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THE IMPACT OF LOOPING ON STUDENT ACHIEVEMENT ON THE COLORADO STUDENT ASSESSMENT PROGRAM

by

Steven C. Tucker

A Research Project Presented in Partial Fulfillment
of the Requirements for the Degree
Master of Education

REGIS UNIVERSITY

August, 2006

THE IMPACT OF LOOPING ON

STUDENT ACHIEVEMENT ON THE

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Steven C. Tucker

has been approved

August, 2006

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ABSTRACT

The Impact Of Looping On Student Achievement
On The Colorado Student Assessment Program

The use of looping, the practice of students and teachers remaining together for two years or more, has increased over the past decade. This study investigated the achievement of students enrolled in both looping and traditional classrooms at Holmes Middle School (HMS) on the Colorado Student Assessment Program (CSAP). Test scores for the 183 students enrolled in seventh grade at were analyzed utilizing an unpaired *t*-test to determine if there was a statistically significant difference between the scores of 95 looping and 88 nonlooping students. In all three areas tested assessed by the CSAP, reading, writing, and mathematics, it was found that students enrolled in the looping program scored significantly higher than the students enrolled in the traditional program.

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Chapter 1

INTRODUCTION

Currently, public educators are under a great deal of pressure from the officials of the federal, state and local governments, as well as community members to increase student achievement. In response to this challenge, some school administrators have departed from the traditional school model and have implemented nontraditional methods to increase student achievement. One such model is looping. "Looping, defined as a core group of students and a single teacher remaining together for multiple years, or a family grouping, is not a new concept in America's educational history" (Nichols & Nichols, 2002, p. 1). Arhar, Johnston, and Markle (1989) proposed a form of classroom restructuring that allows teachers to maintain a stronger influence on students' educational development through successive years of involvement and curriculum implementation. Looping, like multi grade classrooms, is just one of the methods that teachers and administrators can use to achieve the restructuring that some experts, such as Arhar, Johnston, and Markle (1989), have proposed.

Statement of the Problem

Although previous research (Arhar et al., 1989; Little & Dacus, 1999; Zahorik & Dichanz, 1994) has shown the positive impact that looping appears to have on student, teacher, and parental attitudes, the research was limited to qualitative studies and individual case studies. Quantitative data about the impact of looping on student

achievement has not been well documented. Previous quantitative studies have been limited. For instance, Nichols and Nichols (2002), only investigated the parental, student, and teacher attitudes toward looping. Busse and Schieffer (2002) only addressed the student achievement of low socioeconomic fourth grade students in their study. Therefore, quantitative studies of the impact of looping on general populations of students have been limited. With this project, this researcher provided additional quantitative data to support the current research on the impact of looping on students.

Purpose of the Project

The purpose of this project was to determine whether the use of looping has an impact on student achievement according to the results from the Colorado Student Assessment Program (CSAP; Colorado Department of Education, 2005). This researcher's position is that students, who loop to the next grade level with their teachers, perform better on the CSAP than students who are placed with new teachers every year. For this project, the author used the results from the 2002-2003, 2003-2004, and 2004-2005 CSAP scores to compare the academic growth of looping and nonlooping students.

Chapter Summary

"Looping, defined as a core group of students and a single teacher remaining together for multiple years, or family grouping, is not a new concept in America's educational history" (Nichols & Nichols, 2002, p.1). Looping has its roots in the one room school house from early in the history of the U.S. As U.S. educators search for ways to meet the demands of federal, state, and local government officials, the concept of looping has

reemerged as a tool to assist educators reach their goals. However, the majority of research is qualitative in nature. Arhar et al. (1989), Little & Dacus (1999), and Dichanz (1994) all described the qualitative impact of looping on student, teacher, and parental attitudes. The purpose of this project was to collect quantitative data on the impact that the use of looping has on student achievement. By collecting and utilizing quantitative data this researcher hoped to add to the current research and confirm that looping has a positive impact on students.

In Chapter 2, a review of literature will be presented and prior findings identified. In Chapter 3, the methodology for the collection and the analysis of the data for this project will be presented.

Chapter 2

REVIEW OF LITERATURE

The purpose of this project was to determine whether the use of looping has an impact on student achievement as indicated in the Colorado Student Assessment Program (Colorado Department of Education, 2005) test scores. As educators in the U.S. work diligently to try and determine the best practices in education, many different programs and approaches have been developed. The use of looping has reemerged as a method that can be used to meet the needs of current educators and students. Until the last 10 years, looping has received little attention from the research community; thus, studies of the effects of looping are relatively limited.

Definition and History

With its origin in the one room school house, the concept of a looping classroom has been present in much of U.S. history. For the purpose of this paper, looping is defined as "the practice of advancing a teacher from one grade level to the next along with his or her class" (Gaustad, 1998, p.1).

History of Looping

Throughout the 1800s, students in rural areas were often educated at home. As the rural areas became more populated and the citizens more prosperous, schools were built to educate the children of the community. At the Edcitement web site, the one room school house was described as a small school that, frequently, consisted of a single

classroom where students of all ages would gather for their daily lessons. Generally, students sat together by grade level and, often, boys were on one side of the classroom and girls on the other. All grade levels were instructed in the same classroom; typically, students had the same teacher year after year. Thus, the education model of looping is based on practices utilized early in the history of the U.S. education system.

As the U.S. began to become more of an industrial nation, the one room school house became more rare and with it, the use of looping. However, the concept of looping and the value associated to it did not end. Forsten, Grant, Johnson, and Richardson (1997) stated that, in 1913, the U.S. Department of Education described the organizational pattern of looping under the title of *teacher rotation*. Finally, the Northeast and Islands Regional Educational Laboratory at Brown University (1997) quoted a 1913 memo, where officials working in the U.S. Department of Education questioned:

> Shall teachers in graded city schools be advanced from grade to grade with their pupils through a series of two, three, four, or more years, so that they may come to know the children they teach and be able to build the work of the latter years on that of the earlier years? (p. 4)

Although looping has not been used frequently in the United States recently, looping has been used extensively in Europe. Zahorik and Dichanz (1994) reported that, in German elementary schools, students are grouped into heterogeneous groups in the first grade. The students and teachers remain together for 4 years. Through out history looping has been given many different titles. Forsten et al. (1997) identified many other terms that have been used to describe the process of looping: (a) family style learning,

(b) two cycle teaching, (c) student teacher progression, (d) multi year groups, (e) teach for two, (f) take'em up, (g) roll'em over, (h) teacher retention, (I) teacher rotation, (j) 20 month classroom, (k) step up, and (l) multi year teaching.

The Waldorf School Model

A growing model of education that utilizes looping is the Waldorf school model. The Waldorf schools originated in Central Europe over 75 years ago and were brought to the U.S. in 1928. Staff at the Lab at Brown University (1997) reported that the first Waldorf School was founded by Rudolf Steiner, a philosopher, scientist, and artist, at the request of Emil Molt, CEO of the Waldorf Astoria cigarette factory. Molt wanted a school for the children of the factory employees. Steiner based the program on anthroposophy, which means *Wisdom* or *Knowledge of Man*. Busse and Schieffer (2001) described the Waldorf model as "teachers guiding students artistically to balanced thinking, feeling, and willing in the pursuit of truth, beauty, and goodness, with an underlying goal of helping children to develop an inner moral impulse" (p. 2).

A major component of the Waldorf model is the concept of looping. Grant, Johnson, Richardson, and Fredenburg (1995) defined looping in the Waldorf school model as when a teacher remains with the same group of students from the first through eighth grade. Steiner believed that a long term relationship with the teacher was beneficial to the children in the school. At the Waldorf Education web site (association,n.d.), it was reported that when teachers loop with their elementary students, the students become a type of family and the teacher a parental figure. Additionally,

teachers come to know their students very well and are able to determine the best practices to help them with their education.

According to an article on the Association of Waldorf Schools of North America (AWSNA) (n.d.) website, the regular classroom teacher is not responsible for every lesson every day. Typically, the classroom teacher is responsible for a two hour main lesson in the morning and one or two lessons in the afternoon. Throughout the day, other instructors teach specialty subjects such as foreign language, instrumental music, and eurythmy. The classroom teacher is responsible for the main subjects of language arts, the sciences, history, and mathematics. With such a vast amount of information and curriculum for a teacher to teach, one major concern of opponents to looping is teacher qualification. How is a teacher qualified to teach multiple levels? This is even more prevalent in the Waldorf model where a teacher is responsible for eight separate levels. Many individuals have concerns in regard to teacher qualifications for a single individual to instruct the various grade levels, these concerns were addressed at the AWSNA website.

> Waldorf class teachers work very hard to master the content of the various subjects that they teach. But the teacher's ultimate success lies in her ability to work with those inner faculties that are still *in the bud,* so that they can grow, develop, and open up in a beautiful, balanced, and wholesome way. (p. 8)

In order to teach in a Waldorf school, typically, teachers have a University degree and teacher certification from an Waldorf teacher education college. In addition, teachers complete their course of study and practice under the supervision of other Waldorf

educators for 2-3 years, and they must adhere to state and local requirements in regard to teacher certification. By adhering to these standards, Waldorf schools assure qualified teachers for the looping students.

Benefits of a Looping Classroom

During the past 10 years, there has been a renewed interest in the impact of looping on students, teachers, and parents. The major focus of the research has been on the qualitative effect that looping has on the student, teacher, and parent participants (Arhar et al., 1989; Little & Dacus, 1999; Zahorik & Dichanz,1994). In many of the research reports, the emphasis has been on the positive impact that looping has on student, teacher, and parental attitudes and perceptions of the school and education that the students received.

Impact of Looping on Teachers and Administrators

Schools that utilize looping impact three major groups: (a) students, (b) teachers, and (c) parents. Several studies documented the impact of looping on teachers and administrators. George and Shewey (1997) reported that teachers, by a large margin, have the most positive perceptions of the impact of looping programs. The perceived benefits of a looping program included: (a) improved student behavior, (b) the teacher's ability to build on students' strengths, and (c) the improved performance of low achieving students. Burke (1997) reported that the additional time provided by looping has the greatest impact. Teachers, students, and parents do not have to start from the beginning every year. The first few weeks of school, which is usually spent in learning names,

preferred styles of learning, classroom procedures, and teacher expectations, is utilized for grade level curriculum instruction. Burke (1996) stated that "Looping essentially adds an extra month of teaching /learning time during the second year when the typical transitional period at the beginning of the year is virtually unnecessary" (p. 1). Also, Grant, Richardson and Johnson (1996) found that most teachers find that students remain on task far longer at the end of the first year, thus maximizing the entire school year for teaching and learning. Burke reported that teachers in looping classrooms have a minimum of two years instead of just one to provide opportunities for students to master certain basic skills and concepts.

Other aspects of the classroom were impacted by looping as well. In addition to increased instructional time, George, Moorefield and Spreul (1987) reported that 70% of the teachers in the three year looping program in their study felt that the use of looping allowed them to use more positive classroom management strategies, 92% felt they knew their students better, and 69% felt their students were more willing to volunteer in class. Gaustad (1998) reported that administrators in the Attleboro, Massachusetts school district identified the possible impact that looping has on student behavior and attitudes where looping is mandated for all teachers, first through eighth grade. The district administrators reported: (a) improved attendance, (b) improved test results, (c) fewer discipline problems, and (d) fewer referrals for special education services.

Impact of Looping on Students and Parents

The impact of looping on students has also been positive. Gaustad (1998) stated, "For students, having the same teacher and classmates for two or more years provides stability and builds a sense of community. Looping reduces anxiety and increases confidence for many children, enabling them to blossom both socially and as learners" (p. 1). George and Shewey (1997) reported that students enjoyed staying with their peers and had less anxiety about the beginning of school. Burke (1997) maintained that middle school students might benefit the most from a looping program because it provides a more supportive structure for them. Middle school students are faced with a variety of obstacles as they begin the transition from child to young adult. Looping teachers provide them with a consistent support system as they begin this transition.

Finally, parents have reported the benefits of looping as well. Burke (1997) cited the National School Public Relations Association (1995) and stated that "looping can turn parents into supporters and promotes stronger bonding between parents and teachers" (p. 1). In Project Families Are Students and Teachers (F.A.S.T.), a program developed by the staffs of East Cleveland, Ohio schools and Cleveland State University where looping was an integral component, it was reported that parents: (a) felt more respected by teachers, (b) had more confidence in their children's teachers and administrators, and (c) were more likely to seek assistance from the school if needed.

A Quantitative Study of Parental Attitudes Toward Looping

Multiple studies (Arhar et al., 1989; Little & Dacus, 1999; Zahorik & Dichanz, 1994) have been undertaken in regard to the qualitative effects of looping on students and parents. Quantitative data on the use of looping is not as prevalent in studies on looping. Qualitative studies such as Zahorik and Dichanz (1994), a study of German elementary schools, observed that the use of looping helped students in several ways. First, teachers had an understanding of the students' educational knowledge because the teachers had been involved in the students' development. Second, the reassessment of student knowledge every year was not necessary. Finally, the use of looping reduced the chance that topics taught in previous years would be repeated. Nichols and Nichols (2002) cited several qualitative studies (Arhar, Johnston & Markle, 1989; Little & Dacus, 1999; Zahorik & Dichanz, 1994) in which it was found that "students in multiyear grouping have more positive attitudes about learning" (p. 2).

The Nichols and Nichols (2002) study was designed to provide quantitative data about the impact of looping. Nichols and Nichols collected data so that a comparison study could be conducted about the perceptions of looping students' parents. The sample consisted of 455 parents with students in seven elementary schools. The response format for the survey was based on a 5 point Likert scale. After a factor analysis was conducted with the data, the researchers divided the findings into four areas to be statistically assessed: (a) parental attitudes toward the teacher and school, (b) student behavior, (c) student motivation, and (d) student attitudes. Nichols and Nichols concluded that, generally, the parents of looping students had more positive attitudes and perceptions of

their children's teacher, school, and behavior than the perceptions of parents of the nonlooping and first year looping students. When Nichols and Nichols compared the parent responses for the subcategories of: (a) student gender, (b) single parent homes vs. non-single parent homes, (c) marital status, or (d) socioeconomic status, without identifying the multi year loopers they found no statistical significance. This supports the theory that the variable of multi year looping has an affect on parental attitudes and perceptions of the school, teacher and student behavior.

Also, Nichols and Nichols (2002) were interested in the effects, in addition to looping, that the demographic variables had on attitudes. Nichols and Nichols (2002) used an analysis of variance (ANOVA) to determine the mean differences in parent responses. The researchers first analyzed the data without regard to the looping variable. They found that, in general, responses from single parent homes were more favorable ($p < .05$). The researchers also found that parents of females and those of low income status had a more positive perception in regard to student behavior and student motivation in school ($p < .01$) Finally, the researchers found that parents of females and those of high income status had a more positive perception of their students' attitudes toward school. When the looping variable was included in the analysis, the researchers found that there was a significant ($p < .001$) difference in parental attitudes for all of the categories between parents of looping and nonlooping students. The data suggests that parents of looping students had a more positive perception of the school, teachers and student learning than parents of nonlooping students.

Student Achievement

With increased pressure from members of the federal government, the critical concern of educators today is student achievement. However, the availability of research on the effect of looping on student achievement is very limited. In Yang's (1997) study of the looping program at Berino Elementary School, the 1995-1996 test scores on the Iowa Test of Basic Skills (ITBS), Spanish Assessment of Basic Education (SABE), and Language Assessment Scales (LAS) of looping students and nonlooping students were compared. Yang found that: (a) looping students generally outscored nonlooping students on the tests; (b) looping students scored better on the ITBS in all areas compared; (c) looping students scored higher on the SABE in all but one area; and (d) on the LAS, students in the looping classes scored higher. Also, Burke (1997) reported that students enrolled in the Cleveland based Project F.A.S.T. had significantly higher reading and mathematics scores on standardized tests when compared to nonlooping students. The data from each of these studies appears to support the hypothesis that looping has an impact on student achievement.

The Waldorf Model and Student Achievement

The Waldorf model of education utilizes an extreme process of looping. Students and teachers remain together for the first eight years of school. Busse and Schieffer (2001) compared the student achievement of low SES fourth grade students at a public Waldorf school to a comparison school where more traditional methods of instruction were utilized. Using the results of the previous year's state mandated achievement test,

the researchers identified low SES fourth grade students in the two schools. For the 1997-1998 school year, 36 low SES fourth grade students at the Waldorf school and 9 at the companion school were identified. The 1998-1999 school year resulted in, 24 low SES fourth grade students at the Waldorf school and 42 at the comparison school. Busse and Schieffer used a Chi-square test on the scores of the students in each category to determine if there was a significant difference between the results from the two schools for each year of the study.

Busse and Schieffer reported that for the 1997-1998 school year, "the type of education had a moderate correlation with the students' test scores (Pearson's C range: 0.57-0.61)" (p. 7). Also, Busse and Schieffer found a moderate correlation during the 1998-1999 school year as well (Pearson's C range: 0.32-0.44). At the Waldorf school, there were a smaller number of students in the Minimal Proficiency levels and more students in the Proficient and Advanced levels. Busse and Schieffer stated "the type of education had a moderate correlation with the student's test results" (p. 7). The results of Busse and Schieffer (2001) stated that students enrolled in the Waldorf school and by default looping, performed better on the state test than similar students enrolled in a more traditional educational system. More importantly, the use of the Waldorf model appeared to help address some of the process variables identified in the Christenson (1995, as cited in Busse & Schieffer) study (e.g., motivate children to be learners, and parent contact with the school) that have been identified as factors that increase the achievement of children of all SES levels. Perhaps, the use of looping, even in more traditional school settings, can address the same process variables.

Looping in the Middle School

Studies of looping at the middle school level are so limited that Kerr (2002) was able to identify only four previous studies conducted at that level. In one of those studies, George and Shewey (1997) identified 70 middle schools in the U.S. in which a form of looping was utilized. George and Shewey (1997) identified several positive impacts of looping: (a) students and teachers developed effective interpersonal relationships, (b) classroom management seemed to be more effective, (c) academic progress was seen more clearly, and (d) teachers felt they helped students to achieve higher academic standards. In another study called the Delta Project (Hampton, Mumford and Bond, 1997), researchers determined that students' self-esteem and attitudes toward school improved during the looping process. Further in the Attleboro School System in Massachusetts Grant, Richardson and Johnson (1996) found that looping resulted in: (a) increased attendance, (b) decreased retention, (c) decreased suspensions, (d) fewer special education referrals, and (e) improvement in staff attendance. Kerr cited the teachers and administrators of Tolland Middle School in Connecticut (1997) where they reported that "working together in a looping arrangement allows for long lasting, trusting relationships to form, increased academic time, and fewer classroom management problems" (p. 57).

The findings from the Kerr (2002) study were consistent with results from previous research (George, Moorefield, & Spreul, 1987; George & Shewey, 1997; Grant, 1996) and demonstrated the positive impact that the use of looping can have in relationship development between students, teachers, and parents. The Kerr study was conducted with 214 eighth grade students, nine teachers, and 75 parents who were at the

end of their looping experience. Kerr (2002) utilized three forms of assessment to collect the qualitative data used to answer the study questions: (a) interviews, (b) surveys, and (c) observations. For the interview portion of the study, Kerr interviewed 12 teacher recommended eighth grade students (e.g., 6 from each team) of: (a) various ability levels, (b) SES, and (c) ethnic backgrounds. These students were chosen by their teachers to represent the diverse population of the school. Also, four teachers and 11 parents were interviewed.

As reported by Kerr (2002), in addition to the interviews, 214 eighth grade students, who had looped with their seventh grade teachers, were given open ended surveys to complete, and 75 parents completed a closed survey format. During the 2000-2001 school year, the parent survey was a 3 point Likert type scale with Agree, Disagree and Unsure as response choices. The 2001-2002 parent survey was expanded to a 5 point Likert type scale with Strongly Agree and Strongly Disagree at the extremes. Also, the nine teachers completed a 5 point Likert type survey with the same extremes near the end of the eighth grade year.

Finally, Kerr (2002) video taped four teacher selected, lessons for observation. The taped lessons were then watched and field notes were taken. Kerr thought that "video taping provided yet another opportunity for a rich description of the looping environment" (p. 15).

Kerr (2002) concluded that the majority of individuals involved in the looping program had a favorable opinion of it. The results were broken down by participant type. Of the students surveyed, 80% approved of looping. In addition to the written results, 10

of the 12 students interviewed also had a positive attitude toward looping. The students reported that they developed close friendships with their looping classmates. In addition, the teacher reports were positive, even the teachers who began the process with some apprehension reported that they would loop again if asked to do so. They felt that they knew the students' strengths and weaknesses better and were able to advocate for the students more effectively. However, teachers reported a concern that students became too comfortable with them by the end of the eighth grade year. The parent results were similar to those of the students; 10 of the 12 parents interviewed reported having a positive opinion of looping. A majority of the parents, 83%, felt that their student's teacher had a better understanding of their student's strengths and weaknesses. In addition, 74% felt that the start of eighth grade was less stressful for their child.

Kerr (2002) identified seven themes of looping in her analysis of the data:

1. The use of looping inherently develops and sustains relationships between parents, teachers and students over the 2 or more years. It was these relationships that helped make looping a positive experience;
2. The use of looping creates a sense of knowing and belonging. Throughout the process, individuals involved in the looping work together to create shared values and a sense of community to which they all belonged;
3. The use of looping creates academic accountability and assists with curricular planning. Students are held more accountable and expected to work to their potential;
4. Teachers can tailor curriculum to fit the needs of their students because they have a better understanding of their students' strengths and weaknesses;
5. Also it creates a seamless transition from seventh to eighth grade. The stress of beginning a new year is less for students involved in looping;
6. Parent involvement also increases for looping classrooms. Parents reported having a better understanding of expectations for their student and that they believed that teachers better understood the academic needs of their student;
7. And alternative views of looping included that looping is not for everyone, the data showed that not all individuals had a positive experience. (p. 165)

Alternative Views

Not all educators think that looping is best for all students. Kerr (2002) and Nichols and Nichols (2002) pointed out that looping is not the answer for every student. Kerr (2002) reported that two of the student participants and two of the parent participants were not in favor of looping. Personality conflicts, wanting to be with nonlooping friends, and concerns about the abilities of the teacher were identified as reasons for not favoring looping. Nichols and Nichols addressed some of these same concerns and stated, "Experience demonstrates that not all members of an educational classroom environment will be compatible with one another. Educators and parents have a responsibility to teach children that all positive relationships evolve through time, passing through numerous tensions" (p. 6). If at the end of the first year concerns have not been alleviated then parents and teachers should be allowed to remove the student and place them in a more favorable situation.

Vann (1997) took a different approach to the concept of looping. While most researchers (Arhar et al., 1989; Burke, 1997; Kerr, 2002; Little & Dacus, 1999; Nichols & Nichols, 2002; Zahorik & Dichanz, 1994) have praised looping for the positive impact that it appears to have on students, teachers, and parents, Vann stated:

> Looping is not for everyone, however, it should not be mandated or forced on an unwilling staff. Even with enthusiastic participation, there may be disadvantages in having a child remain with the same peers and teacher for a second year:
>
> 1. Time may be lost at the beginning and throughout the school year as the looping teacher strives to master the new curriculum. The higher the grade level, the more curriculum content to be mastered.

2. Despite best efforts to match teaching styles with children's learning styles, there will always be mismatches. Continuing those mismatched a second year is unfair to both teacher and student.
3. Every teacher has strengths and weaknesses. Children moving from grade to grade in the traditional system may go from a teacher who is gifted at teaching one subject to a teacher strong in a different subject. But looping relegates children to two consecutive years with and instructor who may not teach an important curriculum area as well as other grade level teachers.
4. Each year, some children are ridiculed or even ostracized by peers who perceive them as too smart, dumb, tall, short, fat, thin, etc. Looping extends the negative consequences for both those children and their classmates. (pp 1-2)

Vann (1997) stated that looping is not the ultimate answer for all students and teachers and should not be forced on either group.

Several teachers who were involved in looping programs reported that looping was not appropriate for everyone (Gaustad, 1998). Some teachers in the Attleboro School District, which mandated looping in Grades 1-8, supported looping in the primary grades, but reported that middle school students would benefit from a variety of teachers. Also, looping classrooms can be difficult for new students to join. Gaustad (1998) reported that "joining a looping class is hard on newcomers, and that introducing five or more students in the second year can be disruptive enough to reduce the benefits of looping for the original students" (p. 3).

Jacobson (1997) reported that parental concerns about looping have been centered around their student being placed with an ineffective teacher for more than 1 year. Also, teachers, who are responsible for more than one subject, might be strong in one curriculum, but be weaker in the other.

Future Research

With the possible positive impact that looping seems to have on students, teachers, and parents, researchers will need to continue to look at the impact that looping can have on students.. The impact of looping on parental, student, and teacher attitudes has been well documented (Arhar et al., 1989; Burke, 1997; Kerr, 2002; Little & Dacus, 1999; Nichols & Nichols, 2002; Zahorik & Dichanz,1994). Researchers are now interested in the impact of looping on student achievement and the long term effects of looping on students. Nichols and Nichols (2002) provided suggestions for further study. First, researchers should examine looping schools vs. nonlooping schools with baseline data for comparison. Preloop and postloop analysis of parent responses could provide some of the answers to the questions that Nichols and Nichols raised. Finally, achievement data should be collected prior to and after the looping cycle to determine academic growth. Also, Kerr (2002) recommended a study of looping students' transition into high school in order to determine the effects of looping after middle school. Additionally, Kerr felt that the impact of looping on student achievement warranted more in depth study.

Busse and Schieffer (2001) presented topics for further study in their investigation of the Waldorf model of education. First, researchers should study the behavior of Waldorf students vs. traditional programs and determine the impact that student behavior had on their academic success. Also, Busse and Schieffer suggested that a study be designed to compare a Waldorf school to a more traditional school that utilizes the looping concept to discover the impact that looping has on student achievement.

Implementation of a Looping Program

Once educators decide to put a looping system in place, they can find implementation of the program to be fairly easy. Gaustad (1998) reported that looping is easier and less expensive to implement than most education reforms, but extra resources are still needed to ensure success. Forsten et al. (1997) stated that "looping is a very cost effective reform which does not require money for expensive alterations to the physical plant, or complex research or planning" (p. 77). Looping does not require the development of new curricula nor does it require additional space or staff. Participation does not have to be school wide either. Two teachers in consecutive grades who are willing to move between those grades on a yearly basis, would be sufficient to begin a looping program. Gaustad (1998) identified several components of a looping program that might assist educators and administrators with the implementation process: (a) procedures for the review of all student placements should be in place at the end of the year to allow parents and teachers to determine whether the looping placement is in the best interest of the child, (b) looping classrooms should not be overloaded with special needs students who might benefit from the longer relationship, and the number of special needs students in a looping classroom should reflect the demographics of the school; and (c) parents should be given a choice between looping and nonlooping classrooms.

Researcher's Perspective

The concept of looping is near and dear to this researcher's heart. I have had first hand experience with a looping program. I am involved in a program that takes a sixth grade class and progresses though the middle school years with the same group of

students until they graduate from the eighth grade and go to high school. I am responsible for mathematics and science instruction and a teammate teaches the language arts and social studies classes. Looping classrooms are very beneficial for teachers and students. Classroom management, student/teacher/ parent relationships, and student achievement all benefit from the looping classroom structure. The drawbacks of a looping system are also present. Student/teacher personality conflicts, new students fitting into the looping classroom, and difficulty with separation are issues that arise in a looping system.

The greatest benefit that I have observed in a looping classroom is the relationship that the students and teachers develop over the time they are together. The group truly becomes a family. It is this relationship that creates a learning environment that is very successful. Classroom discipline is more effective because looping students are already aware of the classroom expectations the second year. The students spend less time testing the limits of the teacher and more time focusing on learning. Student achievement also benefits from the looping classroom. My looping students consistently outscore the more traditional students in standardized tests.

I have also observed the negative aspects of a looping system. There have been rare instances of student/teacher personality conflict. This is usually rectified by the student leaving the team at the end of the first year. However, when this does not happen, it does make for a very long second or third year for both the student and teacher. A more common issue has been new students fitting into the looping team. The team has a great deal of memories that are new students are not part of. Fitting into the group can be difficult. Finally, the most abundant issue present in looping teams is saying goodbye. As

students complete the eighth grade and realize that they will be leaving middle school and their teachers a great deal of anxiety and sadness are felt on those last days of school. It is very difficult to say goodbye. Despite these drawbacks it is my opinion that these issues can be rectified and the benefits of a looping classroom far exceed the difficulties that may arise.

Chapter Summary

Over the last 10 years, interest in the impact of looping in education has reemerged. The implementation of looping has been found to be easier and cheaper than many other educational reforms. The majority of literature has been centered on the relationships of students, teachers, and parents that develop as a result of the looping environment. Parents and students involved in looping classrooms seem to have more positive attitudes toward school, teachers, and administrators. Teachers have found that the use of looping provides more time for instruction and a better understanding of their students and their needs. It has been reported that students in looping classrooms consistently outscore nonlooping students on standardized tests.

Like many educational programs, looping should not be mandated or forced on teachers and administrators. Also, parents and students should have input about placement in a looping program. Parents and teachers must have the ability and authority to remove students from the looping teams if they feel that the student's needs are not being met or a conflict between the student, teacher, or parent exists.

In Chapter 3, this researcher will present the methodology for this study. The method of participant selection and placement will be discussed. Also, the procedure and data analysis techniques will be presented.

Chapter 3

METHOD

The purpose of this project is to determine whether the use of looping, defined here as, when teachers and students remain together for 2 or more years, has an impact on student achievement scores for seventh grade students attending Holmes Middle School (HMS) on the Colorado Student Assessment Program (CSAP; Colorado Department of Education, 2005). In order to gather the data for analysis, test scores from 3 years of CSAP testing were compared to determine whether the achievement of students enrolled in a looping program at HMS varied significantly from students enrolled in the more traditional program at the same school. This author utilized an ex post facto research design and analyze the results of the 2002-2003, 2003-2004, and 2004-2005 CSAP scores as reported by the state of Colorado.

Looping at Holmes Middle School

A single team of two teachers began the looping program at HMS in 1999. It was not uncommon for teams to move from one grade level to another as the student population varied at each grade level; however, 1999 was the first year that a group of students and their teachers were purposefully kept together. Parents were initially given the opportunity to place their students with the looping team and the remaining student openings were filled at random. Students were given the opportunity to leave the looping placement after the first year. In consequent years, the practice of looping has become

more popular with the staff; there are now 4 teachers that consistently loop with their students. The original looping team loops with students from sixth to seventh grade, and the second looping team loops with students from sixth to eighth grade. With the success of the students in the looping programs, other teachers have begun to express interest looping with their students as well. Students stay with their classroom teachers for instruction in language arts, social studies, science, and mathematics. Other qualified teachers instruct specialty subjects such as wood shop, gym, music, and art. The concept of looping is not a new one to the specialty subject teachers, since the nature of their subjects allowed students to return to their classes throughout the students' 3 years at HMS.

Participants

The participants in this study were former seventh grade students at HMS located in Colorado Springs, CO. Students, who attended HMS as sixth grade students during the 2003-2004 school year and seventh grade students during the 2004-2005 school year, were placed into one of two groups, depending on their placement with looping or nonlooping teachers during the years being studied.

Student Placement

Initially, counseling staff members placed students in one of four teams when they enrolled at HMS for the 2002-2003 school year. The teams were organized in such a way that they were to be as close to mirror images of one another as possible. To do this counselors used student results from the 2002-2003 fifth grade CSAP scores, fifth grade

teacher recommendations and, Terra Nova assessments in an effort to divide students evenly into four teams with two teachers each according to: (a) various ability levels, (b) minority classifications, and (c) special needs. Two teams were designated as looping teams and two as nonlooping teams. Parents were informed of the availability of the looping teams, and they were able to make requests into the initial sixth grade placement of their child in either a looping or nonlooping team.

The four sixth grade teams were consolidated to three teams for the 2004-2005 school year, and the two nonlooping teams were blended together to form one large team with four new teachers. New students were placed with the looping teachers in order to balance the demographic variables for the 2004-2005 school year.

Data Collection

All of the data used for this study was collected by the State of Colorado and made available to the Colorado Springs School District #11 and HMS. This researcher used the results from the 2003, 2004 and 2005 CSAP tests. Therefore, students will not be directly involved and approval from the Human Subjects Review Committee to conduct this study was not necessary. Student and teacher names were omitted to protect the confidentiality of the participants.

Procedure

To determine the effect of the use of looping on the achievement of students enrolled in the program, the CSAP test scores were compared at three points in time. First, the mean scores from the 2002-2003 CSAP test that students took in fifth grade

were analyzed to determine baseline data. The baseline data was used to determine: (a) the level at which students began and (b) whether students in both looping and nonlooping began at the same level of student achievement on the CSAP. Next, the mean scores for the 2003-2004 sixth grade CSAP test for looping and nonlooping students were analyzed to determine the level of student achievement at the end of the participants' sixth grade year. The 2003-2004 data may indicate differences in student achievement related to the strengths or weaknesses of individual teachers the students were originally placed with that could skew the results from this study. Finally, the mean scores of the 2004-2005 seventh grade CSAP test for looping and nonlooping students were compared to determine whether there is a significant difference in student achievement between students enrolled in looping and nonlooping programs.

Instrument

The instrument used in this study was the Colorado Student Assessment Program (CSAP) test. It was developed by staff of CTB/McGraw-Hill with input from members of the Colorado Department of Education (Colorado Department of Education, 2005), teachers, and community members. The CSAP is administered to all Grade 3-10 students enrolled in Colorado public schools. Students in Grades 5, 6 and 7 are assessed in mathematics, reading, and writing. The instrument consists of a combination of multiple choice and open-ended questions. The multiple choice portion of the assessment is scored via computer and the open-ended questions are scored by certified scorers. The staff of the CDE reported the reliability of the test by use of the Standard Error of

Measurement (SEM). They stated:

> Taking the SEM into consideration means that you should not think of an obtained score as an absolute value. Instead, consider it as a point within a range that probably includes a student's true score. (A student's "true score" is the hypothetical average score that would result if the student could take the test repeatedly without being affected by practice, fatigue, or additional learning.) It is expected that 68 percent of the time a student's score obtained from a single testing would fall within one SEM of that student's true score and 95 percent of the time the obtained score would fall within two SEMs of the true score. (p. 9)

The student results for the CSAP are reported in the form of scale scores and proficiency levels (CDE, 2005). Students are assigned a raw score that is converted into a scale score, which is required to compare student progress from year to year. Scale scores are then used to determine the proficiency level of the student. Students can score in one of four categories: (a) Advanced, (b) Proficient, (c) Partially Proficient, and (d) Unsatisfactory.

Data Analysis

This researcher compared the mean scale scores on the CSAP for looping and nonlooping student groups for the 2002-2003, 2003-2004, and 2004-2005 school years through an independent groups *t*-test. The assumptions of a *t*-test are that: (a) the observations in the two groups are independent because students were randomly assigned to the two groups, (b) the scale of measurement for the CSAP scores is ratio, (c) the shapes of the two distributions is a normal distribution, (d) the two groups are homogeneous. Typically, the independent groups *t*-test is used to analyze a relationship between two variables when: (a) the dependent variable is quantitative, and (b) the

independent variable is between subjects in nature (Becker & Jaccard, 2002). The mean scores for looping and nonlooping students were compared for each year to determine if there was a statistically significant difference in test scores in each of the three areas (reading, writing, and mathematics) tested by the CSAP. Additionally, the number of students who scored in each of the four proficiency levels (Advanced, Proficient, Partially Proficient, and Unsatisfactory) were compared to determine whether the use of looping has a significant impact on student achievement on the CSAP.

Chapter Summary

In chapter 3, the methodology for this research project was presented. The process by which students were placed into specific groups was discussed, as was the method for the collection of data. Also, the format and assessment procedure for the CSAP, as well as, the reliability data for the test was presented. Finally, the procedure for data analysis was reported. By analysis of the data, this researcher hopes to show that the use of looping has a significant impact on student achievement on the CSAP.

In chapter 4, this researcher will present the results of the statistical analysis of the CSAP test scores. Initial placement data and student achievement levels will also be presented. Chapter 5 will contain a discussion of those results as well as a discussion of the methodology of this research project.

Chapter 4

RESULTS

The purpose of this study was to determine if the use of looping has a positive impact on student achievement in regards to the CSAP at Holmes M.S. Data was collected from the 2003, 2004, and 2005 CSAP tests for a group of students attending HMS for the 2003-2004 and 2004-2005 school years. An independent groups *t*-test was used to determine if looping has an impact on student achievement at HMS. In addition to the independent groups *t*-test, the percentage of students scoring proficient or advanced on each test was calculated. Finally the percent of change for the number of students scoring in those same categories was calculated to help determine what impact looping has on student achievement. The data met the qualifications of the assumptions of the *t*-test. The students were randomly assigned to one of the two groups, the scale of the CSAP was ratio, the shapes of the two distributions was normal, and the groups were homogeneous.

Participants

The 2004-2005 seventh grade class at Holmes M.S. consisted of 217 students. Of the 217 students, 97 students (or 45%) participated in the looping program and the other 120 (or 55%) participated in the traditional program. However, not all of these students had attended HMS for the two years of this study and others did not have complete test scores for all three years of the study. When these students were removed from the data

set, the number of students that had participated for both years of the looping program was 95 and the number of nonlooping students who attended HMS for the two full years was 88. It is noted that three students that had been initially placed on the looping teams choose to not continue with their teachers and are included in the nonlooping data. Two of the students that requested the change chose to join the nonlooping team and the third joined the other looping team.

Demographics

The general make-up of the looping and nonlooping teams in regard to gender was similar. The looping team was 52% male and 48 % female. The nonlooping students were 55% male and 45% female. The ethnicity of the two groups was a bit different. The looping group was 84% Caucasian, 9% Hispanic, 3% African American, 2% Asian, and 2% Native American. The nonlooping team was 76% Caucasian, 14% Hispanic, 3% African American, 6% Asian, and 1% Native American. Numbers for special education needs, as well as, free and reduced lunch status were not available to the researcher.

2003 CSAP Results

The 2003 CSAP results were the student fifth grade test scores. These scores assisted with the placement of students into the four sixth grade teams. Counselors attempted to create four teams that were mirror images of each other while honoring parent requests for teaching styles and school programs, including looping, that would best meet the needs of each student.

The 2003 reading CSAP results showed that the looping group started out with a

higher average reading score than the nonlooping group. Looking at strictly proficiency levels in reading, 83% of looping students scored proficient or advanced compared to 76% of nonlooping students. The mean score for the looping students group was 633.88 with a standard deviation of 46.81. The nonlooping students group mean score was 622.64 with a standard deviation of 52.12. The independent groups *t*-test of the 2003 reading scores resulted in $t = 1.5379$. This score is not considered statistically ($p = 0.13$) significant.

Table 4.1. 2003 Reading CSAP Comparisons

Group	*Mean Score*	*Standard Deviation*	*% Proficient or Advanced*
Looping	633.88	46.81	83%
Nonlooping	622.64	52.12	76%

The 2003 writing scores for the looping students were considerably higher than those of the nonlooping students. The percent of looping students who scored proficient or advanced in writing was 74% compared to nonlooping students at 66%. The mean score for the looping group in writing was 526.06 and a standard deviation of 45.02. While the nonlooping groups had a mean score of 510.40 and a standard deviation of 43.45. The independent groups *t*-test resulted in $t = 2.3915$. The *t*-test in this case confirmed a significant ($p = 0.02$) difference between the two groups.

Table 4.2. 2003 Writing CSAP Comparisons

Group	*Mean Score*	*Standard Deviation*	*% Proficient or Advanced*
Looping	526.06	45.02	74%
Nonlooping	510.40	43.45	66%

The 2003 mathematics scores once again showed that the looping students average score started out higher than the nonlooping students score. Looping students scoring proficient or advanced in mathematics numbered 79% compared to 67% for the nonlooping students. The looping students' mean score was 530.99 with a standard deviation of 61.46. The nonlooping students' mean score was 514.67 with a standard deviation of 67.92. The independent groups *t*-test resulted in $t = 1.7063$. This value is not quite statistically ($p = 0.09$) significant.

Table 4.3. 2003 Mathematics CSAP Comparisons

Group	*Mean Score*	*Standard Deviation*	*% Proficient or Advanced*
Looping	530.99	61.46	79%
Nonlooping	514.67	67.92	67%

Table 4.4. 2003 CSAP Statistical Data

Test	*t-Test*	*p-Value*	*Significant*
Reading	1.5379	0.13	N
Writing	2.3915	0.02	Y
Mathematics	1.7063	0.09	N

2004 CSAP Results

The 2004 CSAP results were the students test scores from the sixth grade, the students first year at HMS. Since the students were new to the school, the benefits of a looping program were not incorporated into the results. The sixth grade experience for the students would be considered more traditional. However, looping students and teachers knew that they would be together the following school year.

The 2004 reading CSAP results showed that both groups progressed evenly. Once again, looking at strictly proficiency levels in reading, 86% of looping students scored proficient or advanced compared 80% of nonlooping students. Both groups showed a percent of increase of 4% in students scoring proficient or advanced. The mean score for the looping students group was 644.96 with a standard deviation of 56.20. The nonlooping students group mean score was 638.45 with a standard deviation of 56.68. The independent groups *t*-test of the 2004 reading scores resulted in $t = 0.7789$. This result is not considered statistically ($p = 0.44$) significant.

Table 4.5. 2004 Reading CSAP Comparisons

Group	*Mean Score*	*Standard Deviation*	*% Proficient or Advanced*	*% Increase*
Looping	644.96	56.20	86%	4%
Nonlooping	638.45	56.68	80%	4%

The 2004 writing scores for the looping students were once again considerably higher than those of the nonlooping students. Looping students scoring proficient or

advanced in writing was 85% compared to nonlooping students at 75%. The looping group showed a 16% increase in students scoring proficient or advanced. The nonlooping students increased 14%. The mean score for the looping group in writing was 556.67 and a standard deviation of 52.19. While the nonlooping groups had a mean score of 540.53 and a standard deviation of 53.33. The independent groups *t*-test in writing resulted in $t = 2.0684$. Once again, the test showed a significant ($p = 0.04$) difference between the groups.

Table 4.6. 2004 Writing CSAP Comparisons

Group	*Mean Score*	*Standard Deviation*	*% Proficient or Advanced*	*% Increase*
Looping	556.67	52.19	85%	16%
Nonlooping	540.53	53.33	75%	14%

The 2004 mathematics scores showed a considerable difference in the scores of looping verse nonlooping students. Looping students scoring proficient or advanced in mathematics numbered 75% compared to 61% for the nonlooping students. Both groups had a decrease in the number of students scoring proficient or advanced from the previous year. The number of looping students scoring proficient or advanced decreased 5% and the nonlooping students decreased 8%. The looping students' mean score was 553.55 with a standard deviation of 70.94. The nonlooping students' mean score was 532.10 with a standard deviation of 67.84. The independent groups *t*-test resulted in $t = 2.0864$. This showed a significant ($p = 0.04$) difference between the two groups after the first year.

Table 4.7. 2004 Mathematics CSAP Comparisons

Group	*Mean Score*	*Standard Deviation*	*% Proficient or Advanced*	*% Increase*
Looping	553.55	70.94	75%	-5%
Nonlooping	532.10	67.84	61%	-8%

Table 4.8. 2004 CSAP Statistical Data

Test	*t-Test*	*p-Value*	*Significant*
Reading	0.7789	0.44	N
Writing	2.0684	0.04	Y
Mathematics	2.0864	0.04	Y

2005 CSAP Results

The 2005 CSAP results were the students test scores from the seventh grade, the students second year at HMS. It is during this year that the benefits of a looping program were expected. The seventh grade experience for only half the students would be considered traditional.

The 2005 reading CSAP results showed larger growth for the looping students. Once again, looking at strictly proficiency levels in reading, 88% of looping students scored proficient or advanced compared just 69% of nonlooping students. Looping students scoring proficient or advanced increased by 2% while the nonlooping students scoring at that level decreased by 1%. The mean score for the looping students group was 671.38 with a standard deviation of 47.93. The nonlooping students group mean score

was 655.64 with a standard deviation of 47.99. The independent groups *t*-test of the 2005 reading scores resulted in $t = 2.2187$. The *t*-test value showed a significant ($p = 0.03$) difference in achievement between the two groups.

Table 4.9. 2005 Reading CSAP Comparisons

Group	*Mean Score*	*Standard Deviation*	*% Proficient or Advanced*	*% Increase*
Looping	671.38	47.93	88%	2%
Nonlooping	655.64	47.99	69%	-1%

The 2005 writing scores for the looping students were overwhelmingly higher than those of the nonlooping students. Looping students scoring proficient or advanced in writing was 88% compared to nonlooping students at 65%. Looping students showed an increase of 4% from the 2004 test and the nonlooping students a decrease of 14%. The mean score for the looping group in writing was 595.88 and a standard deviation of 52.24. While the nonlooping group had a mean score of 564.33 and a standard deviation of 60.90. The independent groups *t*-test in writing resulted in $t = 3.7703$. The writing scores showed an extremely significant ($p = 0.0002$) difference between the groups.

Table 4.10. 2005 Writing CSAP Comparisons

Group	*Mean Score*	*Standard Deviation*	*% Proficient or Advanced*	*% Increase*
Looping	595.88	52.24	88%	4%
Nonlooping	564.33	60.90	65%	-14%

The 2005 mathematics scores showed a extreme difference in the scores of looping verse nonlooping students as well. Looping students scoring proficient or advanced in mathematics numbered 81% compared to 49% for the nonlooping students. Nonlooping students scoring proficient or advanced decreased by 20% while the looping students scoring at that level increased by 8%. The looping students' mean score was 597.77 with a standard deviation of 61.66. The nonlooping students' mean score was 556.06 with a standard deviation of 61.08. The independent groups *t*-test resulted in $t = 4.5930$. The independent groups *t*-test showed an extremely significant ($p = 0.0001$) difference between looping and nonlooping student scores.

Table 4.11. Mathematics CSAP Comparisons

Group	*Mean Score*	*Standard Deviation*	*% Proficient or Advanced*	*% Increase*
Looping	597.77	61.66	81%	8%
Nonlooping	556.06	61.08	49%	-20%

Table 4.12. 2005 CSAP Statistical Data

Test	*t-Test*	*p-Value*	*Significant*
Reading	2.2187	0.03	Y
Writing	3.7703	0.0002	Y
Mathematics	4.5930	0.0001	Y

Chapter Summary

In chapter 4, the results of the 2003, 2004, and 2005 CSAP test were presented. The number of students scoring in the proficient or advanced levels were given, as well as, the percent of change from year to year. The mean scores for each group, *t*-test results, and the probability that the difference could be attributed to the use of looping was also presented. In chapter 5, the data presented in chapter 4 and the methodology of the research project will be discussed and analyzed.

Chapter 5

DISCUSSION

The results of this study into the impact of looping on student achievement on the CSAP are encouraging. The 2003-2004 school year CSAP results showed similar progress in most areas for all students. However, the results from the 2004-2005 CSAP test showed a large discrepancy in test scores between the students involved in a looping program and those in a traditional program.

2003-2004-Sixth Grade

An analysis of the 2003 fifth grade scores on the CSAP showed that the students that were enrolled in the looping program were not significantly different in reading and mathematics, but were significantly higher in writing. This trend was also present in the 2004 results. The results of the 2004 sixth grade CSAP test showed that both groups progressed at a similar rate. The number of looping and nonlooping students that scored proficient or advanced in reading increased 4% for both groups. Similar gains in writing were also identified. Looping students scoring proficient or advanced in writing increased 16%, while nonlooping students scoring in the same range on the writing test increased 14%. Finally, the number of looping students scoring proficient or advanced on the mathematics test decreased 5%, while the number of nonlooping students decreased 8%. This data supports the theory that the students of each group progressed at a similar rate during their first year at HMS.

Additional evidence to support this conclusion was provided by the mean scores of each group. The differences in the mean score for the reading and writing tests also show that the students progressed at similar rates. The difference in the mean reading scores in 2003 was 11.24 points. This difference was reduced to 6.51 points on the 2004 test. The students in the nonlooping group had narrowed the gap in reading between the two groups. The 2003 mean scores for the writing test had a difference of 15.66 points. The 2004 writing results showed a similar difference of 16.14 points. In this case, the nonlooping group progressed at a similar rate as the looping group. The results of the 2004 mathematics test did show that the gap was growing between the groups. The mean scores of the 2003 mathematics test had a difference of 16.32 points. The difference in the mean scores of the 2004 mathematics grew to 21.45. The 2004 mathematics results showed more growth for the looping students than the nonlooping students. The difference between the groups in 2003 was not quite statistically significant, however this increase was enough to show a significant difference in student performance on the 2004 CSAP test in mathematics. Overall, the results of the 2004 CSAP tests did not show that the groups were receiving drastically different educations. The results of the 2004 CSAP once again showed no significant difference in performance on the reading portion of the test. The gap in mathematics had grown slightly and writing still showed a significant difference in achievement, however, the gap in achievement had not grown significantly.

2004-2005 Seventh Grade

The results of the seventh grade CSAP test showed a drastic difference in student performance between the looping and nonlooping groups. The students in the looping program out performed the nonlooping students by a large amount. The difference in the mean score on the 2005 reading test grew to 15.74 points. The number of looping students that scored proficient increased by 2%, while the nonlooping students that scored in the proficient range decreased by 1% The difference in the mean score on the writing increased also, growing to 31.55 points. The looping students that scored in the proficient range increased 4% while the nonlooping students scoring in the proficient range decreased by 14% The largest discrepancy was in mathematics. The difference in the mean score ballooned to 41.71 points. Looping students scoring in the proficient range increase 8% while the nonlooping students scoring proficient decrease 20%. According to the independent groups *t*-test, the achievement of the looping group was significantly different in all three areas tested. It appears that looping has an affect on student achievement on the CSAP.

While the results of the 2004 CSAP test help support that students of each group were progressing at very similar rates, the results of the 2005 test show a drastic difference. The 2004 school year was more traditional for all students at HMS. The students essentially participated in a traditional school program where students are placed with new teachers at the beginning of the year. The only difference being that the looping students knew that they had the option of remaining with the same teachers for a second year. Since the year was a more traditional for all students involved, they progressed at

similar rates. The results of the 2005 test were possibly impacted by the many benefits outlined in this study. Looping students and teachers have the benefit of already knowing each other at the beginning of the second year. Students are already familiar with teacher and classroom expectations and teachers are already familiar with student needs and learning styles. Time spent in a traditional program learning these characteristics of the group at the beginning of the year is now used for instruction and curriculum. The teacher is also more familiar with the best practices for the group and instruction can be tailored to the needs of the group in a more efficient manor.

Table 5.1. CSAP Test Comparison Data -% Proficient and Advanced

	Reading		Writing		Mathematics	
Year	*Looping*	*Nonlooping*	*Looping*	*Nonlooping*	*Looping*	*Nonlooping*
2003	83%	76%	74%	66%	79%	67%
2004	86%	80%	85%	75%	75%	61%
2005	88%	69%	88%	65%	81%	49%

Weaknesses of the Study

Although this study appears to show the positive impact that looping has on student achievement on the CSAP, it has several limitations: (a) it was only a one year study, (b) it lacked historical data to compare the seventh grade results, (c) opportunity for involved parents to request the looping teams, (d) the initial higher achievement of the looping group, (e) a disproportionate number of minorities on the nonlooping team, and (f) using only one measure of student achievement. The length of the study could

possibly skew the results. With data from only one group of students it is impossible to tell if the results of this study are typical for all looping programs or an anomaly. The lack of historical data for seventh grade achievement was also a limitation. Without historical data it is impossible to determine if the drop in scores for the nonlooping students was typical for students of this age group or a result of other factors, such as poor instruction. The fact that parents had an opportunity to request a looping program could have also impacted the outcome of the study. An involved parent might put more emphasis on student achievement which could have impacted the results. Data on parent requests would have been useful in determining how many individuals had requested the looping program. The premise of the study was that the groups were mirror images of each other. While the groups were not statistically different in reading and mathematics, the looping group did have a higher average score in all three areas tested and this could have impacted the results. Standardized tests such as the CSAP, could be culturally biased and the higher number of Hispanic students on the nonlooping team might have been at a disadvantage. Finally, using only the results of the CSAP might have skewed the data. Grades and other indicators of student achievement would possibly give a more accurate indication of the impact that looping has on student achievement.

Future Research

Although this research project has shown that looping appears to have an impact on student achievement on the CSAP, several future research projects have arisen. First, continued analysis of student achievement of looping and nonlooping groups at HMS

should be aggressively pursued. Additional data on the impact of looping is needed to confirm the impact that looping has on student achievement. Other aspects of the looping program at HMS should also be explored. An investigation into the impact of the HMS looping program on student behavior and achievement in other areas besides the CSAP would provide additional information for school personnel. Finally, the transition of looping students to traditional high school programs should be studied to determine the long term effects of a looping program.

Chapter Summary

This research project has shown that looping appears to have a positive impact on student achievement on the CSAP at HMS. Students involved in a looping program outperformed the nonlooping students on all areas tested on the CSAP. The independent groups *t*-test showed a significant difference between the groups in all areas that could be attributed to looping. Weaknesses of the study were also presented, as well as, topics for future investigation. Continued efforts by the staff of HMS should be made to analyze and assess the effectiveness of the current looping program and the effect that looping has on students and student achievement.

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