The Effect of Inconsistent Cur	ricula on Academic Achievement
A Spec	ial Project
Pres	ented to
Dr. Rob	ert P. Kraig
Heritage	University
In Partial	Fulfillment
of the Requirem	ents for the Degree
Masters	of Education

Diana Stray

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# FACULTY APPROVAL

The Effect of Inconsistent Curricula on Academic Achievement

A Master's Special Project by Diana Stray

Approved for the Faculty	
	, Faculty Advisor
Dr. Robert P. Kraig	
	, Date

**ABSTRACT** 

The Effect of Inconsistent Curricula on Academic Achievement

Researcher:

Diana Stray

Chair Advisory Committee:

hypothesis was accepted.

Robert P. Kraig, PhD.

The researcher conducted a Quasi-Experimental study to determine if a change in curriculum between eighth and ninth grade would negatively impact academic performance. Four ninth-grade classrooms at Decatur High School participated in the study. The control group consisted of 21 ninth-grade students who had attended Saghalie Middle School using the SpringBoard curriculum, and the experimental group consisted of 54 ninth-grade students who had attended Lakota Middle School using Cambridge Checkpoint curriculum. The study was conducted during first semester beginning September 2010 and ending January 2011. Two teacher-created assessments were compared along with survey results. The difference in performance between the control group and the experimental group was not significant enough to support the hypothesis; therefore, the null

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### CHAPTER 1

#### Introduction

## Background for the Project

Federal Way Public Schools (FWPS) was among the largest school districts in the state of Washington. This urban district had four comprehensive high schools, an alternative high school, seven middle schools, two 6-10 choice schools, two k-8 schools, and 21 elementary schools.

FWPS has used a feeder system in order to move students from the middle schools to the high schools. Students were placed in schools based on the geographic location of their residences. Many middle schools sent a percentage of their students to one school while the remainder was sent to another high school; consequently, this constituted what Federal Way termed a dirty feeder system.

Lakota Middle School sent 35% of their students to Federal Way High School and 65% of their students to Decatur High School. Totem Middle School had 77% of their students sent to Thomas Jefferson High School and 23% of their students sent to Federal Way High School.

Although on the surface this didn't seem problematic, FWPS then offered multiple programs for advanced coursework and enacted a board policy that automatically enrolled all at-standard students (as measured by the Washington

Measure of Student Progress) in those courses unless their parents opted them out. There was a disparity between what programs were offered at the middle school sites as compared to the offerings at their feeder high school. Lakota Middle School implemented the Cambridge Checkpoint Preparatory Program, and Saghalie Middle School implemented the SpringBoard/Pre-Advanced-Placement (AP) program. As a result of the dirty feeder issue, 70% of the Lakota students attended Decatur High School which implemented the continuation of SpringBoard/Pre-AP, yet 100% of Saghalie Middle School students received consistent curriculum. Similarly, Totem Middle School students were instructed using SpringBoard/Pre-AP curriculum, yet 77% of them attended Thomas Jefferson High School which participated in the International Baccalaureate Diploma Programme and the other 23% attended Federal Way High School which focused on the Cambridge Preparatory Program.

Part of Washington State's response to the No Child Left Behind Act (NCLB) signed by President George W. Bush in 2001 was to create a high-stakes assessment formerly known as the Washington Assessment of Student Learning (WASL) that must be passed before exiting high school. For most students, their first opportunity to pass this test was during their 10<sup>th</sup> grade school year. As of 2010, the test has been restructured and renamed as the High School Proficiency

Exam (HSPE). These tests require proficiency in reading, writing, math, science, etc. Before attempting the HSPE in tenth grade, FWPS students would receive instruction at their respective high schools for ninth grade and for two-thirds of their tenth grade school year.

### Statement of the Problem

Federal Way's Feeder pattern from middle schools to high schools created a system where students had a break in the continuity of their Language Arts curriculum and instruction. In combination with the school board's policy enacted in spring 2010 that all students who meet standard in reading and math in seventh grade would be enrolled in advanced coursework, the resulting situation was one where students would have different academic backgrounds when they entered ninth grade.

#### Purpose of the Project

The purpose of this study was to determine if the dirty feeder system was creating a disadvantage for those students with inconsistent curricular programs. Additionally, the findings of the study could be used to guide decisions regarding the feeder patterns in Federal Way Public Schools.

### **Delimitations**

This study was delimited to one high school and its two feeder schools:

Decatur High School and Saghalie and Lakota Middle Schools. This also effectively limited the study to two competing programs: SpringBoard and Cambridge Checkpoint. In order to focus the study, it specifically analyzed Language Arts classes. Four ninth grade classrooms (all taught by the same instructor) at Decatur High School were analyzed based on their performance with assessments during one grading period and based on their responses to a survey. Any students who received a zero or blank in the grade book indicating that they had not completed the assessment were not included in the study.

#### Assumptions

For this study an assumption was made that all students gave full attention and worked hard throughout the grading period. Another assumption was that all students answered the survey honestly. A third assumption was that the middle school teachers and high school teachers were all implementing the prescribed programs to the best of their abilities.

#### Hypothesis

Ninth Grade student who transition to a high school which implements a Language Arts Curriculum and strategies that are consistent with their middle

school will have higher on-demand assessment scores than ninth grade students who transition to a high school implementing a program that is inconsistent with their middle school curriculum. The students with the consistent curriculum will feel better prepared for ninth grade coursework and will have more confidence in their abilities than those who experience curriculum/strategies that are inconsistent with their middle school experience.

## **Null Hypothesis**

There will be no significant difference between the mean performance on district assessments for ninth grade students who continue with their middle school Language Arts curriculum and those who begin a different curriculum at 9<sup>th</sup> grade. The students with the consistent curriculum and strategies will not have a marked difference in their feelings of preparation and confidence in comparison with their peers who received inconsistent instruction.

### Significance of Project

The purpose of this study was to determine whether or not the dirty feeder system used by Federal Way Public Schools was further complicating the academic transition from Middle School to High School. Before making any changes to the feeder system, the degree of impact needed to be calculated. The results of this study were presented to the Teaching For Learning Department in

order to initiate conversations regarding the need for articulation and coordination of curriculum in regard to the feeder patterns.

#### Procedure

For the purpose of this project, the following procedures were implemented:

- 1. Permission to conduct research at Decatur High School was granted by Principal Tom Leacy (see Appendix A).
- 2. A review of selected literature was conducted at Federal Way Public Schools, Heritage University, and internet search engines.
- 3. All students completed a series of assessments during the first grading period and the results were recorded in the teacher's online grade book.
- 4. Scores from these assessments were tabulated and disaggregated by feeder school and by their eighth grade language arts course placement in order to focus the study on only those students who participated in advanced coursework in eighth grade.
- 5. A t-TEST for independent samples was conducted for the two different assessments (see figures 1-3).
- 5. Students in the language arts class received and completed a survey (see Appendix B)

- 6. Data from survey was tabulated and graphed (see figures 4-13).
- 7. Results from the study were evaluated and conclusions drawn.
- 8. A meeting was held to discuss findings with the assistant superintendent of Teaching For Learning and the Assessment Director in order to determine if boundary/feeder changes are feasible or need to be enacted based on the results of the study.

## **Definition of Terms**

Advanced Placement. Courses approved by the College Board to prepare students for Advanced Placement tests that can earn college credit for pre-college students.

Cambridge Preparatory Program. A high school curricular program created by Cambridge University.

Cambridge Checkpoint Preparatory Program. A middle school curricular program created by Cambridge University and designed to prepare students for the high school program.

International Baccalaureate Diploma Programme. An advanced placement program for high school grades 11 and 12 that is recognized internationally.

SpringBoard. An advanced placement Language Arts curriculum created by the College Board for grades 6-12.

Washington Assessment of Student Learning. A state assessment to measure student's levels of proficiency in reading, writing, math, and science.

## Acronym

AP. Advanced Placement

FWPS. Federal Way Public Schools

HSPE. High School Proficiency Exam.

NCLB. No Child Left Behind

WASL. Washington Assessment of Student Learning.

#### CHAPTER 2

#### Review of Selected Literature

### Introduction

This chapter has been organized around the following topics: (a) No Child Left Behind Act (NCLB), (b) Academic Acceleration, (c) Curriculum Articulation, (d) Instructional Programs, (e) Middle School to High School Transition, and (f) Summary.

#### No Child Left Behind Act

The major focus of No Child Left Behind was to close student achievement gaps by providing all children with a fair, equal, and significant opportunity to obtain a high-quality education. According to the United States Department of Education, one of the provisions of the act addressed Access to High Standards. This provision specifically supported state and local efforts to raise academic standards through advanced placement programs, and thus further increase the number of students who participate and succeed in advanced placement programs. It encouraged states and school districts to increase the availability and broaden the range of schools offering advanced placement and pre-advanced placement programs while also demonstrating that larger and more diverse groups of students can participate and succeed in advanced placement

programs (2011).

#### Academic Acceleration

In order to respond to this challenge, in 2010 FWPS established and enacted Instruction Policy #2191, also known as the Academic Acceleration Policy. The policy stated, in part, that it was the responsibility of school staff to identify at the earliest possible opportunity challenging academic course work, to communicate academic progress with parents/guardians and students, and to work together with parents/guardians and the student to develop and implement a highly rigorous and challenging program to enhance the student's progress toward exceeding standards.

Advanced programs and course work were available for all students. When a student had attained established standards for academic achievement and demonstrated acquisition of required knowledge and skills as evidence of preparedness to be successful at the next level, said student would automatically be enrolled in such program/s. This would not preclude the self-selection process.

This policy directly connected the goals of No Child Left Behind and created avenues for all students to participate in advanced coursework; thereby, developing the advanced programs to more closely match the demographics of the diverse, urban population within FWPS.

### <u>Curriculum Articulation</u>

Fenwick English defined curriculum articulation as "the focus and vertical connectivity in a school or school system" (2000, p. 5). Fenwick argued that in most instances school districts struggle with articulation because of a disconnect between those teaching at different levels and therefore different buildings within a school district. Even if curriculum content/design could be agreed upon, there were still issues of curriculum delivery. These common issues with curriculum articulation were compounded in FWPS because of the dirty feeder system that not only allowed typical delivery differences, but also intentionally implemented separate curriculum content.

A closely related concept was that of scope and sequence. The scope generally referred to the body of content to be covered within a course, and the sequence was merely the order in which the content was delivered. In any given scope and sequence, stress or emphasis would be placed on certain concepts in order to spiral the curriculum. As English stated, "some things are presented again and again with increasing levels of complexity added...until maturation and instruction come together to enable them to truly understand" (2000, p. 58). "Students interpret new information in the light of the prior information in their possession" (Bransford, Brown, & Cocking, 2000; Willingham, 2006). Students

needed to have prior knowledge in order to digest material that is of increasing difficulty. In order for adequate learning to take place, they must have been given adequate time for repetition and review of new concepts, content, and strategies. As Dougherty (2009) stated, "... these considerations show the necessity of academic preparation over a sustained period of time, as would be provided by a coherent, aligned curriculum that prepares students systematically over the preschool, elementary, middle, and high school years" (p. 5).

### <u>Instructional Programs</u>

The College Board (which also oversaw Advanced Programs and testing known as AP and coordinated the Scholastic Aptitude Test (SAT) that is commonly used by colleges to determine readiness for college coursework) created the SpringBoard Language Arts curriculum. According to the website, this official AP curriculum "infused rigor, set high expectations, and expanded access and opportunity for all students by providing culturally and personally relevant activities that engaged students in problem solving, academic discussion, and critical analysis" (2011). Some trademarks of the program were the embedded use of common Pre-AP strategies and a spiraling, loosely scripted curriculum that was articulated through grades 6 through 12 in order to produce college-ready students in the twelfth grade. Students were expected to practice

strategies and skills with easier levels of text in the earlier grades and then practice and refine those strategies and skills with texts of increasing difficulty.

The Cambridge Checkpoint Preparatory curriculum was sponsored by Cambridge University in England. Checkpoint featured a rigorous, relevant curriculum and developed skills for the Cambridge Preparatory Academy offered at the high school level. The Lakota Middle School/FWPS website listed the benefits of the program as, " its advanced academic curriculum for math, science, and English and also its spiraling curriculum that could be adjusted in order to accommodate students with accelerated needs" (2011). It differentiated itself from SpringBoard by not requiring the instruction of any specific student strategies for accessing text and by defining primarily student outcomes and leaving the majority of the instructional approach decisions to the professional judgment of the instructor.

### Middle School to High School Transition

Schiller (1999) defined academic transition as "a process during which institutional and social factors influence which students' educational careers are positively or negatively affected by this movement between organizations" (pp. 216–217). The new social, emotional and academic demands of the high school environment were found to be particularly difficult for students. Certainly

students generally displayed excitement to attend high school, but this tended to be coupled with anxiety as well.

There was definite importance for high schools and their feeder schools to identify the commonalities in their academic programs and communicate that information to incoming students in order to minimize the negative impact on academic performance. As Akos and Galassi (2004) stated, "Each organization needs to reflect on the consistency of messages presented to students and families explaining the similarities and differences in academic, social, and organizational expectations" (p. 213).

The importance of communication among the personnel for the high school and its feeders shouldn't be overlooked. Successful transition programs must involve collaboration between eighth and ninth grade buildings/personnel (Mizelle, 1999).

## **Summary**

The focus of this chapter was to address the available evidence on the topics of (a) No Child Left Behind Act (NCLB), (b) Academic Acceleration, (c) Curriculum Articulation, (d) Instructional Programs, and (e) Middle School to High School Transition. NCLB created a focus on the importance of providing access to college preparatory courses for increasing numbers of students and on

the importance of providing opportunities to normally under-represented groups such as minorities and students of poverty. This increased focus prompted FWPS to enact Board Policy #2191, also known as the Academic Acceleration policy. Research presented in this chapter showed that articulation is critical to an aligned curriculum and that there was no clear content/design or delivery connection between the SpringBoard and the Cambridge Checkpoint curricula. Additionally, the transition from eighth to ninth grade was shown to be a difficult process that requires intentionality and open communication across grade levels and buildings. The methodology and treatment of the data are reported in Chapter 3.

#### CHAPTER 3

## Methodology and Treatment of the Data

### Introduction

This chapter has been organized around the following topics: (a)

Methodology, (b) Participants, (c) Instruments, (d) Design, (e) Procedure, (f)

Treatment of Data, (g) Summary. FWPS enacted the Academic Acceleration

Policy in 2010 which placed all at-standard students in advanced coursework.

The researcher sought to determine if students who attended a feeder middle school with an essentially different curricular program from the high school were at an academic disadvantage.

## Methodology

Quantitative research methods were used to support either the hypothesis or null hypothesis. Quantitative research was defined as, "the collection and analysis of numerical data to explain, predict, and/or control phenomena of interest" (Gay, Mills, & Airasian, 2009). In the study, the quantitative data was collected for the purpose of determining whether or not students with a disparate middle school curriculum would have an academic disadvantage on ninth grade assessments.

The students were also given a descriptive survey at the end of the first semester in order to measure student perceptions of their preparedness for the curricular performance expectations for the ninth grade SpringBoard program at Decatur High School. The data from both the survey and assessments were entered into the spreadsheet program, Excel, for simplicity in data analysis.

Graphs were created to represent both survey and assessment data.

Finally, the researcher entered the collected data into a statistical calculator (Stat Pak), and a t-chart was used for non-independent samples to determine significance. The results of the t-chart were then compared to distribution of t table to determine if the treatment did influence students' performance during the first semester of ninth grade SpringBoard Language Arts.

## **Participants**

The researcher selected four classes of ninth grade SpringBoard at Decatur High School for the first semester of the 2010-2011 school year. The students selected as participants had all attended either Saghalie Middle School or Lakota Middle School and received first semester instruction from the same teacher at Decatur High School. Twenty-one students had attended Saghalie, and fifty-four students had attended Lakota. Any students who received a "0" for not completing either of the two assessments were removed from the study.

#### Instruments

Two teacher-created assessments that supplemented the SpringBoard curriculum were used to collect data. The first assessment was administered to all participants in October 2010, and the second assessment was administered to all participants in early January 2011.

After the data was gathered the researcher entered it into the spreadsheet program, Excel. Excel was a software program written and distributed by Microsoft. Once the data was entered the researcher used the program to tabulate the results of the two assessments and the descriptive survey. Excel was also used to create graphs and charts. Stat-Pak was the statistical calculator used to determine significance of the data results.

#### Design

The researcher collected the scores of four ninth grade language arts classes at Decatur High School from two assessments during the first semester of the 2010-2011 school year resulting in a quasi-experimental design. The Quasi-experimental design was necessary because it was not possible to randomly assign individual students to the groups (Gay, Mills, & Airasian, p. 259).

A descriptive survey was given to participants at the conclusion of the treatment to investigate individual and subgroup attitudes. All twenty-one Saghalie students completed the survey, and forty-three out of fifty-four Lakota students completed it. It provided data on the differences between the two

groups' perceptions of their preparedness for the ninth grade SpringBoard program.

#### Procedure

The researcher wanted to determine if lack of continuity between middle school and high school curricular approaches would influence students' ability to meet the expectations in first semester of ninth grade. The researcher began by reviewing articles from internet sources, textbooks, and journals. The researcher gathered data about student achievement using two teacher-created assessments that were administered during the first semester of the 2010-2011 academic year. Once the scores were collected, they were disaggregated by middle school attended. A descriptive survey was developed and given to each participant at the end of the first semester in order to determine students' perceptions of their preparedness for the demands of the high school SpringBoard course.

The data from the assessments and the survey were entered into an Excel program. Results were tabulated and graphs created. The scores of the two separate groups were entered into the statistical calculator to test of significances and create a table for each assessment. The answers from the survey were tallied, entered into Excel, and analyzed. Results from the study were evaluated and conclusions drawn. A meeting was held with the Assessment Director, the

Added Value Specialist, and the Assistant Superintendent who oversees middle schools in order to discuss the results of the study.

#### Treatment of Data

Raw data from the two separate assessments was sorted using Excel. The data from the two different groups was then entered into Stat-Pak to compute the mean for those scores. Finally the t-test was used to find the level of significance at .44 for the first assessment and .88 for the second assessment.

### **Summary**

This chapter was designed to review the methodology and treatment of data related to the study to determine if students who received different curricular offerings in middle school than in high school would have a lower performance on teacher-created assessments in first semester of high school than those who had consistent curricular offerings. The analysis of data and findings from this study are reported in Chapter 4.

#### **CHAPTER 4**

Analysis of the Data

### <u>Introduction</u>

Chapter 4 has been organized around the following topics: (a) Description of Environment, (b) Hypothesis, (c) Results of the Study, (d) Findings, and (e) summary. The purpose of this study was to determine if the dirty feeder system was creating a disadvantage for those students with inconsistent curricular programs. Additionally, the findings of the study could be used to guide decisions regarding the feeder patterns in Federal Way Public Schools.

### Description of the Environment

This study was delimited to one high school and its two feeder schools:

Decatur High School and Saghalie and Lakota Middle Schools. This also effectively limited the study to two competing programs: SpringBoard and Cambridge Checkpoint. In order to focus the study, it specifically analyzed Language Arts classes. Four ninth grade classrooms (all taught by the same instructor) at Decatur High School were analyzed based on their performance with two assessments during one grading period and based on their responses to a survey. Any students who received a zero or blank in the grade book indicating that they had not completed the assessment were not included in the study.

#### **Hypothesis**

Ninth Grade student who transition to a high school which implements a

Language Arts Curriculum and strategies that are consistent with their middle school will have higher on-demand assessment scores than ninth grade students who transition to a high school implementing a program that is inconsistent with their middle school curriculum. The students with the consistent curriculum will feel better prepared for ninth grade coursework and will have more confidence in their abilities than those who experience curriculum/strategies that are inconsistent with their middle school experience.

### Null Hypothesis

There will be no significant difference between the mean performance on district assessments for ninth grade students who continue with their middle school Language Arts curriculum and those who begin a different curriculum at 9<sup>th</sup> grade. The students with the consistent curriculum and strategies will not have a marked difference in their feelings of preparation and confidence in comparison with their peers who received inconsistent instruction.

## Results of the Study

On the first assessment, the mean score of the students who attended Saghalie Middle School (using SpringBoard curriculum) was 73.29 as compared to those students who attended Lakota Middle School whose mean score was 71.78. The established t-value was .44 with 73 degrees of freedom. This result was well

below any acceptable percentage based on the set probabilities, indicating an insignificant difference between the two groups.

0.10	0.05	0.025	0.01	0.005	0.001
1.293	1.666	1.993	2.379	2.645	3.206

Figure 1
Distribution of t for 73 degrees of freedom

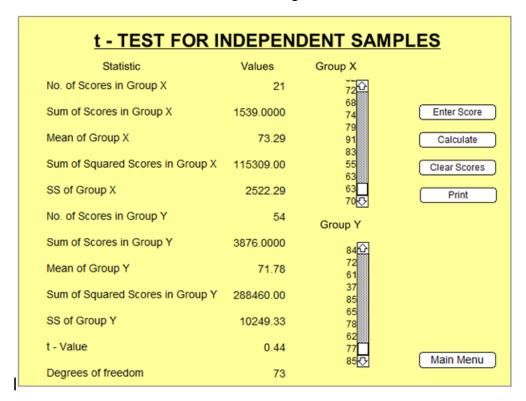


Figure 2
T-test results for Assessment 1

On the second assessment, the twenty-one Saghalie students had a mean score of 81.90; whereas, the 54 Lakota students had a mean score of 79.78. These means resulted in a t-value of .88 with the same 73 degrees of freedom. In this

second sample, the t-value was again insufficient to establish any kind of significance.

t - TEST FOR II	NDEPEN	DENT SAM	PLES
Statistic	Values	Group X	
No. of Scores in Group X	21	78	
Sum of Scores in Group X	1720.0000	96 88	Enter Score
Mean of Group X	81.90	90 86 85	Calculate
Sum of Squared Scores in Group X	142148.00	82 66	Clear Scores
SS of Group X	1271.81	85 75⊕	Print
No. of Scores in Group Y	54	Group Y	
Sum of Scores in Group Y	4308.0000	90	
Mean of Group Y	79.78	80 68	
Sum of Squared Scores in Group Y	348898.00	80 81	
SS of Group Y	5215.33	85 85	
t - Value	0.88	90 100	Main Menu
Degrees of freedom	73	90[2]	Waiii Weild

Figure 3
T-test results for Assessment 2

A student survey was conducted in January 2011. Sixty-four students took the survey: 21 Saghalie students and 43 Lakota students. When asked to respond to the first statement on the survey, "I understand the expectations of the SpringBoard Language Arts course," the majority of both groups agreed with the statement. A slightly larger percentage of Lakota students strongly agreed with

the statement as shown by 12% versus Saghalie's 9%. In terms of disagreeing with statement, a total of 29% of Saghalie students disagreed/strongly disagreed with the statement; whereas, Lakota students only had 9% disagree with the statement and no students strongly disagreeing.

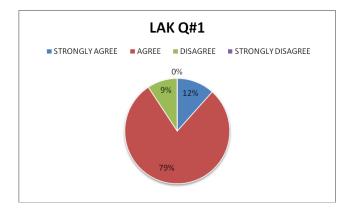


Figure 4
Lakota Students' Responses to Survey Item #1

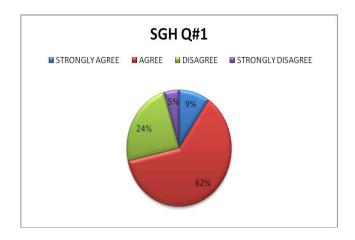


Figure 5
Saghalie Students' Responses to Survey Item #1

When asked about their agreement with the statement, "I see clear connections

between my middle school Language Arts classes and the expectations of my current course", only 56% of Lakota students agreed/strongly agreed with the statement as compared to Saghalie's 71%.

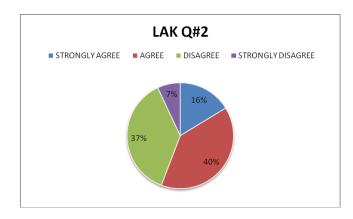


Figure 6
Lakota Students' Responses to Survey Item #2

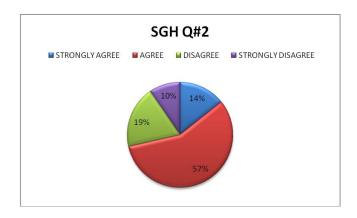


Figure 7
Saghalie Students' Responses to Survey Item #2

Survey items #3, #4, and #5 provided the most similar responses between the two groups with 86% of Lakota students and 76% of Saghalie students indicating

that they agreed or strongly agreed with the statement of "I understand how to use Pre-AP strategies such as SOAPStone, RAFT, etc." Similarly 84% of Lakota students agreed or strongly agreed and 81% of Saghalie students agreed with the statement, "My middle school Language Arts classes prepared me to be successful in 9<sup>th</sup> grade Language Arts." Item #3, "Based on my performance this year in Language Arts, I feel confident that I will successfully pass the High School Proficiency Exam for Reading and Writing" yielded similar results with 91% of Lakota students and 86% of Saghalie students agreeing/strongly agreeing.

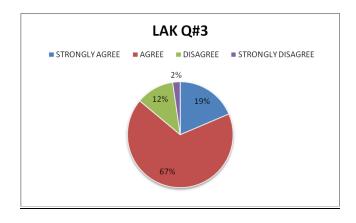


Figure 8
Lakota Students' Responses to Survey Item #3

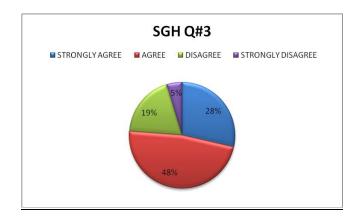


Figure 9
Saghalie Students' Responses to Survey Item #3

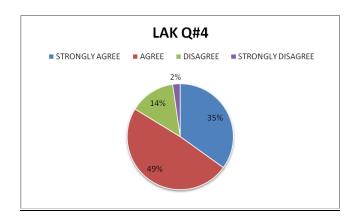


Figure 10 Lakota Students' Responses to Survey Item #4

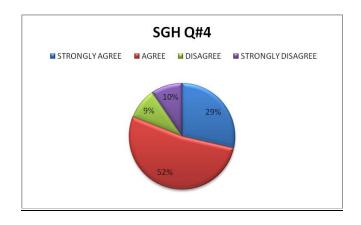


Figure 11 Saghalie Student's Responses to Survey Item #5

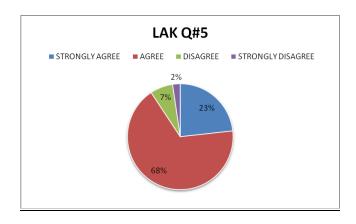


Figure 12 Lakota Students' Responses to Survey Item #5

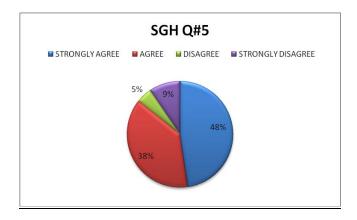


Figure 13
Saghalie Students' Responses to Survey Item #5

## **Findings**

The researcher analyzed the data with the degree of freedom at 73, and the required t-score needed to be 1.666 in order to demonstrate a significant finding. A t-score of .44 for the first assessment and .88 for the second assessment both failed to meet the criteria needed to show significant change at 0.05. (See figures 1-3).

The hypothesis that Ninth Grade students who transition to a high school which implements a Language Arts Curriculum and strategies that are consistent with their middle school will have higher on-demand assessment scores than ninth grade students who transition to a high school implementing a program that is inconsistent with their middle school curriculum was rejected by the researcher. In regard to the portion of the hypothesis regarding to confidence, the survey

findings indicated that more Saghalie students than Lakota students disagreed with the first two survey items, and on the remaining three survey items, the responses were very similar between the two groups. As a result, the researcher also rejected the hypothesis that the students with the consistent curriculum will feel better prepared for ninth grade coursework and will have more confidence in their abilities than those who experience curriculum/strategies that are inconsistent with their middle school experience. The null hypothesis that there will be no significant difference between the mean performance on district assessments for ninth grade students who continue with their middle school Language Arts curriculum and those who begin a different curriculum at 9<sup>th</sup> grade was accepted by the researcher. Based on the survey item responses, the hypothesis that the students with the consistent curriculum and strategies will not have a marked difference in their feelings of preparation and confidence in comparison with their peers who received inconsistent instruction was accepted by the researcher.

### **Discussion**

This study was delimited to one high school and its two feeder schools:

Decatur High School and Saghalie and Lakota Middle Schools. This also

effectively limited the study to two competing programs: SpringBoard and

Cambridge Checkpoint. In order to focus the study, it specifically analyzed Language Arts classes. Four ninth grade classrooms (all taught by the same instructor) at Decatur High School were analyzed based on their performance with assessments during the first grading period and based on their responses to a survey. Any students who received a zero or blank in the grade book indicating that they had not completed the assessment were not included in the study.

Two teacher-created assessments were administered during the first semester to the four separate Language Arts classes. The first test was administered in October 2010, and the second one was administered in January 2011. The survey was distributed and completed in January 2011 just prior to the end of the first semester.

The study investigated the effects of Federal Way Public Schools' feeder system of student performance in ninth grade Language Arts. The results showed an insignificant difference between the mean scores of the Lakota students and the Saghalie students. Also intriguing were the survey results. Even though Saghalie students had received the consistent curriculum, a larger percentage (as compared to the Lakota students' responses) disagreed with the statement about understanding the expectations of the SpringBoard Language Arts course and with the statement regarding seeing clear connections between their middle school

Language Arts course and their current course.

This study had limitations including selection of the participants and inconsistencies in the preparation students may have received in middle school because of different instructors, varying levels of implementation, etc. Given that 100% of Saghalie students feed to Decatur High School as compared to 70% of Lakota students, it was surprising that the four Language Arts courses contained over two times as many Lakota students as compared to Saghalie students (54 versus 21). FWPS also allowed students the opportunity to request another school other than their assigned school which may have been part of the reason for the smaller numbers of Saghalie students. A larger sample size may have given more conclusive results. The results of this study suggest that a different curriculum at middle school had little to no impact on student performance in ninth grade Language Arts.

## **Summary**

This chapter was designed to analyze the data and identify the findings. From the data, the hypothesis was not supported and the null hypothesis was accepted. Chapter 5 will summarize the Study, Draw Conclusions, and Make Recommendations.

# CHAPTER 5

# Summary, Conclusions and Recommendations

# <u>Introduction</u>

This chapter has been organized around the following topic: (a) Introduction, (b) Summary, (c) Conclusions, (d) Recommendations.

# Summary

In response to the guidelines set forth by NCLB, Federal Way Public Schools enacted the Academic Acceleration Policy that placed all at-standard

students into advanced coursework unless they were opted out by their parents or guardians. As FWPS determined which feeder schools would offer complementary programs to the high schools, it became apparent that the dirty feeder system could create inconsistency in curricular offerings for students at several buildings. The researcher sought to determine if the curricular inconsistency would negatively impact the ninth grade performance of affected students. If there had been a significant difference in the results between the students from the two middle schools offering different curricula, then the feeder system and program offerings would have needed to be re-evaluated. However, if there was not a disparity in their assessment score and survey responses, then the feeder system and its influence on the curricular offerings would seem to have minimal impact on student achievement.

Numerous articles were reviewed by the researcher to gather needed information about articulation and coordination of curriculum, scope and sequence, middle school to high school transition, and the two advanced programs of SpringBoard and Cambridge Checkpoint. Background knowledge was obtained to assist the researcher in understanding the motivation for FWPS to enact the Academic Acceleration Policy. Upon visually inspecting the graphs and analyzing the t test, it was determined there was not a significant difference in the

performance or confidence of students from the two different feeder schools.

### Conclusions

As the review of literature indicated, it was considered crucial for there to be articulation and coordination of curriculum. Although this is not the case for the feeder system in FWPS, the research believed that FWPS's move toward Standards-Based Education has created a certain level of consistency regardless of curricular discrepancies in terms of content and instructional strategies.

Additionally, the district's focus on Robert J. Marzano's Classroom Instruction That Works has encouraged consistency in instructional approach that could be emphasized with most, if not all, curriculum offerings. FWPS teachers accessed professional development and were expected to implement Marzano's essential strategies (Marzano, 2001). The SpringBoard curriculum already included many of Marzano's recommended strategies, and the Cambridge Checkpoint program was flexible and allowed for teachers to implement Marzano's strategies within its guidelines.

In regard to transition, FWPS offered opportunities for students to attend a High School Planning night where they learned about the curricular offerings at the four different high schools. In addition, eighth grade students visited their feeder high school in the spring of their eighth grade year. During the summer,

each high school also hosted an orientation for incoming ninth grade students that included campus tours, note-taking and organizational strategies, etc.

The researcher shared the results of this study with district-level administration. The results of this study suggested that the work that FWPS was doing to create consistency in spite of competing programs and a dirty feeder system had been successful in providing consistent instruction to mitigate the inconsistency in curricula.

In order for this study to be more meaningful for Federal Way Public Schools, a larger sample size with more equal numbers of participants from the two schools would be desirable. Additionally, since the Academic Acceleration policy just went into effect in spring 2010, some of the students in the sample may not have received SpringBoard or Cambridge Checkpoint instruction at their middle school.

## Recommendations

The results of this study suggested that the differences in curricular offerings for students from two different middle schools had little impact on their achievement in first semester of ninth grade. Based on the research conducted, the researcher recommended that FWPS continue to offer ways for students to be familiar and comfortable with their changing environment when they enter ninth

grade and that the district continue its focus on instructional approaches and strategies that can be applied regardless of the specific curriculum being used. The researcher also recommended that the study be conducted again after the Academic Acceleration Policy has been in place long enough to ensure that the students participating in the sample have had access to the curricula throughout their middle school years.

#### REFERENCES

- Akos, P., & Galassi, J. P. (2004). Middle and high school transitions as viewed by students, parents, and teachers. *Professional School Counseling*, 7(4), 212–221.
- Bransford, J. D., Brown, A.L. & Cocking, R.R. (Eds.). (2000). *How people learn: Brain, mind, experience, and school.* Washington, DC: National

  Academies Press.

College Board. (2011). The official pre-ap program. Retrieved May 2, 2011,

- from http://springboardprogram.collegeboard.org/
- Dougherty, C., & Mellor, L. (2009). Preparation matters. Retrieved May 2, 2011, from http://www.nc4ea.org/files/preparation\_matters-04-01-09.pdf
- English, F. W. (2000). Deciding what to teach and test: Developing, aligning, and auditing the curriculum. Thousand Oaks, CA: Corwin Press.
- Federal Way Public Schools. (2010). Academic acceleration advance programs 2191. Retrieved May 1, 2011, from http://www.fwps.org/info/policies/2000/2191.html
- Federal Way Public Schools. (2011). Cambridge academy. Retrieved May 1, 2011, from http://schools.fwps.org/lakota/programs/cambridge-checkpointe/
- Gay, L.R., Mills, G., & Airasian, P. (2009). Educational research: Competencies for analysis and applications. Upper Saddle River, NJ: Pearson.
- Marzano, R.J., Pickering, D., & Pollock, J. (2001). Classroom instruction that works: Research-based strategies for increasing student achievement.

  Alexandria, VA: McREL.
- Mizelle, N. B. (1999). Helping middle school students make the transition to high school. *ERIC Clearinghouse on Elementary and Early Childhood Education*. Retrieved May 1, 2011, from http://www.kidsource.com/

# education/middlehigh.html

U.S. Department of Education. (2011). Access to High Standards Act. Retrieved

May 2, 2011, from http://www2.ed.gov/policy/elsec/leg/esea02/pg14.html

Willingham, D.T. (2006). How knowledge helps. *The American Educator*. Retrieved January 30, 2009, from http://www.aft.org/
pubsreports/american\_educator/issues/spring06/willingham.htm

# FWPS 9th Language Arts Survey

Last year I attended (circle one): Lakota Middle School

Saghalie Middle School

Other

PLEASE INDICATE YOUR LEVEL OF AGREEMENT WITH THE FOLLOWING STATEMENTS:	STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
1) I understand the expectations of the SpringBoard Language Arts course.	0	0	O	0
2) I see clear connections between my middle school Language Arts classes and the expectations of my current course.	0	0	O	0
3) I understand how to use Pre-AP strategies such as SOAPStone, RAFT, etc.	0	O	O	0
4) My middle school Language Arts classes prepared me to be successful in 9 <sup>th</sup> grade Language Arts.	0	O	O	0
5) Based on my performance this year in Language Arts, I feel confident that I will successfully pass the High School Proficiency Exam for Reading and Writing.	0	0	0	0