

## CHAPTER 1

### Introduction

#### Background for the Project

Schools in the Yakima School District have struggled to make Annual Yearly Progress (AYP) as measured yearly by student achievement on the Washington Assessment of Student Learning (WASL) from year to year. It seemed reasonable to look at schools, which have made some reasonable gains in their WASL scores by analyzing their 2006-2007 WASL data, school day schedules, and use of best practices to determine whether or not these factors made a significance difference in student achievement.

As schools in the Yakima School District received their WASL scores in previous year, the focus of each school was to find a treatment such as interventions for reading, and math, which would be the cure all for those students struggling to pass those two sections of the WASL. Yet, interventions had not proven to be the only treatment needed in many middle schools because WASL scores were not increasing at a rate that was acceptable by principals, teachers, and building staff. As a result of this inability to produce higher WASL scores solely through interventions other treatments such as teamed and looped day/year schedules had been established at two middle schools in the Yakima School District one of which has gone back to a regular seven period days.

### Statement of the Problem

In recent years at Wilson Middle School there was a small gain in the overall achievement of middle school students on the WASL and who were part of a school that was teamed, which meant students were with the same two, three, or four teachers for the entire school year. Students in the sixth grade also looped with their teachers up to the seventh grade; therefore, it was expected that the achievement and skill levels of students improved on the WASL. As student achievement and overall WASL scores increased, this allowed Wilson to make AYP on a yearly basis, which meant they stayed out of school improvement. Yet, the problem was that WASL scores had fluctuated from year to year in reading and writing; therefore, it was unknown if looping and teaming had made a significance difference in the achievement level of students on the WASL.

The consequences of middle school students at Wilson not improving reading, writing, math, and science scores on the WASL was that Wilson be placed back on AYP or Step 1 of the school improvement continuum. They would also be identified as a school in school improvement, which required parents to be notified of the schools status. As Wilson developed or revised the school improvement plan, teacher's best practices would be questioned, teaming and looping would be questioned, and students would have the option to transfer to other schools in the district that were not currently in school improvement. The evidence to support this need for change was that Wilson students' scores came to

a plateau in the 2005-2006/2006-2007 school years and have not made significant gains as in previous years. Also, not all students gained the skills needed to pass the WASL reading, writing, math, and science sections and this was evident as WASL results were shared with the building staff.

### Purpose of the Project

The researcher's objective for this special project was to explore the impact, if any that students looped and teamed from 6<sup>th</sup> to 7<sup>th</sup> grade at Wilson Middle School had improved or increased student achievement on the WASL. Students who were a part of a school that implemented interdisciplinary teaming were expected to have higher levels of student achievement and student self-esteem than less implemented schools.

### Delimitations

The delimitations of this special project were that the experiment was based upon one year of WASL reading and writing scores during the 2006-2007 school year. Although there was a difference in the daily schedules of students, both schools had similar student and teacher demographics. Wilson Middle School used a looped and teamed schedule, while Franklin Middle School used a traditional calendar and did not implement looping or teaming of students.

### Assumptions

Schools that implemented looping and teaming had some advantages over schools that did not loop or team such as:

1. Students on looped teams were more likely to perform as well as or better than students who were not on looped teams.
2. There were less classroom behavioral issues (disciplinary actions) in classes that implemented looped teams, which allowed for meaningful instruction to occur in classrooms.
3. Students who were looped from 6<sup>th</sup> to 7<sup>th</sup> grade with the same teachers were more apt to achieve a higher success rate and/or score on the WASL reading, writing, and math sections.
4. Students who were part of a looped team tried harder to achieve a level of excellence than those who were not part of a looped team.
5. Teachers on looped teams who used best practices achieved a higher success rate on the WASL than those who were not looped and did not use best practices.
6. Students on looped teams adjusted quicker at the beginning of the 7<sup>th</sup> grade and were able to begin working and reviewing quickly on skills needed to pass the WASL.
7. Students on looped teams were more successful due to the tight knit learning community provided by looped teams.

#### Hypothesis or Research Question

Middle school students who were part of a looped team from 6<sup>th</sup> to 7<sup>th</sup> grade changed their WASL reading, writing, and math scores than middle school

students who were not looped from 6<sup>th</sup> to 7<sup>th</sup> grade. Students needed to pass all three sections of the WASL in the 7<sup>th</sup> grade in order to fulfill future graduation requirements,

### Null Hypothesis

There was no significant difference in the WASL reading, writing and math scores of middle school students who were looped from 6<sup>th</sup> to 7<sup>th</sup> grade than those middle school students who were not looped from 6<sup>th</sup> to 7<sup>th</sup> grade.

Significance was determined for  $p \geq .05, .01, .001$ .

### Significance of the Problem

This special project was important to the Yakima School District because 11 out of schools have been placed on school improvement plans due to their inability to make AYP on the WASL. When data was analyzed and student achievement determined, the school district and individual schools faced with truth that many students were not meeting state standards in each of the content areas and were not passing the WASL. This data was important because it helped to explain why annual drop-out rate in the Yakima Valley was at 6.0% for the 2005-2006 school years. It also showed that the on-time graduation for students was only 63% and those students that asked for extended graduation time was at 74%. The rate of graduation and the drop-off rate in the school year 2005-2006 were alarming considering the WASL was not a factor or a requirement at that time. By the end of the 2008 school year, passing the 10<sup>th</sup> grade WASL will be a

graduation requirement, which means that the graduation rate will decrease if students were unable to pass the WASL and the amount of students asking for extended graduation time will also have increased until they are able to pass the WASL. This also affected the Yakima School District because the drop-out rate may also increase due to students feeling the pressure of trying to pass the WASL and giving up on the school system altogether (OSPI, 2006-2007).

Another significance of this problem was that Wilson Middle School faced the possibility of being placed back on school improvement if they do not meet AYP in all of the cells established by the state. If Wilson had a large number of students not pass the WASL, the focus again at Wilson Middle School was to put interventions in reading, writing, and math into place, which meant eliminating exploratory classes for students. This was a huge burden on students because exploratory classes were classes that allowed students to use their creativity and other talents in a different classroom setting. Others affected by this problem were the students who were able to pass the WASL and/or the highly skilled students, who due to the high focus on interventions, were forgotten and were not being challenged or provided with opportunities to enhance their skills and/or talents. The other problem that arose from this data was how the inability of students to pass WASL due to the difficulty of the test and dealing with environmental and social factors contributed or can contribute to the high drop-out rate found in the Yakima Valley.

## Procedure

On October 12, 2007, Ernesto Araiza, principal at Wilson Middle School, gave the researcher permission to take the 2006-2007 WASL and compare those scores to Franklin Middle School. The researcher looked at the impact looped teams (6<sup>th</sup> to 7<sup>th</sup> grade) had on the student achievement rate on the WASL as compared to Franklin Middle School. Franklin Middle School did not implement looped teams or interdisciplinary teaming.

## Definition of Term

intervention. Programs or curriculums that are used to fill in the (skills) gaps in reading and math. They are primarily used for students reading or performing math skills at two or more years below grade level.

looping. Keeping discrete groups of similarly-aged students together for a period of several years with the same teacher.

Interdisciplinary teaming. A team of two or more teachers from different subject areas and the group of students they commonly instruct.

## Acronyms

WASL. Washington Assessment of Student Learning

AYP. Annual Yearly Progress

P.E.. Physical Education

PLC. Professional Learning Communities

OSPI. Office of Superintendent of Public Instruction

## CHAPTER 2

### Review of Selected Literature

#### Introduction

Due in part to the purpose of the researcher's special project, literature chosen for review dealt with teaming and looping in schools in the middle levels. Also, included in this selection of reviewed literature were a variety of articles found on the internet that dealt with interdisciplinary teaming and looping in the middle school level.

#### Interdisciplinary Teaming

One of the main focuses in schools and school districts today is how to create a positive and meaningful learning environment that allowed students to achieve high-levels of academic and social success during their educational careers. Yet, in order for meaningful and positive learning to have occurred for students, there had to be meaningful and positive relationships occurring between and among building staff, which included administration, secretaries, teachers, custodians, librarians, paraprofessionals, security, and anyone else who had a direct influence on the dynamics of the school. So, for student success to have occurred, a building had to believe that they were all in it together and what they did, whether it was minimal or not, had a direct impact on the success of its students (Flowers, N., Mertens, B., & Mulhall, P. F., 2000). Teaming in the Middle Level School was not a new concept, but there were few schools, which



had been able to bring teaming and looping to its school and be very successful. Building staff worked as a team takes hard work, dedication, and a shared vision that everyone was striving for 100 percent. In fact, teachers at schools that were teamed viewed their school as a more positive, rewarding, and satisfying place to work than teachers that were not teamed (2000).

In the book *Learning by Doing: A Handbook for Professional Learning Communities at Work* it discussed the growing popularity of professional learning communities (PLC) in school districts across the nation. The fundamental nature of learning communities was to have a common focus and a commitment to the learning of each student by establishing collaborative teams that were linked together by this shared vision that all students could learn and be successful:

In a PLC, collaboration represents a systematic process in which teachers work together interdependently in order to impact their classroom practice in ways that will lead to better results for their students, for their team, and for their school. It is equally important, however, to emphasize that collaboration does not lead to improved results unless people are focused on the right issues. (Dufour, R., Eaker, R., Many, T., 2006))

Working collaboratively as a team required that individuals work together to establish goals that would help meet the need of students despite any circumstances that may have been proven to be detrimental to student learning

such as environmental and social factors Teachers and interdisciplinary teams needed to focus on curriculum, interventions, and teaching styles/methods that enhanced student learning and established team goals that were attainable for all students “It is disingenuous for any school to claim its purpose is to help all students learn at high levels and fail to create a system of interventions to give struggling learners...support for learning.” (Dufour, R., Eaker, R., Many, T., 2006) In order for teaming to work and to provide the best opportunities for success to students, teams need to be kept small in terms of number of teachers and students. Teams who were given ample individual planning time and team time to discuss student issues such as possible interventions for struggling students received collaborative support and were able to work together to establish consistency and accountability for their students. Teams who were kept together for multiple years also had an advantage due in part to their ability to establish a system of accountability for all team members and provided consistency for students academically and socially. Furthermore, teams who were allowed to design their students’ day schedules were able to enhance the student learning and objectives set by the team (Flowers and Mertens, 1999-2008).

Success occurred only when teams assumed collective responsibility for their students learning and they began communicating with one another on ways they could interdependently provide ways to meet the needs of students such as interventions or additional time to practice skills being addressed. Student

achievement did not increase in schools that depended on just interventions, “A school characterized by weak and ineffective teaching will not solve its problems by creating a system of timely interventions for students” (Gaustad, 1998). Furthermore, schools who relied on timely interventions in reading and math, but did not have best teaching practices in place continued to see no visible student gains in student achievement. Teachers and principals had to continuously be strategic and specific when identifying measurable and attainable goals for its students including interventions that would fill in those skill gaps of students. Most importantly, teachers and principals needed to work collaboratively, share knowledge, learn together and determine the best ways to meet the needs of students based on these strategic and specific goals.

When establishing a team of teachers it is important to have teams located in the same area of a building in order to provide quick and simple class transitions, as well as, a safe zone for students in teams. Other factors of effective teams were grouping teachers who would work well together and share the same goals for students (Flowers and Mertens, 1998-2008). There were a couple of characteristics administrators took into consideration such as:

1. Teams should be balanced and include teachers who had different teaching styles and methods; along with, different personality types.
2. Each team should have a set of teachers who were competent or highly qualified in their content area.

3. Teams should have a common planning time that allowed for regular meeting times to discuss curriculum and student matters, conduct parent or individual student conferences.
4. Teams should share in decision-making regarding their team and included administration whenever possible or necessary.
5. Teams should be responsible for their own budget and supplies.
6. Counselors and administrators should act as a support system for teams and their students
7. Team members should be able to compromise by setting apart differences or areas of conflict in order to accomplish team established goals and objectives such as student achievement academically and socially (Maxwell).

Setting up a teaming system in a school was simple if everyone involved agreed that this method of grouping students would work and could create pockets of communities that enhanced the overall atmosphere of the entire school.

Maxwell discussed this issue of teachers and other building staff collaborating together to achieve a common goals and what qualities an effective team player had such as being adaptable, committed dependable, committed, disciplined, prepared, and communicative. Effective team players also were expected to be enthusiastic about teaching and strived for excellence in themselves, their team members, and their students. One of the most important characteristics of

effective team members were they were intentional in everything they did so they were always consciously aware of their strengths and weaknesses and strove for improvement whether it is in their teaching style/delivery, or how they interact with their team members and/or students. The most important characteristic of an effective team player is the willingness to work collaboratively with others by focusing on the team goals and not yourself “To become a collaborative team player; think win-win-win; compliment others; take yourself out of the picture” (Maxwell).

If all of the other characteristics of a team player are in place then working collaboratively in a team setting will essentially fall into place without any conflicts between team members. This is vital to creating a positive and meaningful learning environment because as students are grouped into teams with a set of teachers, it is the shared vision of the team and school that will help to create pockets of close-knit communities that will foster higher levels of student achievement within the school. Teamed schools increased parental contact, which was also vital in creating a positive learning environment for students, teachers, and parents (Flowers, N., Mertens, B., & Mulhall, P. F., 2000).

In the book *The 17 Essential Qualities of Team Play: Becoming the Kind of Person Every Team Wants*, the author discussed the roles and expectations of what an effective team player is and how being an effective team player contributed to the overall achievement of his/her students. Teaming was a vital

key to student success if everyone involved buys into this concept and does their part to ensure that the goals established by the team are met.

The book *Learning by Doing: A Handbook for Professional Learning Communities at Work* also focused on the affects teaming had on student achievement and how this shared vision of a school can make a difference in the overall climate of a school. Along with the introduction of professional learning communities to the reader, the book discussed the importance of establishing a common goal for the entire school and for interdisciplinary teams. The goal established by a team must be attainable for the students they share and are familiar with during a particular school year (Dufour, R., Eaker, R., Many, T., 2006).

When schools are highly implemented (teaming, common planning time, small teams, same teams for multiple years, and advisory), they have been more apt to have found a higher level of student achievement and self-esteem than less implemented schools. In several large scale and comprehensive studies conducted by researchers, highly implemented schools have successfully demonstrated the positive and enhancing effects of teaming on student-directed outcomes (Flowers and Mertens, 1998-2008). Hence, districts or schools who considered teaming needed to incorporate all aspects of teaming in order for teaming to work.

### Looping in the Middle Levels

Looped classrooms primarily involved students spending two years with the same teacher or group of teachers (multi-teaching or multi-year placement). Students are promoted to the next grade level, while teachers also moved up with the same group of students. Looped classrooms are not a new concept: in fact, looped classrooms have been around since the early 1900's, "America's one-room school-house was a looping classroom, with the teacher teaching the same children over a period of years" (Hitz, Somers, and Jenlink, 2007). Many modern countries such as Germany and China continue to loop their students two to three years in order to build strong, meaningful relationships between students and teachers. Schools have also developed looping classrooms in order to solve scheduling problems, and dealing with high student enrollment (2007).

As teachers moved up to the next grade level with students, the trust and stability of knowing what was expected of each child, allowed for growth socially and academically, "For a lot of children today, their teacher is often the most stable, predictable adult in their life" (Salvatti). There were many children who came from single family homes or unstable homes, so the bond between student and teacher and the sense of stability was detrimental to the success of each and every student. Students who are part of a looped school have the great benefit of not worrying about fitting in and being part of a clique "no matter their race, academic ability or physical appearance...students morph into one big, happy,

cohesive group (McKay, 2000). Students who looped with their teachers also adjusted more quickly and began the following school year with a sense of belonging “looping reduces anxiety and increases confidence for many children, enabling them to blossom both socially and as learners (Gaustad, 1998).

Along with the bond that was created, a teacher also had the great benefit of becoming familiar with each student’s learning style and what skills he/she had gained and skills he/she needed to continue to work on:

Spending several years with a class enables teachers to accumulate more in-depth knowledge of students’ personalities, learning styles, strengths, and weaknesses. This longer contact reduces time spent on the diagnosis and facilitates more effective instruction. It also helps teachers build better relationships with parents. (Gaustad, 1998)

When students returned the following year, teachers were already familiar with where each student was in his/her learning process and could quickly focus on instruction and providing curriculum that would help each of those students grow, “One of the most positive elements of looping is that it allows a child to grow at his or her own pace, not at an arbitrary fixed-grade rate” (Hitz, Somers, and Jenlink, 2007). Teachers also did not have to waste time reassessing or diagnosing their students’ abilities and personal learning styles (McKay, 2000). Although looped classrooms were deemed effective about many things, in order



for students to benefit from having the same teacher, teachers needed to have an “intimate relationship with the curriculum” and understood how to modify it to meet the needs of students (Salvatti).

So, unlike schools who did not implement looped classrooms into their school year, teachers were able start teaching right at the beginning of the school year because students knew the classroom expectations and didn’t need four to six weeks to familiarize themselves with those expectations. Teachers also had some freedoms in the classroom such as having challenging activities available to those students who were excelling at a faster rate than their peers; as well as, establishing interventions for those students who were struggling with the curriculum (Elliot, 1998).

Another advantage of looped classrooms, besides teachers being more confident in their teaching, is their ability to deal with students who suffered from behavioral issues that might interfere with their learning. One of the key questions asked in “When Two Years Are Better Than One” was how do you help students through the difficult years of early adolescence? When the article spoke about adolescence years, it was specifically talking about students who were in the middle level grades, and who, for the most part, were influenced more by social factors than anything else:

Thanks to looping, teachers know what to expect of students  
and they know what to expect from their teachers...teachers know

students well enough to be able to spot problems almost before they occur and students know themselves well enough to be able to determine what they can and can't do (Elliot, 1998).

This was a vital piece of looped classrooms because in the world of an adolescent there was usually chaos and uncertainty as they tried to fit in to a society that focused more on appearances and fads than education. If looped with an effective teacher or group of teachers that have the desire for optimal student success, these students had the chance to grow not only academically, but socially, as well. If a student happened to be struggling behaviorally, the teacher had the ability to try and work with the student one-on-one, or if necessary, had a parent/student/teacher conference. Each student had a support group or a team that consisted of their teachers, a counselor, administration and their parents. This team was able to work together to bring student problems under control and provided a winning support systems for each and every student (Elliot, 1998).

Another positive factor for looped students was that it allowed teachers who were working collaboratively to share information about students and were able to establish goals to enhance student learning in their classroom. Students who were grouped for two years with a group of teamed teachers, who shared the same goals and vision for their students, had a support system that was indestructible. Because looped teachers knew their students, they also discussed high-stakes decisions such as non-promotion of students or having students tested

for special services. Overall, the benefits of looping for students was tremendous because it did provide stability for students and it also provided a trusting, positive, and meaningful learning environment for students to succeed in. Another plus for teachers looped and sharing the same students was the common planning time, which gave each of the teachers a sense of confidence because he or she knew what to expect from his or her partner (Elliot, 1998).

### Summary

In order for effective teaming to be effective, everyone involved had to have the mindset that they are all in it together. Teaming was more than collaboration; it was building relationships and trust between teachers, administration, parents, paraprofessionals, and all other building staff that were in direct contact with students and their success. Along with building trust and relationships, a building also shared and had a commitment in a common goal and did everything possible to attain that goal for the betterment of its students. Collaboration was a means to an end, not the end itself. Teaming involved frequent monitoring of student achievement and making adjustments and/or adapting curriculum to meet the needs of the individual students. Teaming involved cooperation, dedication, motivation, responsibility, and commitment to students and to each member of their team and building staff.

When teachers looped with their students they became more familiar with individual learning styles or skill deficits and were more readily prepared to meet

the needs of students. Looped schools also helped to build strong, trusting, and meaningful relationships between teachers and students by creating a stable and consistent learning environment for students, which allowed students to focus on their education and not the world around them. Teachers and students had the advantage of beginning the second year together quickly by focusing on instruction and familiarity because students knew the teachers expectations, and the teacher knew his/her students, so behavioral issues could be dealt with immediately. Another advantage of looped classrooms and teaming was it allowed teachers to work collaboratively to ensure student success by setting goals for students and their teams.

## CHAPTER 3

### Methodology and Treatment of Data

#### Introduction

The purpose of this experimental research study was to determine whether looping and teaming had a positive impact on WASL reading and writing scores. To accomplish this purpose, a review of selected literature was conducted, essential baseline data and information was obtained and analyzed (2005-2006 WASL scores in reading and writing), and related conclusions and recommendations were formulated.

#### Methodology

The type of research method used by the researcher was the experimental research methodology involving a t-test for independent samples. The two groups of students were from two different middle schools (Wilson Middle School and Franklin Middle School). This was a parametric test of significance used to determine whether there was a significant difference between the means of two independent samples at a selected probability level (Airasian & Gay, 2003).

#### Participants

One group of 246 students received the treatment (Group W), which meant that they were in a school (Wilson Middle School) that was teamed and looped with students from 6<sup>th</sup> to 7<sup>th</sup> grade. These experimental groups of students were placed on teams of two, three, or four teachers in the 6<sup>th</sup> grade and then

looped with these same teachers into the 7<sup>th</sup> grade. Students were also placed on teams in the eighth grade with two, three or four teachers, who taught in their specialized area of study. As a looped and teamed school, Wilson required students to attend Language Arts and Math classes for 85 to 88 minutes daily, rotated Social Studies and Science classes (odd days Science and even days Social Studies) for 85 to 88 minutes, or taught two weeks of Social Studies and then two weeks of Science. Some teachers also incorporated one period of Social Studies and Science into their daily schedule for 43 minutes of instruction in each. Students also attended exploratory classes for two periods per day, which included Physical Education (P.E.), Drama, Technology, Band/Orchestra, and Art.

The controlled group of 266 students from Franklin Middle School (Group F) did not participate in looped teams, but, instead, had a regular daily schedule that required students to attend seven classes daily for 48 to 51 minutes. Students attended a Language Arts, Social Studies, Math, Science, and Avid classes daily for 48 minutes each and then attended two exploratory classes such as P.E., Magnet, Drama, Choir, Orchestra, Band, Art, and Spanish classes. At the end of the experimental study, 2006-2007 WASL scores were compared to determine the effectiveness of the treatment.

During the 2006-2007 school year the student demographics at Wilson Middle School was as follows: There were 774 students enrolled at Wilson

Middle School with 50.5% being male and 49.5% being female. The ethnicity of our students was divided into the following categories: 2.5% American Indian/Alaskan Native; 1.8% Asian; 4.5% Black; 48.8% Hispanic; and 42.4% White. Students who participated in special programs were as follows: 67.8% received free or reduced price meals; 14.7% received special education services; 15.5% were placed; in a transitional bilingual program; and 18.8% of Wilson students were considered to be migrant or occasional farm workers. Wilson Middle School's unexcused absence rate for the 2006-2007 school year was 1.7%.

Teacher information for the 2006-2007 school year at Wilson Middle School was as follows: The average years of teacher experience was 13.8 years; and teachers with at least a Master's Degree were 43.9% (OSPI, 2006-2007).

During the 2006-2007 school year the student demographics at Franklin Middle School was as follows: There were 828 students enrolled at Franklin Middle School with 50.4% being male and 49.6% being female. The ethnicity of Franklin students were divided into the following categories: 2.4% American Indian/Alaskan Native; 0.6% Asian; 1.8% Black; 64% Hispanic; and 31.2% White. Students who participated in special programs were as follows: 79.4% received free or reduced price meals; 7.5% received special education services; 16.1% were placed; in a transitional bilingual program; and 28.1% of Franklin students were considered to be migrant or occasional farm workers. Franklin Middle School's unexcused absence rate for the 2006-2007 school year was 2.7%.

Teacher information for the 2006-2007 school year at Franklin Middle School was as follows: The average years of teacher experience was 14.9 years; and teachers with at least a Master's Degree were 57.5% (OSPI, 2006-2007).

### Instruments

The instruments used for this experiment were the overall 2006-2007 WASL data scores for Wilson Middle School and Franklin Middle School Tables 3-5; as well as, individual scores of students in reading, writing and math. The WASL test scores were used due in part to the high validity of the test. The WASL measured the intended content area by the use of relevant test items (questions) that were directly related to the content area. The WASL test was also based on the state's learning standards, which were found in the Essential Academic Learning Requirements (EALR'S). Teachers throughout the state were required and mandated to focus their instruction on these EALR's, which would essentially be tested on some part of the WASL. The validity of the test can also be attributed to the fact that Washington State educators helped to establish and build the WASL and on a yearly basis review every question for content quality and direct correlation with the Washington State EALR'S. Also, each WASL question went through a vigorous analysis by a Bias and Cultural Fairness Committee, which helped to eliminate questions that were culturally biased and would be difficult for students of different cultural backgrounds to answer respectfully (Educational Institutions in the State of Washington, 2006).



The reliability of the WASL was also a factor in the researcher's use of the test scores because there was a high degree of trustworthiness to which the WASL consistently measured whatever it was measuring. Also, when individual tests were scored they were scored by two or more individuals, who included teachers across the state of Washington and professional scorers that were closely monitored by a state testing contractor, Pearson Educational Measurement. Each question or writing sample was scored by one individual and then another individual; if there was a huge discrepancy in the scorers scores, a third scorer scored the question or writing sample for reliability. Each test question and writing sample was compared to performance-level descriptors or written descriptions of what students should know and be able to do in their respected grade levels.

A t-test for independent samples provided essential baseline data from which related inferences, conclusions and recommendations were essentially formulated.

### Design

The researcher used the Quasi-Experimental Design and selected two non-equivalent groups in the Yakima School District. One population of 6<sup>th</sup> grade students were from Wilson Middle School and the other were 6<sup>th</sup> grade students from Franklin Middle School. The 6<sup>th</sup> grade students from Wilson Middle School were administered a different treatment (looping and teaming); while the 6<sup>th</sup> grade

students from Franklin Middle School were not administered the treatment (followed a 7 class regular day schedule). The researcher then compared the 2006-2007 WASL results from Wilson Middle School and Franklin Middle School to determine whether or not the treatment was effective.

### Procedure

The following were the steps taken to complete the researchers experimental student:

1. On October 12, 2007, Ernesto Araiza, principal at Wilson Middle School, gave the researcher permission to take the 2006-2007 WASL and compare those scores to Franklin Middle School.
2. On October 14, 2007, William Hilton, principal at Franklin Middle School, gave the researcher permission to take the 2006-2007 WASL scores and compare them to Wilson Middle School. He also provided Franklin's day schedule to be used by the researcher.
3. In December 2007, the researcher then used the collected data from the 2006-2007 6<sup>th</sup> grade reading and math WASL to find if there was any significance in scores between Wilson Middle School and Franklin Middle School. The researcher analyzed the data using a t-test for independent samples to determine the significance of looping and teaming at Wilson Middle School and WASL reading and math scores.

### Treatment of Data

The data gathered from the 2006-2007 WASL reading and writing scores was imputed into the Windows STATPAK statistical software program that accompanied the Educational Research: Competencies for Analysis and Application text (Airasian & Gay, 2003) in conjunction with a t-test for independent samples. The controlled group (received the treatment) from Wilson Middle School was labeled as W, while the uncontrolled group (did not receive the treatment) from Franklin Middle School was labeled as F. The independent variable in this Experimental Design was implementing teaming and looping, while the dependent variable was the reading and math WASL. The 2006-2007 reading scores for Wilson Middle School and Franklin Middle School were entered into the StatPak in order to compare the WASL score outcomes of both middle schools.

### Summary

The purpose of this research project was to examine and analyze the impact teaming and looping played on student success at the middle school level. The type of research method used by the researcher was the experimental research methodology involving a t-test for independent samples. The two groups of students were from two different middle schools (Wilson and Franklin Middle Schools), but similar student and teacher demographics. The instrument used by the researcher was a t-test for independent samples provided essential baseline

data from which related inferences, conclusions, and recommendations were essentially formulated. The researcher requested WASL scores from the 2006-2007 school year from both Wilson Middle School and Franklin Middle School and then proceeded to enter the WASL reading and math scores into the StatPak to compare the WASL score outcomes of both middle schools.

## CHAPTER 4

### Analysis of the Data

#### Introduction

The purpose of this research project was to determine the extent to which looping and teaming improved the WASL reading and math scores of participating 6<sup>th</sup> graders at Wilson Middle School. The 2006-2007 reading and math data entered into the StatPak allowed the researcher to compare the WASL score outcomes of both middle schools; therefore, allowed the researcher to either accept or reject either the hypothesis and/or null hypothesis.

#### Description of the Environment

Participants involved in the study included two groups of 6<sup>th</sup> grade students from Wilson Middle School and Franklin Middle School. A total of 246 students, 128 females and 118 males, were from Wilson Middle School and a total of 266 students, 134 females and 132 males, were from Franklin Middle School. The 246 from Wilson Middle School and 266 students from Franklin Middle School were organized into treatment and controlled groups.

The treatment group was comprised of 246 students. These students were part of a school who implemented teaming and looping during the 2006-2007 school year.

The control group was comprised of 266 students. These students attended a school, which did not implement looping and teaming, but implemented a regular day schedule.

#### Hypothesis/Research Question

Middle school students who were part of a looped team from 6<sup>th</sup> to 7<sup>th</sup> grade changed their WASL reading, writing, and math scores than middle school students who were not looped from 6<sup>th</sup> to 7<sup>th</sup> grade. Students needed to pass all three sections of the WASL in the 7<sup>th</sup> grade in order to fulfill future graduation requirements.

#### Null Hypothesis

There was no significant difference in the WASL reading, writing and math scores of middle school students who were looped from 6<sup>th</sup> to 7<sup>th</sup> grade than those middle school students who were not looped from 6<sup>th</sup> to 7<sup>th</sup> grade.

Significance was determined for  $p \geq .05, .01, .001$ .

#### Results of the Study

Table 1 displayed the 246 participants from Wilson Middle School and 266 participants from Franklin Middle Schools overall average scores on the reading and math WASL test. The scores were obtained in October 2007. The treatment group included 246 6<sup>th</sup> grade students and the controlled group included 266 6<sup>th</sup> grade students. The complete data can be found in the appendix.

Table 1

2006-2007 WASL Reading and Math Scores

Treatment Group Wilson W			246 students	Control Group Franklin F			266 students
Student #	Language Arts	Math	Student #	Language Arts	Math		
W1	383	351	F1	410	372		
W2	370	368	F2	400	407		
W3	410	377	F3	452	417		
.	.	.	.	.	.		
.	.	.	.	.	.		
.	.	.	.	.	.		
.	.	.	.	.	.		

Tables 2 and 3 displayed data collected from the 246 participants from Wilson Middle School and the 266 participants from Franklin Middle School WASL scores. Group W was comprised of the 246 students who attended a teaming and looping school. Group F was comprised of 266 students who attended a non-teaming and non-looping school. The t-test for independent variables on the Windows STATPAK to accompany Educational Research: Competencies for Analysis and Application, Seventh edition (Airasian & Gay, 2003) was used to calculate the data statistics and values. The sum of the scores on the reading WASL in Group W was 95752.0000; the mean of W's was 398.97; the sum of squared scores for W's was 38335766.00; and the ss of Group W was 133909.73. The sum of the scores on the reading WASL in Group F was 108443.0000; the mean of F's was 407.68; the sum of squared scores for F's was

44330695.00; and the ss of Group F was 120603.84. The sum of the scores on the math WASL in Group W was 94897.0000; the mean of W's was 381.11; the sum of squared scores for W's was 36430921.85; and the ss of Group W was 264492.85. The sum of the scores on the math WASL in Group F was 39967900.00; the mean of F's was 386.26; the sum of squared scores for F's was 39967900.00; and the ss of Group F was 280905.58. Consequently, the research was not surprised when  $t = -4.36$  with 504 degrees of freedom and showed the Franklin kids were significantly better at reading than students who attended Wilson Middle School. Also, the research was not surprised when  $t = -1.79$  with 513 degrees of freedom and showed the Franklin kids were significantly better at math than students at Wilson Middle School. Table 2 and 3 describes the research results used to determine my calculated values for t-independent samples in reading and math WASL scores.



Table 2

t-test for Independent Samples: Reading 6<sup>th</sup> grade WASL

Statistics	Value
Number of scores in Group W	246
Sum of Scores in Group W	95752.0000
Mean of Group W	398.97
Sum of Squared Scores in Group W	32335766.00
SS of Group W	133909.73
Number of Scores in Group F	266
Sum of Scores in Group F	108443.0000
Mean of Group F	407.68
Sum of Squared Scores in Group F	44330695.00
SS of Group F	120603.84
t-Value	-4.36
Degrees of Freedom	504

$$t = \frac{\bar{x} - \bar{x}}{\left( \right) \left( \right)}$$

$$t = 398.97 - 407.36$$

$$t = -4.36$$

$$df = 504$$

Table 3

t-test for Independent Samples: Math 6<sup>th</sup> grade WASL

Statistics	Value
Number of scores in Group W	246
Sum of Scores in Group W	94897.0000
Mean of Group W	381.11
Sum of Squared Scores in Group W	36430921.85
SS of Group W	264492.85
Number of Scores in Group F	266
Sum of Scores in Group F	102746.0000
Mean of Group F	386.26
Sum of Squared Scores in Group F	39967900.58
SS of Group F	280905.58
t-Value	-1.79
Degrees of Freedom	513

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\left( \frac{s_p^2}{n_1} + \frac{s_p^2}{n_2} \right)^{1/2}}$$

$$t = 398.97 - 407.36$$

$$t = -1.79$$

$$df = 513$$

Table 4 has presented the distribution of t with 504 degrees of freedom. The distribution of t was used to determine level of significance and to compare WASL reading scores of students who attended a looping and teaming school with those students who attended a school that did not implement teaming and

looping. The significance was determined for  $p \geq 0.05$ ; 0.01 level and 0.001. The null hypothesis was accepted at all levels.

Table 4

Distribution of t with 504 Degrees of Freedom

df	p		
	0.05	.01	0.001
504	1.960	2.576	3.291
t	-4.36	-4.36	-4.36

Table 5 has presented the distribution of t with 513 degrees of freedom. The distribution of t was used to determine level of significance and to compare WASL math scores of students who attended a looping and teaming school with those students who attended a school that did not implement teaming and looping. The significance was determined for  $p \geq 0.05$ ; 0.01 and 0.001. The null hypothesis was accepted levels.

Table 5

Distribution of t with 513 Degrees of Freedom

df	p		
	0.05	.01	0.001
504	1.960	2.576	3.291
t	-1.79	-1.79	-1.79

## Findings

Given the findings of the data, the researcher's hypothesis was rejected, while the null hypothesis was accepted at all levels. There was no significant

change in students' reading and math WASL scores, who attended a teaming and looped school. The data indicated that the null hypothesis was accepted for both reading and math WASL scores at  $p \geq$  at the 0.05, 0.01, and 0.001 levels based on the independent t-test.

When the researcher began the experiment to determine whether or not looped and teamed schools had an impact on the success of students on the WASL, the researcher expected to find some change in test scores, but not of a great degree. Although looped and teamed schools had the benefit of having students for two years in a row, it did not guarantee student success on the WASL. The experiment showed that Franklin Middle School did significantly better than Wilson Middle School on the reading and math WASL and also provided data that showed looping and teaming was not effective. As determined by the experiment, Wilson should implement what Franklin Middle School does immediately and eliminate teaming and looping.

### Summary

An experimental study of two groups of students from two different middle schools in the Yakima School District was completed during the 2006-2007 school years. One group from Wilson Middle School received the treatment, while the other group of students from Franklin Middle School did not receive the treatment. The demographics of the participants from both Wilson Middle School and Franklin Middle School were very similar and contributed to

the validity of this experiment. The instruments used for this experiment was the overall 2006-2007 WASL data scores for Wilson Middle School and Franklin Middle School Tables 3-5; as well as, individual scores of students in reading, writing and math. The researcher used the Quasi-Experimental Design and selected two non-equivalent groups in the Yakima School District. The data indicated that there was no significance at  $p \geq$  at the 0.05, 0.01, and 0.001 levels; therefore, the null hypothesis was accepted and the hypothesis was not supported. The 6<sup>th</sup> grade students who received treatment attending a teaming and looped school did not show significant change as measured by ARI, while the school who did not receive the treatment did significantly better on the reading and math WASL. It was determined that Wilson Middle School is way behind Franklin Middle School and that teaming and looping does not enhance the learning of students.

## CHAPTER 5

### Summary, Conclusions and Recommendations

#### Introduction

Schools in the Yakima School District have struggled to make Annual Yearly Progress (AYP) as measured yearly by student achievement on the Washington Assessment of Student Learning from year to year. The researcher, therefore, looked at schools, which had made reasonable gains on WASL scores by analyzing their 2006-2007 math and reading WASL scores, school day schedules and the use of teaming and looping in one of the middle schools. After the data was collected, analyzed, and compared with both schools, it was determined that looping and teaming played no significant role on student success on the WASL. Therefore, the researcher's hypothesis was rejected, while the null hypothesis was accepted at all levels and there was no significant change in students' reading and math WASL scores, who attended a teaming and looped school. The recommendations made by the researcher were Wilson Middle School should discontinue looping and implement Franklin Middle Schools yearly schedule. It may also be recommended that Wilson Middle School discontinue teaming immediately and implement Franklin Middle Schools best practices and regular day schedule.

## Summary

The researcher's objective for this special project was to explore the impact, if any that students looped and teamed from 6<sup>th</sup> to 7<sup>th</sup> grade at Wilson Middle School had improved or increased student achievement on the WASL. Students who were a part of a school that implemented interdisciplinary teaming were expected to have higher levels of student achievement and student self-esteem than less implemented schools.

## Conclusions

Based on the review of selected literature and major findings produced from the present study, the following conclusions were drawn:

1. Students on looped teams were not more likely to perform as well as students who were not on looped teams.
2. Students who were looped from 6<sup>th</sup> to 7<sup>th</sup> grade with the same teachers were not more apt to achieve a higher success rate and/or score on the WASL reading, writing, and math sections.
3. Students on looped teams were not as successful as students who were not on looped teams despite the tight knit learning community provided by the overall school environment.

## Recommendations

As a result of the conclusions mentioned above, the following recommendations have been suggested:

1. Wilson Middle School should discontinue looping and implement Franklin Middle Schools yearly schedule.
2. Wilson Middle School should discontinue teaming immediately and implement Franklin Middle Schools best practices.



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## Appendix

### 2006-2007 WASL Reading and Math Scores

<b>Wilson</b>	<b>Treatment Group W</b>	<b>246 students</b>	<b>Franklin</b>	<b>Control Group F</b>	<b>266 students</b>
<b>Student #</b>	<b>Language Arts</b>	<b>Math</b>	<b>Student #</b>	<b>Language Arts</b>	<b>Math</b>
<i>W1</i>	383	351	<i>F1</i>	410	372
<i>W2</i>	370	368	<i>F2</i>	400	407
<i>W3</i>	410	377	<i>F3</i>	452	417
<i>W4</i>	418	410	<i>F4</i>	383	348
<i>W5</i>	370	375	<i>F5</i>	319	285
<i>W6</i>	430	400	<i>F6</i>	405	393
<i>W7</i>	425	400	<i>F7</i>	418	442
<i>W8</i>	402	362	<i>F8</i>	412	348
<i>W9</i>	400	380	<i>F9</i>	400	362
<i>W10</i>	425	387	<i>F10</i>	383	357
<i>W11</i>	341	312	<i>F11</i>	426	407
<i>W12</i>	388	341	<i>F12</i>	407	387
<i>W13</i>	412	400	<i>F13</i>	392	384
<i>W14</i>	385	387	<i>F14</i>	425	389
<i>W15</i>	381	362	<i>F15</i>	407	377
<i>W16</i>	407	341	<i>F16</i>	410	400
<i>W17</i>	381	372	<i>F17</i>	426	393
<i>W18</i>	398	382	<i>F18</i>	400	338
<i>W19</i>	366	307	<i>F19</i>	388	368
<i>W20</i>	410	412	<i>F20</i>	436	407
<i>W21</i>	410	410	<i>F21</i>	415	400
<i>W22</i>	402	387	<i>F22</i>	412	405
<i>W23</i>	388	368	<i>F23</i>	412	417
<i>W24</i>	425	375	<i>F24</i>	366	357
<i>W25</i>	430	412	<i>F25</i>	418	384
<i>W26</i>	396	382	<i>F26</i>	426	438
<i>W27</i>	425	403	<i>F27</i>	379	375
<i>W28</i>	394	354	<i>F28</i>	430	393
<i>W29</i>	442	442	<i>F29</i>	381	370
<i>W30</i>	396	410	<i>F30</i>	400	389
<i>W31</i>	407	398	<i>F31</i>	436	430
<i>W32</i>	368	317	<i>F32</i>	426	430
<i>W33</i>	405	382	<i>F33</i>	436	425
<i>W34</i>	412	362	<i>F34</i>	415	442
<i>W35</i>	430	360	<i>F35</i>	410	415
<i>W36</i>	402	391	<i>F36</i>	412	370
<i>W37</i>	392	357	<i>F37</i>	425	362

W38	405	357	F38	396	372
W39	402	398	F39	442	425
W40	412	393	F40	412	382
W41	407	412	F41	400	375
W42	418	417	F42	407	403
W43	426	410	F43	412	368
W44	373	360	F44	360	382
W45	360	300	F45	430	435
W46	415	435	F46	400	360
W47	396	387	F47	418	380
W48	392	398	F48	394	334
W49	370	354	F49	412	415
W50	402	372	F50	425	415
W51	407	380	F51	425	420
W52	430	412	F52	412	420
W53	345	338	F53	405	407
W54	370	393	F54	452	430
W55	400	365	F55	398	384
W56	398	372	F56	412	384
W57	405	375	F57	400	393
W58	418	365	F58	410	393
W59	388	360	F59	407	393
W60	467	461	F60	425	403
W61	398	382	F61	410	391
W62	373	330	F62	390	384
W63	392	334	F63	373	312
W64	430	420	F64	426	372
W65	426	407	F65	407	370
W66	412	415	F66	418	391
W67	377	370	F67	407	387
W68	400	382	F68	402	389
W69	392	387	F69	373	307
W70	398	334	F70	415	405
W71	332	326	F71	436	423
W72	425	403	F72	379	357
W73	418	420	F73	425	474
W74	400	377	F74	415	368
W75	390	360	F75	442	435
W76	418	387	F76	418	389
W77	407	415	F77	415	403
W78	426	375	F78	415	391
W79	426	410	F79	402	377
W80	358	377	F80	363	334
W81	373	341	F81	398	389
W82	418	365	F82	402	407

W83	415	410	F83	452	450
W84	385	377	F84	355	317
W85	430	403	F85	410	357
W86	402	391	F86	418	365
W87	345	354	F87	402	354
W88	410	398	F88	412	387
W89	407	398	F89	396	420
W90	402	382	F90	430	425
W91	398	377	F91	402	415
W92	392	334	F92	375	345
W93	402	357	F93	348	307
W94	388	400	F94	405	382
W95	377	326	F95	407	389
W96	396	389	F96	390	334
W97	407	384	F97	366	341
W98	415	410	F98	452	430
W99	363	312	F99	426	425
W100	412	415	F100	388	391
W101	405	410	F101	418	435
W102	402	398	F102	405	387
W103	412	387	F103	366	322
W104	402	368	F104	398	368
W105	410	391	F105	398	377
W106	390	405	F106	418	357
W107	360	348	F107	375	372
W108	467	442	F108	390	396
W109	379	380	F109	415	403
W110	418	420	F110	410	430
W111	426	430	F111	418	387
W112	381	357	F112	442	403
W113	412	412	F113	407	393
W114	398	375	F114	377	341
W115	425	430	F115	405	403
W116	410	375	F116	400	370
W117	430	430	F117	392	341
W118	383	345	F118	410	357
W119	373	357	F119	415	389
W120	370	389	F120	430	420
W121	368	330	F121	407	415
W122	358	334	F122	0	0
W123	360	380	F123	436	410
W124	396	362	F124	467	420
W125	392	384	F125	415	334
W126	388	370	F126	405	412
W127	430	420	F127	392	370

W128	442	450	F128	418	389
W129	355	312	F129	418	415
W130	385	368	F130	396	377
W131	418	405	F131	379	330
W132	426	483	F132	418	410
W133	394	357	F133	415	423
W134	360	348	F134	405	403
W135	426	410	F135	400	384
W136	394	341	F136	426	430
W137	396	405	F137	383	382
W138	412	403	F138	388	375
W139	381	387	F139	442	425
W140	425	400	F140	442	393
W141	385	357	F141	418	396
W142	383	370	F142	407	400
W143	418	391	F143	410	412
W144	407	403	F144	418	389
W145	407	410	F145	412	393
W146	370	348	F146	396	403
W147	415	417	F147	407	389
E148	418	391	F148	430	391
W149	360	338	F149	400	396
W150	415	382	F150	390	368
W151	394	403	F151	436	382
W152	383	372	F152	402	387
W153	407	412	F153	405	396
W154	426	407	F154	394	368
W155	358	322	F155	390	420
W156	415	431	F156	436	396
W157	390	362	F157	394	360
W158	412	400	F158	426	467
W159	415	351	F159	377	330
W160	426	407	F160	402	357
W161	398	365	F161	383	365
W162	410	415	F162	390	341
W163	405	396	F163	402	410
W164	370	312	F164	430	396
W165	360	354	F165	385	330
W166	390	351	F166	396	341
W167	368	348	F167	418	403
W168	412	365	F168	405	400
W169	383	326	F169	425	425
W170	385	362	F170	392	360
W171	345	345	F171	442	420
W172	415	410	F172	405	389

W173	398	382	F173	436	446
W174	388	405	F174	381	334
W175	345	341	F175	368	338
W176	418	417	F176	426	396
W177	425	403	F177	426	410
W178	402	423	F178	418	357
W179	396	362	F179	352	322
W180	410	393	F180	430	446
W181	436	415	F181	381	351
W182	412	396	F182	415	375
W183	396	348	F183	418	391
W184	407	377	F184	430	415
W185	436	442	F185	426	420
W186	392	384	F186	412	407
W187	442	357	F187	402	330
W188	426	400	F188	430	407
W189	400	396	F189	402	372
W190	392	391	F190	415	412
W191	430	380	F191	436	375
W192	368	365	F192	385	362
W193	418	387	F193	430	391
W194	390	372	F194	398	365
W195	370	338	F195	383	330
W196	405	341	F196	358	312
W197	341	334	F197	418	410
W198	436	446	F198	385	345
W199	398	405	F199	407	389
W200	381	370	F200	402	357
W201	390	372	F201	396	360
W202	426	389	F202	412	417
W203	381	362	F203	390	372
W204	418	396	F204	436	393
W205	415	412	F205	426	430
W206	377	360	F206	410	420
W207	405	384	F207	392	348
W208	398	387	F208	418	382
W209	400	345	F209	412	382
W210	398	405	F210	388	368
W211	430	467	F211	392	398
W212	373	341	F212	415	354
W213	412	357	F213	452	423
W214	381	354	F214	430	423
W215	426	435	F215	415	405
W215	442	403	F216	415	330
W217	392	360	F217	410	360

W218	436	400	F218	410	375
W219	394	377	F219	425	391
W220	410	360	F220	418	430
W221	390	334	F221	405	389
W222	398	431	F222	425	387
W223	425	389	F223	430	415
W224	410	412	F224	467	412
W225	396	410	F225	400	415
W226	426	417	F226	388	348
W227	410	377	F227	398	384
W228	358	330	F228	418	380
W229	368	348	F229	412	430
W230	370	330	F230	402	382
W231	426	417	F231	396	387
W232	390	348	F232	392	351
W233	381	403	F233	392	354
W234	366	345	F234	430	417
W235	341	334	F235	418	405
W236	377	405	F236	407	377
W237	430	417	F237	405	405
W238	415	417	F238	390	377
W239	418	365	F239	412	348
W240	402	391	F240	426	400
W241	363	312	F241	394	354
W242	407	412	F242	398	360
W243	370	312	F243	415	403
W244	415	410	F244	388	351
W245	381	370	F245	407	391
W246	426	435	F246	412	384
			F247	381	354
			F248	412	423
			F249	341	285
			F250	442	431
			F251	415	450
			F252	436	423
			F253	415	387
			F254	430	417
			F255	398	400
			F256	436	431
			F257	375	341
			F258	430	407
			F259	426	415
			F260	425	370
			F261	405	389
			F262	400	405



<i>F263</i>	341	312
<i>F264</i>	412	396
<i>F265</i>	385	351
<i>F266</i>	407	396