class peers each year make it difficult to develop healthy cohesion and in-depth teacher – student engagement," (Lindsay et al., 2008, p. 152). Looping provides students with the opportunity to build longstanding relationships with teachers as well as classmates that leads to and supports a conducive environment for learning. One example of looping working with stereotypically underperforming subgroups came from a partnership between an Ohio school district and Cleveland State University. Together they developed Project F.A.S.T. (Families Are Students and Teachers). Looping was utilized in an urban school that served a diverse group of ethnic students from impoverished backgrounds. The teachers participating remained with their students from kindergarten through second grade. Not only were the academic improvement and parental involvement results dramatic, the students performed significantly higher on reading and math tests than their peers who did not participate in the program (Lindsay et al., 2008).

A study by Nevin, Cramer, Voight, and Salazar (2008) documented the effectiveness of co-teaching paired looping for students with disabilities. The special and general education teachers looped with their students from third to fourth grade. Both teachers were responsible for teaching the general education curriculum to all of the students in their classroom and for implementing the requirements of the Individualized Education Plans for the students with disabilities. Both members of the team were also responsible for planning, teaching, assessment, and classroom management. All special education students showed improvement on their developmental scores for reading and math on the Florida Comprehensive Achievement Test (FCAT) except one. In addition, all English as Second Language students made substantial growth in both areas. Both the special and general education teachers felt that looping contributed to the success within their classroom because of the extra teaching time they gained.

Because so many groups of children can benefit from looping, the placement of students must be a deliberate and reflective process. While the temptation exists to stack these classes homogeneously based on academic achievement, sex, race, behavior, special needs, or socioeconomics, grouping these classes heterogeneously is a better practice (Little & Dacus, 1999). To overload these classes with a specific type of student can lead to teacher burnout, as well as place an unwanted label on the class. Heterogeneous grouping levels the playing field for all groups that are involved. Because looping works well with many traditional educational practices, it is compatible with existing pedagogies and teaching styles, such as cooperative learning and authentic assessment (Gaustad, 1998). Because cooperative learning is a teaching practice that

lends itself naturally to looping classrooms, the heterogeneous mix of students supports the community of learners' theory where teachers and students not only learn together, but interchangeably share the role of "teacher" and "learner." Sometimes the teacher is the learner and the learner is the teacher. Looping does not require the teacher to develop a different teaching repertoire.

Possible Drawbacks of Looping

While looping offers a wealth of positive by-products, such as strong interpersonal relationships, increased leadership skills, decreased disciplinary referrals, improved attendance, and fewer special education referrals ("Looping: Two Years with the Same Class," 1998), there are also drawbacks that must be examined. One such drawback deals with the transitioning of new students into a pre-established looping classroom. Baran (2010) purported that the introduction of additional students into a looping class after the first year of its inception is as stressful on the "new" students as it is on the "old." Because the original loopers spent a great deal of time during the first year building community and establishing trust, new students were not a part of this very important process; therefore, their arrival into the class is often viewed as an infringement causing the new students to feel alienated (Baran, 2010). Not only is the balance within the classroom upset for the students, it is also upset for the teacher. Because the new students have not had the long-term relationship with the teacher as the original students, the teacher has to interrupt the flow of instruction in order to establish rules, expectations, and procedures. This interruption can be frustrating to all involved because the natural flow of the classroom shifts in order to orient the new students into their new setting.

Lindsay et al., (2008) suggested that before a student is placed in an established looping classroom, the teacher should be consulted in order to determine if the child is a good match.

Because looping is often viewed as having a two year curriculum instead of two one-year instructional programs that are taught sequentially, there is a possibility that the teacher does not follow an established scope and sequence of skills or standards. For a student who exits or enters the looping classroom there is the possibility of gaps in learning because the teacher took the liberty of shifting some content from one school year to the next (Baran, 2010). Baran (2010) stated that by allowing non-looping classrooms to be smaller so that new students are automatically placed in them, this issue could be resolved, thus reducing the chance of new students missing grade specific content.

Another drawback is the possibility that positive relationships do not form between the teacher, student, and or parents. Research conducted by Chirichello and Chirichello (2001) suggested and supported removing the student from the looping classroom and reassigning them to another setting if a positive relationship with the looping teacher was not formed. Baran (2010) further supported reviewing all student placements at the end of the school year as well as allowing parents or teachers to request students being reassigned from looping classrooms in the middle of the school year in order to alleviate the stress of remaining in an environment that may not be working. In addition, because looping is not for every student or teacher, the choice to participate in a looping or traditional classroom should be an option and not a mandate, according to

Jacobson (1997). Careful attention should be paid when matching student and teacher personalities in order to determine if looping will be beneficial for those involved (Fenter, 2009; Lindsay et. al, 2008).

Practical Considerations

The practical application of looping into a school requires deliberate consideration. First, all stakeholders must understand what looping is and what it is not. According to Elliott and Capp (2003), an interested administrator and/or group of teachers should spend time researching and discussing the pros and cons of looping. If at the end of the research looping appears to be a viable practice for the school's population, the next step is educating parents and students. Holding informational meetings, sending home newsletters about looping, or providing parent friendly articles and websites are all avenues through which the education of stakeholders may occur (Little & Dacus, 1999). The next step is providing parents and teachers the option of a looping or traditional classroom. Because looping is not for every student or teacher, it is extremely important to have an alternative in place. Neither group should participate in looping if they are reluctant.

In addition to choosing to loop and the careful placement of students within looping classrooms, an equally important application is the provision of resources and professional development for teachers. Because looping assigned teachers are responsible for delivering curriculum standards across two or more grade levels, there is the need for additional materials that allows the teacher to teach multi-leveled standards and content. There also needs to be time for teachers to meet together in professional learning

communities in order to share ideas, materials, and best practices (Chirichello & Chirichello, 2001). Most looping assigned teachers become mini experts for the standards in more than one grade level. Support from colleagues and administration are key components whose importance are imperative to the success of any program, but especially looping. There is also the need for formal training in order to prepare for looping assignments and the time to network with other successful looping assigned teachers in order to communicate and share ideas (Baran, 2010). Administrators must be sure to provide the time, space, and resources needed to aid in the successful implementation of looping.

Research Methodology

This research study utilized a quantitative methodological approach. According to Creswell (2003), quantitative research methodology is best suited when the researcher uses inquiry strategies such as surveys and gathers statistical information from pre-identified instruments. The design of the quantitative procedure used a convenience sampling because I was responsible for forming the looping and teacher assigned classrooms (independent variables). Special considerations were made in forming these classes so that they would be as heterogeneously identical as possible in order to reduce the possibility of academically or behaviorally stacked classes prior to the commencement of the study. For the purposes of the study, the scores from a computerized adaptive assessment known as Measures of Academic Progress (MAP) were compared and contrasted using a *t* test design. MAP uses a unique interval scale

called the Rasch Unit or RIT scale which charts student growth from one testing window to the next.

The phenomenological approach of qualitative research was another viable research method considered in conducting this study. Edmonds and Kennedy (2013, stated the qualitative method's aim is "to reveal and understand phenomena within a particular context without attempting to infer any type of causation," (p. 112) while Creswell (2007) purported, "A phenomenological study describes the meaning for several individuals of their lived experiences of a concept or phenomenon" (p. 57). If utilized, the phenomenon that would be experienced and studied would be looping. The use of focus groups may have shed light on the benefits of looping as perceived by parents and students. While studying the phenomenon of looping through the experiences of the participants would provide rich, powerful, and insightful information, the researcher focused solely on the quantitative methodological approach for this research.

Section 3: Research Method

Introduction

The purpose of this quantitative study was to identify, document, and compare the academic achievement of elementary aged students who experienced looping assigned (LA) classrooms and elementary aged students who experience traditional assigned (TA) classrooms in two elementary schools in South Carolina. In this section, I describe the research design and approach, setting and sample, instrumentation and materials, data collection and analysis methods, and the measures used for ensuring the protection of the participants' rights.

Research Question and Hypotheses

I conducted a quantitatively designed study to compare looping teacher assigned and traditional teacher assigned student achievement scores for elementary aged students. The data came from the archives of the school. The following research question and hypotheses guided the study:

Research question: Will there be a significant difference between the mean score calculated from academic assessments completed by the group of students that experienced a looping assigned (LA) teacher and the mean score calculated from academic assessments completed by the group of students that experienced traditional assigned (TA) teachers as measured using the Measures of Academic Progress (MAP) assessments?

Null hypothesis: There will be no significant difference between the academic assessment mean score calculated from the Measures of Academic Progress (MAP)

assessments completed by the group of students that experienced looping teacher (LA) assignment and the academic assessment mean score calculated from the Measures of Academic Progress (MAP) assessments completed by the group of students that experienced the traditional assigned (TA) teachers.

Alternative hypothesis: There will be a significant difference between the academic assessment mean score calculated from the Measures of Academic Progress (MAP) assessments completed by the group of students that experienced looping teacher (LA) assignment and the academic assessment mean score calculated from the Measures of Academic Progress (MAP) assessments completed by the group of students that experienced the traditional assigned (TA) teachers.

Research Design

The quantitative research design of *t* testing was utilized in this study. This parametric design was chosen because it provides data that addresses the problem of there being very little data that analyzes whether looping or traditional assignments are beneficial or detrimental to student success. Because the purpose of this study was to identify, document, and compare the academic achievement of elementary aged students experiencing looping assigned (LA) teachers and students experiencing traditional assigned (TA) teachers, comparison data were collected from both groups. Creswell (2003) stated, “The quantitative approach employs strategies for inquiry such as experiments and surveys, and collects data on predetermined instruments that yield statistical data” (p.18). Edmonds and Kennedy (2013) further purported, “Measurement is the critical component of the quantitative method,” and that researchers should utilize

"quantitative properties (i.e., numerical systems) to research the relationships or effects of specific variables" (p. 20). Because archived data (a numerical system) were used to compare the achievement scores of looping and traditionally assigned students, the quantitative method of research was most useful for this study.

Convenience sampling was available because of the process used to heterogeneously place students in the looping and traditional assigned classrooms in order to maintain racial, gender, and academic level balance. Utilizing archived MAP data, I investigated whether or not there is any significant difference between the mean score of students assigned to a TA class and the mean score of students assigned to an LA class using a *t* test design.

Setting and Sample

The study settings consisted of two elementary schools in South Carolina. Those two schools are a part of a district with 11 elementary schools, four middle schools, and three high schools. In that district, there are schools for career and technology education, alternative education, adult education and parenting. The district serves approximately 10,200 students. The data for this study were pulled from student MAP score archives for the population which consists of approximately 55 students looping from kindergarten to first grade, 35 students looping from second to third grade, and 21students looping from fourth to fifth grade, as well as 35 first, 22 second, 44 third, and 23 fifth grade students who were not in looping assigned classes but were in classes with traditionally assigned (TA) teachers. The 235 students are currently enrolled in the two rural schools but the

data had already been acquired through normal business operations and none of the students were involved in the research in any way.

Instrumentation and Materials

The data for this study came from archived information obtained using the Measures of Academic Progress, or MAP. MAP consists of computerized adaptive tests that are completed by the district's students using desktop computers. According to the Northwest Evaluation Association (NWEA) website, "The difficulty of a test is adjusted to the student's performance so each student sees different test questions. The difficulty of each question is based on how well the student has answered the questions up to that point." If a student answers a question correctly, the level of difficulty continues to increase. When a student answers incorrectly, the questions become easier. Not only is each test unique to the student completing it, it is also tied directly to each state's standards which guarantees that it tests what each student should be learning at any given grade level. MAP scores are calculated using three different measures: achievement scores, growth scores, and percentile scores. Unique to MAP is a scale called the Rasch Unit (RIT scale). It is an equal interval scale used to chart a student's growth from one year to the next.

Reliability and Validity

When choosing an instrument, Creswell (2003) "emphasizes the need to describe the established validity and reliability of scores obtained from past use of the instrument" (p. 158). Validity consists of a three pronged tests which are content validity (Does the test measure what it is supposed to measure?), predictive validity (Do the results support

other results?), and construct validity (Do the scores have a positive purpose?). Along with validity, the researcher must determine the reliability of the instrument. Reliability refers to how consistent or trustworthy a test is in measuring the same thing over time. According to the NWEA (2012), the substantive test item bank, which has been developed over an extensive period of time, has allowed opportunities to establish the reliability of MAP tests. Tests and re-test studies have consistently yielded statistically valid correlations between multiple test events for the same students (Northwest Evaluation Association, 2012). Even though this type of methodology usually lowers the correlations, "the reliability indices have consistently been above what is considered statistically significant," according to the NWEA. In addition, reliability between test items, or internal reliability, has been impressive as well considering the extensiveness of the item bank combined with the fact that MAP tests adapt to each individual student's ability level.

Data Collection and Analysis

Data collection began after the receipt of approval from the Institutional Review Board (IRB) at Walden University. Prior to that approval, a meeting was conducted with the school district's superintendent and the director of assessment in order to receive permission to obtain the archived testing data which was collected during the course of normal academic operations of the schools. Once the approval from the IRB was obtained, I retrieved the testing data so that it could be analyzed and interpreted.

Descriptive statistics was used to analyze the archived Measures of Academic Progress (MAP) data. Defined by Gravetter and Wallnau (2008) as "statistical

procedures to simplify and summarize data" (p. 6), the scores from the students participating in LA and TA classrooms were organized into tables and charts utilizing the Statistical Package for the Social Sciences (SPSS) version 21 program so that all scores may be critiqued and compared. Because data was analyzed from the two distinct groups, the *t* test for two independent samples was utilized. As stated by Gravetter and Wallnau, that "design involves separate and independent samples and makes a comparison between two groups of individuals" (p. 258). For the purposes of this study, the statistical analysis involved comparing looping teacher assigned and traditional teacher assigned student achievement scores (dependent variable). Because the Measures of Academic Performance (MAP) utilizes a scale called the Rasch Unit (RIT Scale) which is an interval scale that is used to measure a student's growth from one year to the next, parametrical statistical tests were required to complete the analysis. As stated by Gravetter and Wallnau (2008) not only are numerical scores for each student in both populations (LA and TA) required, the required scores must also be based on an interval or ratio scale. Gravetter and Wallnau further defined an interval scale as "ordered categories that are all intervals of exactly the same size," and that "equal differences between the numbers on the interval scale reflect equal differences in magnitude" (p, 21). The null and alternative hypotheses to be tested were whether or not there was significant difference between the academic assessment mean scores calculated from the Measures of Academic Progress (MAP) assessments completed by the group of students that experienced looping teacher (LA) assignment and the academic assessment mean score calculated from the Measures of Academic (MAP) assessment completed by the group of

students that experienced the traditional assigned (TA) teachers. Those hypotheses were posed to answer the research question of if there will be a significant difference between the mean score calculated from academic assessments completed by the group of students that experienced a looping assigned (LA) teacher and the mean score calculated from academic assessments completed by the group of students that experienced traditional assigned (TA) teachers as measured using the Measures of Academic Progress (MAP) assessments.

Protection of Students' Rights

Because I served as the principal of the school where the students whose archived testing information was used, there might have been direct contact made between myself and the students during the data collection portion of this study; however, the contact was not related to the testing data. As the principal, I routinely analyze test data in order to make informed decisions concerning curriculum and teaching practices. While these decisions may affect the students as a whole, their individual test scores were analyzed based on an assigned number and not their individual names. I did not anticipate my relationship with the students affecting the research process as my role comprised solely the collection, organization, analysis and reporting of the archived testing data. This study was approved by Walden University's Institutional Review Board (IRB) and was assigned the approval number 05-29-13-0071056. Section 4 will provide a synopsis of the study's results.

Section 4: Results

Introduction

The purpose of this quantitative study was to compare the mean achievement scores of two distinct groups of elementary aged students. The first group looped, or received instruction from the same teacher, for 2 sequential years while the second group was traditionally assigned to a different teacher each sequential year. The measurement of each student's academic achievement was the dependent variable, while the independent variable was the classroom assignment. Because all students in this school district are required to participate in the Measures of Academic Progress (MAP) testing twice a year, once in the Fall and once in the Spring, archived data were used utilized. For the purposes of this study, the mean scores from Spring of one year were compared to the mean Spring scores of the subsequent year.

The following research question and hypotheses were used to determine whether a significant difference in achievement scores exists between looping teacher and traditional teacher assigned students:

Research question: Will there be a significant difference between the mean score calculated from academic assessments completed by the group of students that experienced a looping assigned (LA) teacher and the mean score calculated from academic assessments completed by the group of students that experienced traditional assigned (TA) teachers as measured using the Measures of Academic Progress (MAP) assessments?

Null hypothesis: There will be no significant difference between the academic assessment mean score calculated from the Measures of Academic Progress (MAP)

assessments completed by the group of students that experienced looping teacher (LA) assignment and the academic assessment mean score calculated from the Measures of Academic Progress (MAP) assessments completed by the group of students that experienced the traditional assigned (TA) teachers.

Alternative hypothesis: There will be a significant difference between the academic assessment mean score calculated from the Measures of Academic Progress (MAP) assessments completed by the group of students that experienced looping teacher (LA) assignment and the academic assessment mean score calculated from the Measures of Academic Progress (MAP) assessments completed by the group of students that experienced the traditional assigned (TA) teachers.

Research Tools

The research tool used to conduct this study was Measures of Academic Progress, or MAP. MAP archived test data was collected for the 235 students who either looped or were traditionally assigned to classrooms for two consecutive school years. Because MAP consists of adaptive, computerized tests that are tied directly to each state's standards, these tests make it possible to adequately measure what students learn at each given grade level. This assessment, which is completed by all students twice a year, sets individual growth goals for each learner. It also provides teachers with important instructional planning information by identifying precisely what each student needs in order to progress academically.

The research question posed was would there be a significant difference between the mean score calculated from academic assessments completed by the group of students that experienced a looping assigned (LA) teacher and the mean score calculated from

academic assessments completed by the group of students that experienced traditional assigned (TA) teachers as measured using the Measures of Academic Progress (MAP) assessments. The null and alternative hypotheses to be tested were whether or not there was significant difference between the academic assessment mean score calculated from the Measures of Academic Progress (MAP) assessments completed by the group of students that experienced looping teacher (LA) assignment and the academic assessment mean score calculated from the Measures of Academic (MAP) assessment completed by the group of students that experienced the traditional assigned (TA) teachers. Table 1 shows the comparison of mean scores by group.

Table 1

Comparison of Measures of Academic Progress Mean Scores by Group

Groups	Number	Mean	Std. Deviation	Std. Error Mean
Looping assigned	111	185.82	23.135	2.196
Traditional assigned	124	187.55	20.702	1.859

As summarized in Table 1, there were n_1 = 111 students assigned to (LA) classrooms and n_2 = 124 assigned to (TA) classrooms. The analysis of the independent *t* test produced a mean score of M = 185.82 for the (LA) group with a standard deviation of σ = 14.451. The analysis of the (TA) group produced a mean score of M = 187.55 and a standard deviation of σ = 20.702. Next, Table 2 provides a summary of the independent sample *t* test by group and mean score.

Table 2

Summary Table of Independent Sample t-Test (Two-Tailed) for Comparison of Measures of Academic Progress Mean Scores by Group

Groups	Number	Mean	Std. deviation	*t*	p
Looping assigned	111	185.82	23.135	-.604	.546
Traditional assigned	124	187.55	20.702		

As summarized in Table 2, an independent sample *t* test with assumed equal variances was performed to determine if there was a significant difference in mean scores between the Looping Assigned (LA) and Traditional Assigned (TA) groups. The calculations obtained a t statistic of $t = -.604$ with $df = 233$ and a MD score of -1.1729. For this study, the p value of .546 is greater than the alpha level of .05.

Data Analyses

The data analysis used followed the process outlined by Gravetter and Wallnau (2008). The scores from the students participating in LA and TA classrooms will be organized into tables and charts utilizing the Statistical Package for the Social Sciences (SPSS) version 21 program so that all scores may be critiqued and compared. Because data was analyzed from the two very distinct groups, the *t* test for two independent samples was utilized. As stated by Gravetter and Wallnau, that "design involves separate and independent samples and makes a comparison between two groups of individuals" (p. 258). For the purposes of this study, the statistical analysis involved comparing

looping teacher assigned and traditional teacher assigned student achievement scores (dependent variable). Because the Measures of Academic Performance (MAP) utilizes a scale called the Rasch Unit (RIT Scale) which is an interval scale that is used to measure a student's growth from one year to the next, parametrical statistical tests were required to complete the analysis. The null and alternative hypotheses tested was whether or not there was significant difference between the academic assessment mean score calculated from the Measures of Academic Progress (MAP) assessments completed by the group of students that experienced looping teacher (LA) assignment and the academic assessment mean score calculated from the Measures of Academic (MAP) assessment completed by the group of students that experienced the traditional assigned (TA) teachers. The degrees of freedom was used as the basis for determining the significance the mean scores between the (LA) and (TA) groups. The alpha level applied to the analysis was .05.

The analysis of the independent t test produced a mean score of $M = 185.82$ for the (LA) group with a standard deviation of $\sigma = 14.451$. The analysis of the (TA) group produced a mean score of $M = 187.55$ and a standard deviation of $\sigma = 20.702$. In addition, the independent sample t test with assumed equal variances was analyzed to determine if there was a significant difference in mean scores between the Looping Assigned (LA) and Traditional Assigned (TA) groups. The calculations obtained a t statistic of $t = -.604$ with $df = 233$ and a MD score of -1.1729. For this study, the p value of .546 is greater than the alpha level of .05. Based on this information, these results produced no evidence of any significant difference between the two groups (LA and TA) Measures of Academic Progress mean scores; therefore, I failed to reject the null hypothesis.

Summary

The findings in this study addressed the research question which asked if there would be a significant difference between the mean score calculated from academic assessments completed by the group of students that experienced a looping assigned (LA) teacher and the mean score calculated from academic assessments completed by the group of students that experienced traditional assigned (TA) teachers as measured using the Measures of Academic Progress (MAP) assessments. In order to determine the mean difference between the two groups, a t test was performed. Further review of the data which was calculated from the independent sample *t* test, the findings did not provide substantial evidence that a significant difference between the two sets of mean scores existed; therefore, I failed to reject the null hypothesis which stated that there would be no significant difference between the academic assessment mean score calculated from the Measures of Academic Progress (MAP) assessments completed by the group of students that experienced looping teacher (LA) assignment and the academic assessment mean score calculated from the Measures of Academic Progress (MAP) assessments completed by the group of students that experienced the traditional assigned (TA) teachers.

The results of this study did not support that students experiencing looping assigned classroom as having an increased academic effectiveness on student achievement when compared to their traditional assigned counterparts, but there are conclusions of significance that may be made from this study that will impact decision making by school leaders and advocates. The consistency between mean scores of the

looping assigned (LA) and traditional assigned (TA) students could be intrepreted as having no significant differences due to similarities of the teachers' pedagogies, resources used, or school or district initiatives where every student is expected to be instructed utilizing the same curriuculum or program. Another alternative interpretation might also be that the relationship between students and teacher does not necessarily require multiple years to cultivate as supporters of looping would suggest. Section 5 will include a brief overview of why and how this study was conducted, review the questions that were addressed, and provide a brief summary of the findings.

Section 5: Summary, Conclusion, and Recommendations

Overview

The purpose of this quantitative study utilizing the t test design was to compare the mean scores of elementary aged students experiencing looping assigned (LA) teachers with those students experiencing traditional assigned (TA) teachers. In order to conduct this study, the following research question and hypotheses were posed:

Research question: Will there be a significant difference between the mean score calculated from academic assessments completed by the group of students that experienced a looping assigned (LA) teacher and the mean score calculated from academic assessments completed by the group of students that experienced traditional assigned (TA) teachers as measured using the Measures of Academic Progress (MAP) assessments?

Null hypothesis: There will be no significant difference between the academic assessment mean score calculated from the Measures of Academic Progress (MAP) assessments completed by the group of students that experienced looping teacher (LA) assignment and the academic assessment mean score calculated from the Measures of Academic Progress (MAP) assessments completed by the group of students that experienced the traditional assigned (TA) teachers.

Alternative hypothesis: There will be a significant difference between the academic assessment mean score calculated from the Measures of Academic Progress (MAP) assessments completed by the group of students that experienced looping teacher (LA) assignment and the academic assessment mean score calculated from the Measures

of Academic Progress (MAP) assessments completed by the group of students that experienced the traditional assigned (TA) teachers.

Based on the results of the data analysis, no significant differences were found between the mean test scores of students who looped and those who were traditionally assigned. The remainder of Section 5 consists of a more in-depth interpretation of the findings, implications for social change, recommendations for action and future study, and conclusion.

Interpretation of the Findings

The data analysis performed in this study did not provide results supporting the hypothesis that students experiencing looping assigned classrooms have an increased academic edge on student achievement when compared to their traditionally assigned counterparts. In order to answer the research question and hypotheses, an analysis of the independent *t* test was performed. As summarized in Table 1, there were $n_1 = 111$ students assigned to (LA) classrooms and $n_2 = 124$ assigned to (TA) classrooms. The *t* test produced a mean score of $M = 185.82$ for the (LA) group with a standard deviation of $\sigma = 14.451$, while the (TA) group produced a mean score of $M = 187.55$ with a standard deviation of $\sigma = 20.702$. The *p* value obtained was .546. Table 2 provided an independent sample *t* test with assumed equal variances. This test was performed to determine if significant differences exists in mean scores between the Looping Assigned (LA) and Traditional Assigned (TA) groups. The calculations obtained a t statistic of t = -.604 with $df = 233$ and a MD score of -1.1729. Because the p value of .546 is greater than the alpha level of .05, these results did not produce evidence that a significant difference exists

between the two groups on the Measures of Academic Progress mean scores. For this reason, the null hypothesis failed to be rejected.

The theoretical framework surrounding looping is grounded in a memo from the United States Department of the Interior in 1913, which supported looping as a viable educational reform. According to Grant et. al. (2000), the memo asked if it was more beneficial to keep students and teachers together for several years so that there would be a continuous scaffolding of learning, or should students rotate through different teachers year after year. For this study, keeping students and teachers together for more than one year did not provide data supporting that looping was either beneficial or unbeneficial since the mean scores were very similar between the looping and non-looping groups. Once might speculate that because the mean scores were so close that looping could be considered as beneficial by default since the scores were not below those of their counterparts.

John Dewey and his colleagues introduced the concept of learning communities, and it was that concept that caused American schools to look at looping in terms of improving instruction and forging positive relationships instead of for the sole purpose of convenience, practicality, or necessity (Thompson et al., 2009). Again, from a theoretical framework basis, the idea of improved instruction was not supported or denied due to the consistency of the mean scores.

Literature provided by Delviscio and Muffs (2007) and Hanson (2008) supported that instruction is jump started at the beginning of the second (and subsequent) years of looping because immersion into the curriculum is immediate. While this is most likely

true, the results of this study did not support that this immediate immersion into instruction caused those students who looped to have more of an academic advantage over those who did not loop.

While the results of this study did not support that students experiencing looping assigned classroom have an increased academic effectiveness on student achievement when compared to their traditional assigned counterparts, there are conclusions of significance that may be made from this study that will impact decision making by school leaders and advocates. The consistency between mean scores of the looping assigned (LA) and traditional assigned (TA) students could be intrepreted as having no significant differences due to similarities of the teachers' pedagogies, resources used, or school or district initiatives where every student is expected to be instructed utilizing the same curriculum or program. With this in mind, comparing mean scores for just those students identified as academically challenged who are (LA) or (TA) may identify significant differences. Another alternative interpretation might also be that the relationship between students and teacher does not necessarily require multiple years to cultivate as supporters of looping would suggest.

Implications for Social Change

With the many demands placed on schools from No Child Left Behind (which dictates that stringent guidelines holding schools accountable for increased student performance be put in place), Adequate Yearly Progress (which measures the percentage of students performing at or above the proficient level in Math and ELA), and high stakes testing, the significance of this study is beneficial for several groups of

stakeholders, including legislators, lawmakers, administrators, teachers, and parents (See Section 1). Because the purpose of this quantitative study was to identify, document, and compare the academic achievement of elementary aged students experiencing looping assigned teachers to students experiencing traditionally assigned teachers, the results provided the stakeholder groups with data indicating that while looping assigned (LA) students did not provide significant mean scores as compared to their traditional assigned (TA) counterparts, it did not reduce them (See Table 1, Section 4). With this in mind, parents, teachers, administrators, and school boards may feel more at ease with allowing the implementation of looping to take place within more schools. The study is also of significance to the abovementioned groups of people because it supports that looping is a viable instructional tool that provides an educational atmosphere that supports academic achievement seemingly to the same extent as tradional assigned classrooms (See Table 2, Section 4). Armed with the resulting data, decisions pertaining to implementing, supporting, and funding more looping assigned teacher classrooms might occur.

Recommendations for Action

The results of this study revealed similarities in the mean scores of the looping assigned (LA) and traditional assigned (TA) students rather than significant differences. Because of these findings, my first recommendation, which is for schools and school districts, would be to continue analyzing and comparing the mean scores of these two groups within more diverse populations. The scores that were used in this study were obtained from high achieving schools, so this may account for the lack of disparity in the scores. My second recommendation, for administrators, parents and teachers, would be

that looping appears not to hinder academic achievement and should be viewed as a viable choice for classroom assignment. While this study did not obtain data concerning the emotional or social benefits of looping, these aspects are certainly components of looping that should be studied and will be among the recommendations for future studies. The test scores between the looping assigned (LA) and traditional assigned (TA) students were very similar, but I wonder if the emotional and social feelings of these groups would reveal similar responses as well. I will disseminate the results of this study through presentations within my district and school, conferences, and through publication in peer-reviewed journals.

Recommendations for Future Study

The results of this study indicate that further research is required in the following areas:

1. This study should be conducted using populations that are more diverse in order to determine if looping increases the academic achievement of its participants as compared to the non-looping counterparts. The students in this study attended high performing schools. This fact may have caused the scores not to reflect significant differences in performance.
2. This study should be conducted using a different subject area to compare the mean scores, such as Math. Reading was used for this study.
3. Add another component to the study, such as the emotional and social adjustment of students who loop and those who do not.

4. Isolate the teaching strategies, curriculum, and resources used in the comparison groups in order to determine the similarities and differences, and identify if these instructional strategies affect the achievement of the students.
5. Identify a more homogeneous group of students, such as those identified as academically challenged, in order to determine if a significant difference in mean scores exists.

Conclusion

Every year, demands are placed on schools from No Child Left Behind (which dictates that stringent guidelines holding schools accountable for increased student performance be put in place), Adequate Yearly Progress (which measures the percentage of students performing at or above the proficient level in Math and ELA), Common Core State Standards, and high stakes testing to increase student achievement to levels that are oftentimes thought to be unattainable or unrealistic. The purpose of this study was to determine if the process of looping, which is referred to as a teacher remaining with the same group of students for more than one sequential year, increased the mean scores of its students as compared with the mean scores of their non-looping counterparts. While the results did not reveal significant differences in test scores, the study revealed that looping supports academic achievement and should be considered as an alternative to traditional classroom assignment.

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