

THE EFFECTIVENESS OF FLORIDA VIRTUAL SCHOOL IN TERMS OF COST AND
STUDENT ACHIEVEMENT IN A SELECTED FLORIDA SCHOOL DISTRICT

By

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To my husband, who supported me and never let me give up

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Florida Virtual School was started in 1997. Since then, its presence and impact on public education in Florida has grown significantly. The Florida Virtual School was started by the Florida legislature and is funded through Florida's school funding program, receiving annual appropriations based on successful course completions. The Florida Virtual School is considered a public school district in Florida and Florida's school districts are prohibited from denying access of its students to Florida Virtual School. It is anticipated that the demand for and use of the Florida Virtual School will increase. In fact, the Florida legislature, in 2011, added a graduation requirement of one online course for its high school students.

The trend and demand for online and virtual education has grown nationwide as well. Few studies have been conducted to determine the overall effectiveness and impact on student achievement that occurs as a result of students in grades 6 – 12 taking courses through an online platform. Several organizations and policy groups have developed policy papers and written reports on the current state of online and

virtual learning nationwide. These publications however, have not addressed the effects and outcomes of online and virtual learning for middle and high school students.

The purpose of this study was to determine specifically how student achievement by the students who enrolled in Florida Virtual School classes compared to the student achievement of district students enrolled in the same classes in traditional settings; and was the instruction of district students via the Florida Virtual School a cost-effective approach during the three years of the study?

To answer these two questions, this dissertation examined relevant data, primarily from the Florida Virtual School, the selected school district, and the Florida Department of Education as well as from the College Board™. As Florida's public school system demands and expects increased access to online and virtual options for its students, it is important for districts to understand the full impact of this movement to inform future policy decisions.

CHAPTER 1 BACKGROUND AND SETTING

The landscape of public education in this country has changed drastically since 1635 when the first public school, the Boston Latin School,¹ was founded for “sons of certain social classes who are destined for leadership positions in church, state or the courts.”² In that same year, the first free school in Virginia was founded, but most schooling, particularly in Southern colonies, took place at home by parents or tutors.³

Since that time, public education has gone through several changes. When public education began, students were taught in small, one room school houses. Education was provided in that setting by one teacher for small numbers of students of varying levels and abilities. The typical setting for public education in the Twenty First Century consists of large public schools with many teachers who provide instruction geared toward specific content and age groups to large, diverse groups of students.

Advances in technology and access to computers and internet have revolutionized society since 1977 when the first home computer was developed by Apple. These events have been the catalyst for sweeping change in education. It has been reported that the number of homes with computers worldwide exceeds one billion and is

¹ “About BLS: History (375 Years)”, Boston Latin School
<http://www.bls.org/podium/default.aspx?t=113646&rc=0>, accessed October 12, 2010

² Hunt, Thomas C., Thomas J. Lasley, James Carper, and C. Daniel Raisch. *Encyclopedia of Educational Reform and Dissent*. Vol. 1. Thousand Oaks, CA: SAGE Publications, 2010. xliii.

³ Cremin, Lawrence A. "Chapter 1: EDUCATION IN THE HOUSEHOLDS AND SCHOOLS OF COLONIAL AMERICA." In *The American Experience in Education*, by John Barnard and David Burner, 12. New York: New Viewpoints, 1975.

expected to exceed two billion by 2014.⁴ Today's public school students are known as "digital natives" and are "no longer the people our education system was designed to teach."⁵ Paul Peterson argues that these changes can be addressed by "finding new ways to reach students directly."⁶ Utilizing the power and reach of technology combined with the demands of a changing society, virtual education is becoming a powerful force in public education today.

Virtual education has become a phenomenon in the education world that is unparalleled. In fact, in November 2009, the Evergreen Group reported in "Keeping Pace with K-12 Online Learning"⁷ that as of September 2009, forty-five of the fifty states, plus Washington D.C., had a state virtual school or online initiative, full-time online schools, or both. The popularity of and demand for virtual education is so strong that in 2007 it was reported that "virtual education may provide all or part of formal schooling for nearly one in every fifty students in the US, as many as three out of every four public K-12 school districts...report offering full or partial online courses."⁸

⁴Prensky, Marc. "Digital Natives, Digital Immigrants Part 1." *On the Horizon* 9, no. 5 (2001): 1-6. doi:10.1108/10748120110424816.

⁵ Ibid. 3

⁶ Peterson, Paul E. "We Need Fewer Teachers, Not More : Education Next." *Education Next : Education Next Is a Journal of Opinion and Research about Education Policy*. March 09, 2010. Accessed October 09, 2010. <http://educationnext.org/we-need-fewer-teachers-not-more/>.

⁷ Watson, John. *Keeping Pace with K-12 Online Learning, An Annual Review of State-Level Policy and Practice*. Report. Evergreen: Evergreen Group, 2009

⁸ Glass, Gene. *The Realities of K-12 Virtual Education*. Policy Brief, East Lansing, Michigan; The Great Lakes Center for Education Research & Practice, 2009

Virtual education has been an option for Florida high school students since 1997 when the Florida Virtual School (FLVS) was established.⁹ The Florida Virtual School has led the way in virtual education, as the first of its kind in the country, a state run public virtual school.¹⁰ On the FLVS website it is stated that FLVS “was the country’s first, state-wide Internet-based public high school”¹¹ and is currently a “nationally recognized e-Learning model and the recipient of numerous awards.”¹²

According to a report issued by the Florida TaxWatch Center for Educational Performance and Accountability, the Florida Virtual School was established by the Florida Legislature in 1997 with a \$1.3 million allocation to “break the mold” and implement a virtual learning model through a partnership between Florida’s Alachua and Orange counties.¹³ “Since its inception in 1997 when the FLVS had seventy-seven enrollments, the school has evolved both in offerings as well as in the number of students served. FLVS had over 154,000 half-credit enrollments for the 2008-2009 school year.”¹⁴

In 1998, after an Internet-based high school program was piloted in Alachua and Orange counties in Florida, \$4.3 million was allocated by the Florida Legislature for

⁹ "Quick Facts." Online High School | Online Middle School | Grades K-12 | Florida Virtual School. Accessed September 10, 2010. <http://flvs.net>.

¹⁰ Ibid.

¹¹ Ibid.

¹² Ibid.

¹³ Florida TaxWatch. *Final Report: A Comprehensive Assessment of Florida Virtual School*. Report. Tallahassee: Center for Educational Performance and Accountability, 2007. 1

¹⁴ Watson, John. *Keeping Pace with K-12 Online Learning, An Annual Review of State-Level Policy and Practice*. Report. Evergreen: Evergreen Group, 2009.

program expansion and Florida Virtual School became “the first online school funded by state public education FTE monies.”¹⁵ According to the Florida TaxWatch report, “state lawmakers assertively sought vehicles for reform” to overcome what was seen as “unenviable status quo education outcomes for Florida K-12 students.”¹⁶

The mission of the Florida Virtual School was to “provide students with technology-based educational opportunities to gain the knowledge and skills necessary to succeed. The school shall serve any student in the state who meets the profile for success in this educational delivery context...”¹⁷

As legislators worked to secure funding for FLVS in 1997, it was important that clearly identified needs were developed and prioritized. Therefore, when FLVS was started, priority enrollment was provided for “students who need expanded access to courses in order to meet their educational goals, such as home education students and students in inner-city and rural high schools who do not have access to higher-level courses, and to students seeking accelerated access in order to obtain a high school diploma at least one semester early.”¹⁸

The Florida Commissioner of Education, in a January 2009 letter, informed Florida District School Superintendents that “Florida Virtual School provides options for students, parents, school districts, and schools.”¹⁹ The Commissioner stated that the

¹⁵ Watson, John, and Jennifer Ryan. *Keeping Pace with K-12 Online Learning A Review of State-Level Policy and Practice*. Report. Evergreen: Evergreen Group, 2006. 7

¹⁶ Florida Tax Watch, 1

¹⁷ FRS §1002.37(1)(b) (2010)

¹⁸ FRS §1002.37(1)(b)1 (2009)

¹⁹ "Florida Virtual School as School Choice Option." Eric J. Smith to District School Superintendents. January 8, 2009.

priority for enrollment in FLVS courses should be for students in Florida with limited or no access to a specific course at their own school.²⁰ Other areas identified in the letter as appropriate options for enrolling students in a FLVS class included: 1) helping districts ease overcrowding; 2) providing students with acceleration opportunities; 3) providing options for students with medical or behavioral issues who have had limited success in the traditional classroom; and 4) providing options and flexibility to students who need a more flexible schedule due to participation in extracurricular activities.²¹

Florida Virtual School provided options and opportunities not only for students in Florida but also on a national and international level. Despite the fact that FLVS did not offer or award a high school diploma,²² FLVS offered a full range of academic and elective middle and high school courses for students all over the world which were taught by highly qualified and fully certified Florida teachers.²³ Courses that were offered to Florida students were Florida Department of Education developed and approved courses.²⁴ Students who used FLVS as an option to supplement or accelerate their course work were able to transfer credits from FLVS, which was accredited, to their home school pursuant to Florida statute.²⁵

²⁰ Ibid.

²¹ Ibid.

²² "Quick Facts." Online High School | Online Middle School | Grades K-12 | Florida Virtual School. Accessed September 10, 2010. <http://flvs.net>.

²³ Ibid.

²⁴ Ibid.

²⁵ FRS §1001.42(23) (2009)

The Florida Virtual School was considered a public school “choice” option for Florida students.²⁶ Parents of Florida public school students could seek these options for their student, and were not to be denied access. The website of the Florida Virtual School includes the following:

As stipulated by the Florida K-20 Education Code (s.1002.20) parents have the right to choose educational options such as Florida Virtual School for their children. A student’s full-time school may not deny access to courses offered by FLVS assuming that the desired online course(s) is an appropriate course placement based on the student’s academic history, grade level, and age.²⁷

Funding for the Florida Virtual School is based on Florida’s Educational Funding Program (FEFP) and the definition of a full-time equivalent student.²⁸ Funding is awarded to the Florida Virtual School based solely on course completions, and not on course enrollments.²⁹ According to the Southern Region Education Board (SREB), in FY 2008 FLVS received \$60,566,904 in state appropriations.³⁰ This translated to 116,035 half credit completions.³¹ Data through June 30, 2010 showed that 97,182 students had completed 213,926 half credit enrollments.³² During fiscal year 2009-2010, FLVS

²⁶ FRS §1002.20(6)(a) (2011)

²⁷ "FLDOE Policy." Online High School | Online Middle School | Grades K-12 | Florida Virtual School. Accessed September 09, 2010. <http://flvs.net>.

²⁸ FRS §1002.37(3)(a) (2010)

²⁹ Ibid.

³⁰ Southern Region Education Board Educational Technology Cooperative. *Report on State Virtual Schools*. Report, Atlanta: Southern Region Education Board, 2008

³¹ The website for Florida Virtual School; flvs.net

³² Ibid.

received \$92,046,248 in state appropriations.³³ In two years, the number of half credit course completions had nearly doubled.

Academic integrity for both students and teachers is a priority at FLVS. The following statement was found on the FLVS website: “Academic Integrity is one of our core values and one of the most important areas of focus as a learning organization. Students with Academic Integrity make decisions based on ethics and values that will prepare them to be productive and ethical citizens.”³⁴ According to the FLVS 2010 Legislative Platform Brief, several measures were in place to ensure academic integrity. For example, FLVS employed an Academic Integrity Manager whose primary function was to “oversee all issues relating to questionable academic practices and who is available to assist and coach teachers in academic integrity awareness.”³⁵ FLVS students were involved in a variety of assessments such as random face to face exams, and discussion based assessments that enabled the instructors to monitor student integrity and work. Regular communication between the parent/guardian of each student and the instructor occurred as well.³⁶

Additionally, FLVS required all stakeholders to sign an Academic Integrity agreement. Stakeholders involved included students, parent/guardian and teachers. The agreement clearly identified the responsibilities of each stakeholder, the purpose for the agreement, and the consequences to the stakeholder if the agreement were

³³ *Financial Profile of Florida School Districts*. Report. Tallahassee: Florida Department of Education, 2011.

³⁴ Ibid.

³⁵ Ibid.

³⁶ Ibid.

broken.³⁷ Embedded in the FLVS technology were monitoring tools that checked student work for authenticity, tracked repeat offenders of the integrity agreements, and randomized assessments so students could not share answers.³⁸

This study focused on the effectiveness of Florida Virtual School in a selected school district that included several cities in the southwest area of the State of Florida. In 2010-2011, the school district enrollment was approximately 45,000 students, of which approximately 21,000 were in middle and high school. The school district demographics had experienced significant changes during recent years. As indicated in Table 1.1, since 2006, the majority population has shifted from predominantly white students (48%) in 2006 to predominantly Hispanic students (44%) in 2011.

During the 2009-2010 school year, the demographics of the school district indicated that the majority enrollment was Hispanic. This was a shift from a predominantly white majority enrollment in previous years. In 2009-2010, the school district was 44% Hispanic, 40% white, 6% Haitian, 5% African-American, and 1% Asian comprising the student population. 16% of the district's students were English Language Learners, and nearly 60% qualified for free or reduced lunch. Additionally, according to Carol Gagliano of the Florida Department of Education, the school district had the largest migrant population of any Florida school district.³⁹

The percent of students enrolled in the selected school district who qualified for free or reduced lunch according to the United States Department of Agriculture standards had grown from 44% during the 2007-2008 school year to approximately 56%

³⁷ Ibid.

³⁸ Ibid.

³⁹ Gagliano, Carol. E-mail interview by author. December 21, 2011.

in 2010-2011. This shift in demographics can be attributed, in part, to the economic down turn and subsequent recession that occurred beginning in 2007. As the United States economy went into recession, thousands of workers who lived in the selected school district county lost jobs and income which resulted in more and more students being able to qualify for free or reduced lunch status.

However, the composite demographics of the school district were not representative of all the individual middle and high schools in the district. The school district is in a predominantly agricultural and tourism based region, and the district itself has distinctly different regions, including agricultural, tourism, and fishing. Table 1-2 and Table 1-3 provide additional information regarding the demographics of each of the district's high schools (Table 1-2) and middle schools (Table 1-3).

Purpose of Study

The primary purpose of this study as it related to the selected school district was to determine how achievement by the students who enrolled in FLVS classes compared with students enrolled in the same classes in traditional classroom settings in the school district. This study also sought to determine if instruction of district students via FLVS were a cost-effective approach.

The research questions were: 1) how did student achievement by the students who enrolled in FLVS classes compare with students enrolled in the same classes in traditional classroom settings in the school district; and 2) was instruction of district students via FLVS a cost-effective approach during 2006-2007, 2007-2008, and 2008-2009?

The Florida TaxWatch, a private, non-profit, non-partisan research institute, evaluated the Florida Virtual School in 2007 to “examine the viability of Florida Virtual

School as a credible alternative to traditional schooling as regards both student achievement outcomes and cost-effectiveness.”⁴⁰ The report indicated that on a statewide level, FLVS was a cost-efficient and worthwhile means to provide choice educational options to Florida students. The study used in this project focused on similar factors that were considered by the Florida TaxWatch report,⁴¹ but included only the students of the selected school district, rather than students from the entire state of Florida to determine if FLVS were as cost-efficient and worthwhile to the district students as it was for all Florida students.

Statement of the Problem

Because of the statutory requirement in Florida that public school students must be given access to the Florida Virtual School, it is important that its effectiveness and success are examined and evaluated. The Florida Virtual School annually surveys Florida school districts to identify its areas of strength and weakness. In the 2007-2008 FLVS District Survey a small number of Florida districts expressed concern that FTE dollars were being taken away by FLVS.⁴² Additionally, districts expressed concern about academic integrity and lack of specific guidelines and procedures for school districts.⁴³

However, more recent surveys conducted by FLVS indicated that the frequency with which districts are concerned with loss of funding as an area of concern had greatly

⁴⁰ Center for Educational Performance and Accountability. *Final Report: A Comprehensive Assessment of Florida Virtual School*. Tallahassee; Florida Tax Watch, 2007

⁴¹ Ibid.

⁴² The website for Florida Virtual School; flvs.net

⁴³ Ibid.

diminished.⁴⁴ In fact, in the 2009-2010 school district surveys, only two of the school districts that responded cited loss of funding as an issue.⁴⁵

On the contrary, of the school districts responding to the 2008-2009 District Survey most had very positive comments regarding FLVS.⁴⁶ The survey results showed that districts responded positively about the way that FLVS was able to assist districts, schools, and students with providing additional opportunities for credit recovery, for courses that districts/schools were unable to offer, and for options for students whose schedule needed flexibility. In summary, the problem that existed for the selected school district related to FLVS was the actual cost of the FLVS option for its students, the impact on scheduling and staffing in the brick and mortar buildings, and the integrity and quality of the instruction provided by FLVS to district students.

The focus of this study was two-fold. The first focus was on the academic achievement of district students compared to the academic achievement of district students taking similar courses through FLVS. The second focus was on the cost-effectiveness of the use of FLVS as an option for district students. Specifically, was the use of FLVS cost-neutral for the district, or were there additional variable costs?

Significance of the Study

The results of this study would be significant for the selected school district only. The information gained from this study could be used by the district to understand the impact of FLVS on its operational budget (through possible loss of FTE); to maximize the use of FLVS in the areas identified by Florida Statute as priority; and to strengthen

⁴⁴ Ibid.

⁴⁵ Ibid

⁴⁶ Ibid.

existing brick and mortar programs in the district that were underutilized as a result of FLVS enrollments.

Limitations of the Study

While the results of this study provided valuable information to the district in the study, there would be limitations. The results of this study should be used cautiously, if at all, by other districts since its focus was only one district. The use of Florida Virtual School by other Florida districts varies greatly, as do the demographics of students in other districts and of those students in other districts enrolled in FLVS. Additionally, while Florida statute is very clear related to the rights of the students and of the district as related to FLVS, local interpretation differs. Finally, teacher quality and characteristics were not the focus of this study and were not considered as part of this study, even though both would have an impact on student achievement in any setting. For these reasons, the results of this study were very relevant to the district that was being examined, and would not generalize outside the selected school district. However, other Florida districts might choose to conduct a study similar to this one.

Summary

To summarize, technology has drastically changed the face of education in America. In Florida, students in public secondary schools may not be denied access to courses offered by Florida Virtual School. FLVS was legislatively supported and funded as a school choice option for Florida public school students. The school district involved in this study had a predominately Hispanic enrollment, and nearly 60% who qualified for free or reduced lunch.

Since its beginning in 1997, the Florida Virtual School has provided valuable and significant educational options for Florida's public school students. The number of

Florida public school students using this option has increased steadily. The purpose of this study was to examine the cost effectiveness and success of this option in the selected school district in Florida. The results of this study provided the selected school district with valuable information related to the students who chose this option and the impact their choice had on them academically, as well as the fiscal impact on the district.

Table 1-1. Demographics of the Selected School District

	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
White	46%	44%	43%	42%	41%	40%
African-American	6%	6%	6%	9%	5%	12%
Hispanic	40%	41%	42%	42%	43%	44%

Table 1-2. High School Demographics of the Selected School District

	HS A	HS B	HS C	HS D	HS E	HS F	HS G	HS H
White	73%	19%	74%	3%	36%	26%	60%	45%
African-American	3%	25%	3%	23%	21%	12%	11%	6%
Hispanic	19%	53%	18%	72%	40%	58%	26%	44%
ESE	11%	14%	10%	12%	14%	10%	15%	14%
ELL	22%	63%	18%	73%	51%	59%	27%	34%
Free-Reduced Lunch	19%	70%	20%	87%	53%	53%	38%	40%

Table 1-3. Middle School Demographics of the Selected School District

	MS A	MS B	MS C	MS D	MS E	MS F	MS G	MS H	MS I	MS J
White	46%	45%	31%	9%	68%	2%	6%	71%	66%	65%
African-American	9%	4%	17%	25%	8%	19%	27%	5%	5%	4%
Hispanic	40%	46%	46%	64%	18%	78%	65%	19%	24%	26%
ESE	8%	17%	12%	16%	14%	16%	15%	12%	11%	10%
ELL	31%	38%	51%	72%	18%	73%	75%	21%	21%	27%
Free-Reduced Lunch	50%	53%	68%	86%	35%	93%	88%	31%	32%	33%

CHAPTER 2 REVIEW OF LITERATURE

Chapter 1 provided an introduction to the study, background information, and the purpose of the study, a statement of the problem and the significance and limitations of the study. This study sought to determine if instruction of students in a selected Florida school district via the Florida Virtual School were effective, both with regards to student achievement and cost.

Chapter 2 contained a review of the literature pertaining to the public policy discussion, characteristics of the vast array of virtual and online education models used in all fifty states, and the research pertaining to the perceived efficacy of virtual and online education for secondary students. The availability and use of virtual and online education opportunities for secondary students (including middle and high) is relatively new to the landscape of public education. Policy studies and reports provide a clear picture of emerging and current practice. A variety of different models have been established nation-wide; familiarity with them is relevant also to policy makers and developers.

Discussion of Reports on Public Policy and Current Practice

As virtual and online education has grown nationally and internationally, numerous organizations, including policy centers, professional organizations, educational consortia, and educational technology advocate groups have developed and published reports on the current state of virtual and online education as an option for secondary students. While the reports do not make judgments regarding the efficiency, efficacy, or reputation of virtual and online education options, the information included in the reports was relevant to this study. The purpose of this section was to

examine the information provided in some of the reports related to virtual and online education options.

Virtual and online education, a relatively new concept in secondary education, has experienced growth which closely parallels the growth of the internet and the World Wide Web. According to Watson in *Keeping Pace 2010*,¹ the first online program available for secondary school students was the Utah Electronic High School which was started in 1994, followed by the North Dakota Center for Distance Education in 1996,² and the Florida Virtual School in 1997.³ As the reach of the internet and the World Wide Web has expanded, so has the availability of virtual and online options for secondary students. In 2010, these options existed in different forms in “forty-eight of the fifty states.”⁴ Wicks asserted in *A National Primer on K-12 Online Learning, Version 2* that “the growth of online learning is so rapid that publications that include specific statistics and data are at risk of being out-of-date before they are published.”⁵

The rapid growth of this new form of schooling, which, according to some reports, will “provide all or part of formal schooling for nearly one in every fifty students in the United States”⁶ brings with it policy challenges at the local, state, and national level. In fact, it is widely recognized that the growth of online education has outpaced related

¹ Watson, John. *Keeping Pace with K-12 Online Learning, An Annual Review of Policy and Practice 2010*, 24

² Ibid. 24

³ Ibid. 24

⁴ Ibid. 6

⁵ Wicks, Matthew. *A National Primer on K-12 Online Learning, Version 2*, 2010. 13

⁶ Glass, Gene. *The Realities of K-12 Virtual Education*. Policy Brief, East Lansing, Michigan; The Great Lakes Center for Education Research & Practice, 2009. 3

education policy in many states.⁷ Recognizing the absence of policy to support and govern the advancement of virtual and online education, many groups have explored areas where such policy would be needed. According to Wicks, “Few policymakers anticipated that any time, any space learning was possible when most education laws were authored over the past 50 years.”⁸

The primary areas suggested for virtual education policy and regulation included: governing the provision and funding of online K-12 schooling, audits of providers for virtual education, accreditation, accountability, credible assessment and evaluation of credits earned, student progression, operations and oversight, professional development, equity and access.⁹ In states where policy development has not kept up with virtual and online education, current administrative rules have been adjusted or interpreted to keep up with the growth of online education.¹⁰ The International Association for K-12 Online Learning (iNACOL) encourages districts and states, when writing policies that support virtual education, to develop a set of guiding principles that put the best interest of students first.¹¹

Florida has extensive policies and statutes which support the operation of the Florida Virtual School.

To provide students with technology-based educational opportunities to gain the knowledge and skills necessary to succeed. The school shall serve any student in the state who meets the profile for success

⁷ Wicks, 2010, 18

⁸ Ibid. 6

⁹ Glass, 2009, 4

¹⁰ Wicks, 2010, 18

¹¹ Watson, John and Butch Gemmin. *Promising Practices in Online Learning; Policy and Funding Frameworks for Online Education*; Evergreen Consulting Associates; 2009. 10

in this educational delivery context and shall give priority to:

1. Students who need expanded access to courses in order to meet their educational goals, such as home education students and students in inner-city and rural high school who do not have access to higher-level courses.
2. Students seeking accelerated access in order to obtain a high school diploma at least one semester early.¹²

Additionally, as recommended by iNACOL, Florida policy pertaining to FLVS includes language concerning governance, funding, operation and oversight, access and equity, and accountability.¹³ And, the Center for Digital Education in its 2009 report “Online Learning Policy Survey: A Survey of the States” ranks Florida’s policies “that are in place to offer online learning” as the best in the nation.¹⁴

Numerous reports and studies tout the benefits of virtual and online education. The Southern Region Education Board (SREB) identifies five academic reasons why opportunities for online and virtual education are important to today’s secondary students. First, online and virtual education can offer “courses that schools cannot or do not provide.”¹⁵ Citing the fact that many schools and districts are simply too small to offer everything needed to prepare students for college, along with other factors, it is noted that “SREB state virtual schools now offer a full range of quality ...courses, including foreign languages, Advanced Placement courses and higher-level

¹² FRS §1002.37(1)(b)1-2 (2009)

¹³ Ibid.

¹⁴ Center for Digital Education. *Online Learning Policy Survey: A Survey of the States*, 2009. 2

¹⁵ Southern Region Education Board (SREB). *Five Academic Reasons why Virtual Schools are Important to Your State*. 2007. 1

mathematics and science courses.”¹⁶ Watson and Gemmin offer additional support for the need for such opportunities, “Online learning is a remarkable opportunity for students to access high quality courseware and first-rate teachers, regardless of location or socio-economic status.”¹⁷

Other areas mentioned in the SREB report include reducing the dropout rate through credit recovery options for struggling students, noting that students who drop out of school face severe limits on their own quality of life as well as the impact on the local economy. SREB reported that in 2009, approximately 40% of all high schools in America did not offer Advanced Placement courses. A 2008 study done by the College Board indicated that students who participated in Advanced Placement courses in high school had higher college GPAs, earned more college credits, and graduated at a higher rate than students with no Advanced Placement experience.¹⁸ For these and other reasons, SREB included increased access to Advanced Placement courses as a compelling reason schools should provide online and virtual education opportunities for students.

The final reasons listed by the SREB involved providing high quality teachers for students, especially in “remote, rural or high-poverty areas”¹⁹ and access to quality courses. Finding high quality teachers was very challenging in the remote and rural areas mentioned in the SREB report. Other sources confirm that “nearly three in ten

¹⁶ Ibid. 1

¹⁷ Watson and Gemmin. 2008. 1

¹⁸ Hargrove, Linda, Donn Godin and Barbara Dodd. *Research Report No. 2008-3: College Outcomes Comparisons by AP and non-AP High School Experiences*. 2008. 1

¹⁹ Southern Region Education Board. 2007. 2

high school students are taught by teachers without a college major and certification in English (30%), mathematics (31%), science (27%), or social studies (28%)”²⁰ SREB maintained that the “quality of online teachers employed by state virtual schools is a key factor in the success rates of those schools.”²¹

While it might seem counterintuitive that a potential high school dropout would be successful in a virtual or online learning environment, in many cases the opposite is true. It has been reported that the primary reason that approximately 47% of students who drop out of school do so “because their classes were not interesting.”²² John Watson shares his opinion that “online learning has proven to be meaningful to students, igniting their passion for learning using real-world applications, stimulating their creativity and innovation, and communicating on the global stage – taking teachers and students beyond the class walls and beyond the class period in order to open new possibilities for both teaching and learning.”²³

Because online education was relatively new in the K-12 educational arena, those who fully understood it were limited. As a result, misconceptions related to virtual and online education existed.²⁴ The Florida Virtual School identified some common myths which were noted in a survey of the membership of the National Council for

²⁰ Alliance for Excellent Education. *Every Child a Graduate*. (Washington, DC; Alliance for Excellent Education, 2002)

²¹ Southern Region Education Board, 2007, 3

²² Bridgeland, John M., John J. Dilulio, Jr. and Karen Burke Morison. *The Silent Epidemic, Perspectives on High School Dropouts*. A report by Civic Enterprises in association with Peter D. Hart Associates for the Bill & Melinda Gates Foundation. 2006. 5

²³ Watson, 2010. 7

²⁴ Wicks, 2010; FLVS website, 2010; and Watson in 2008, 2009 and 2010

Online Learning (NACOL) that were reported in 2010.²⁵ One common misconception about online and virtual learning was that online courses were for gifted and talented students only. On the contrary, “online courses have worked well with students of all kinds, including at-risk students, students in rural and urban areas, those with limited English proficiency, and those with special needs.”²⁶ Perhaps a reason for the success of online courses for such a wide variety of students also dispelled the myth that many believe regarding minimal teacher to student and student to student interaction in a virtual education setting. Students reported that “they have more one-on-one interactions with their teachers and fellow students”,²⁷ and teachers reported that they get to know their students better as well.²⁸

One of the common myths about virtual and online learning concerned cheating. Some felt that in online and virtual learning, a student was more likely to cheat.²⁹ While it was true that some students would try to cheat in either an online or face-to-face setting, it was no more prevalent than in a face-to-face setting. The FLVS had an extensive academic integrity policy for all stakeholders, including students, teachers, and parents. The basic premise of the policy was that students were responsible for their own learning and that dishonesty would not be tolerated. Additionally, other factors limited and inhibited cheating and dishonesty, including frequent conversations between students and teachers, between parents and teachers, monitored and oral

²⁵ Wicks, 2010. 17

²⁶ The website for Florida Virtual School; flvs.net

²⁷ The website for Florida Virtual School; flvs.net

²⁸ Wicks, 2010. 17

²⁹ Wicks, 2010; FLVS website, 2010; and Watson in 2008, 2009 and 2010

assessments, proctored assessments, and the use of sophisticated technology tools to monitor and record instances of policy violations.

Another often mentioned misconception deals with what an online class was really about. Some thought online education was simply a new version of what used to be known as correspondence courses, and that online learning was only about technology.³⁰ Time and time again, students indicated they were successful in online courses because of the interaction they had with their teachers, and that they received more individualized and focused instruction in an online course.

Students report that they enjoy the *level of interactivity with other students and their teacher* and find this to be extremely helpful in mastering the course content. Other reasons include the *beneficial effect of alternative pacing of the course* that allows students to spend more time on what they do not understand and to move more quickly over what they do understand.³¹

It is a fact that today's students, the "Millennial" generation, "grew up with the Internet and thrive in a multimedia, highly communicative environment. Learning online is natural to them – as much as retrieving and creating information in the Internet, blogging, communicating on cell phones, downloading files to iPods and instant messaging."³² "State virtual schools are not about technology, but rather about using today's technology to meet the tremendous academic needs of middle grades and high school students in ways have never before been available."³³

³⁰ Gene Glass, *The Realities of K-12 Virtual Education*, issue brief (East Lansing: Great Lakes Center for Education Research & Practice, 2009), 5.

³¹ Southern Region Education Board (SREB), *Five Academic Reasons Why State Virtual Schools Are Important to Your State*, report no. 07T07 (Atlanta, GA: Southern Region Education Board, 2007), 3.

³² Matthew Wicks, *A National Primer on K-12 Online Learning Version 2*, report (Vienna, VA: International Association for K-12 Online Learning, 2010), 4.

³³ SREB, 3

To summarize the section, the world of online and virtual education emerged and evolved quickly and will continue to be an important factor in public education. The literature suggests that to maintain and manage the growth of online and virtual education, states and districts should develop policies based on the best interest of students and should define funding sources for online and virtual education, as well as develop accountability measures that monitor all facets of the operation of virtual schooling.

Summary of Online and Virtual Education Options in the United States

As mentioned previously, forty-eight of the fifty states offered some sort of online learning opportunities for students as of November 2010.³⁴ However, it is also important to note that as of November 2010 no state offered the “full range of options”³⁵ to include supplemental and full-time options for all students at all grade levels. Options for online learning that were available to students fell into three main categories as identified by Watson in *Keeping Pace 2010*:

1. A state virtual school – this type of school, as of November 2010, existed in 39 states, was state funded and typically was part of a state-led learning initiative. In 2009-2010, *Keeping Pace* estimated that state virtual schools had about 450,000 course enrollments.
2. Full-time online schools – this type of school drew students from across multiple districts, and often an entire state. These schools existed in 27 states, plus Washington, DC and enrolled nearly 200,000 students.
3. Individual school district – this type of school was available for a district’s own students, and made up the fastest growing segment of online and virtual

³⁴ John Watson, *Keeping Pace with K-12 Online Learning, An Annual Review of Policy and Practice*, Policy Analysis and Annual Report (Evergreen, CO: Evergreen Group, 2010), 6.

³⁵ *Ibid.* 6

education, accounting for the remainder of the estimated 1.5 million students not identified by the previous types of online schools.³⁶

The schools identified used a variety of delivery models to provide instruction to students. “Online learning is instruction via a web-based educational delivery system that includes software to provide a structured learning environment.”³⁷ Online learning could occur in two different formats. In the first, called *asynchronous*, teachers and students communicated with each other at different times, through emails or discussion forums. In *synchronous* learning, students and teachers were online or working together simultaneously, such as in a video conference setting. Florida Virtual School used the *asynchronous* model, teachers and students communicated with each other via email, but students worked independently through their lessons.³⁸

State virtual schools “have been a critically important part of the online learning landscape in many states”.³⁹ It was speculated that most students were initially exposed to online learning through a state virtual school. The Florida Virtual School was the largest state virtual school, with more than 200,000 course enrollments as of November 2010.⁴⁰ Primary characteristics of state virtual schools included legislative funding,

³⁶ Ibid. 6

³⁷ Ibid. 8

³⁸ John Watson, *Keeping Pace with K-12 Online Learning, An Annual Review of Policy and Practice*, Policy Analysis and Annual Report (Evergreen, CO: Evergreen Group, 2010), 9.

Matthew Wicks, *A National Primer on K-12 Online Learning Version 2*, report (Vienna, VA: International Association for K-12 Online Learning, 2010), 11.

³⁹ Watson, 21

⁴⁰ Ibid. 7

mainly developed for high school grade levels, and most were mainly supplementary and served few full time students.⁴¹

Schools that served students from across multiple districts in a full-time capacity were another form of online school. According to Watson, the majority of these types of schools were charter schools. Full-time multi-district schools had experienced steadier growth than state virtual schools. Online schools of this type were typically charter, combined many schools under one national organization which provided courses, teachers, etc., were available to all grades, were funded by state public education funds and had few part-time students.⁴²

The third type of online school as identified by Watson was a single-district online program which served students who resided within the district that was providing the course. This segment of online learning was seen as one of the fastest growing.⁴³ Single district online schools combined full and part time students and typically served credit recovery and/or at-risk high school students. In Florida, these schools were funded the same way as any other district school.

In summary, while each state legislature/school district provided many online and virtual education options for students, the provision of such is still growing and rapidly changing. Many similarities exist among the options, yet each is very unique and meets the needs of different types of students.

⁴¹ Ibid. 21

⁴² Ibid. 29

⁴³ Ibid. 6

Research Summary Related to Online and Virtual Education

The previous section provided information regarding the different types and structures of online and virtual education options for students. However, the quality, efficiency, and efficacy of these options have not been the subject of any large-scale research studies. It has been noted that online learning is “academically effective” and “cost-effective.”⁴⁴ But, according to the Southern Region Education Board (SREB), “conducting research about online learning is challenging.”⁴⁵ The SREB attributed this challenge to the evolving nature of online learning and stated that “once studies are designed, the online methods or technologies change.”⁴⁶ It could be argued that conducting research in any educational setting is challenging, because of the many variables that exist and the difficulty in controlling them. Yet, the limited research that has been conducted regarding online learning “does seem to indicate that online learning *can* increase students’ learning and expand their access to courses.”⁴⁷

To date, a very small number of meta-studies have been conducted regarding online and virtual education. The United States Department of Education (USDOE) conducted the most thorough and current meta-analysis and review of online learning studies in 2008 which was updated in 2010. The analysis reviewed fifty-one studies that met strict inclusion criteria, and of the fifty-one, only seven focused on K-12 online

⁴⁴ Smith, Rosina; Tom Clark and Robert L. Blomeyer. *A Synthesis of New Research on K-12 Online Learning*. Learning Point Associates and North Central Regional Educational Laboratory. 2005

⁴⁵ Thomas, William R.; *Overcoming Doubts About Online Learning*. Southern Region Education Board, 2009. 4

⁴⁶ Ibid. 4

⁴⁷ Ibid. 4

learning, the focus of the remainder of the studies was on post-secondary and higher education online learning. The USDOE Meta-Analysis stated that “Few rigorous research studies of the effectiveness of online learning for K-12 students have been published.”⁴⁸ In fact, when the team of analysts conducted its initial literature search for studies of online learning in K-12, in a span from 1996 – 2006, no studies had been done that met the criteria for review. Only when the scope was broadened thru July 2008, were the seven K-12 studies found.⁴⁹

Specifically, the USDOE meta-analysis sought to answer the following questions:

1. How does the effectiveness of online learning compare with that of face-to-face instruction?
2. Does supplementing face-to-face instruction with online instruction enhance learning?
3. What practices are associated with more effective online learning?
4. What conditions influence the effectiveness of online learning?⁵⁰

The USDOE findings, which were drawn from all fifty-one studies, showed that online learning, in general, had a positive impact on student achievement.

Specifically, the analysis found that:

1. Students who took all or part of their class online performed better, on average, than those taking the same course through traditional face-to-face instruction
2. Studies in which learners in the online condition spent more time on task than students in the face-to-face condition found a greater benefit for online learning

⁴⁸ Means, Barbara; Yukie Toyama, Robert Murphy, Marianne Bakia, and Karla Jones. *Evaluation of Evidence-Based Practices in Online Learning: a Meta-Analysis and Review of Online Learning Studies*. Center for Technology in Learning and the US Department of Education Office of Planning, Evaluation, and Policy Development Policy and Program Studies Service. 2010. xiv

⁴⁹ Ibid. xiv and 23

⁵⁰ Ibid. xi

3. The effectiveness of online learning approaches appears quite broad across different content and learner types
4. Online learning can be enhanced by giving learners control of their interactions with media and prompting learner reflection, and
5. Providing guidance for learning for groups of students appears less successful than does using such mechanisms with individual learners.⁵¹

It is important to realize that because the USDOE meta-analysis involved so few studies focused on K-12 online learning, generalizing of the findings to K-12 should be done with caution, if at all.⁵²

Because of the dearth of rigorous studies about online learning which have measured student achievement, many of the findings are anecdotal, at best. Following are the most significant findings which were observed in the relatively few studies available.

The USDOE reported that students who took Spanish 1 and Spanish 2 through the West Virginia Virtual School performed as well as or better than their peers who took Spanish 1 and Spanish 2 in a traditional setting.⁵³ Additionally, the West Virginia Virtual School students in the Spanish 1 and Spanish 2 classes learned “valuable technology skills.”⁵⁴

In 2007, the Florida TaxWatch published a report “A Comprehensive Assessment of Florida Virtual School” which examined the “viability of Florida Virtual School as a credible alternative to traditional schooling as regards both student achievement

⁵¹ Ibid. xiv – xvi

⁵² Ibid. xii

⁵³ Ibid. 32

⁵⁴ Ibid. 32

outcomes and cost-effectiveness.”⁵⁵ The report identified some notable trends. For instance, students who logged in to their courses more frequently earned higher grades. In fact, it was reported that the average number of log-ins for an earned grade of “A” was 180. Another trend related to the duration of the course related to earned grades. FLVS students who took longer to complete a course, on average, earned lower grades in the course than students who took less time to complete the course.⁵⁶

On the instructional side of the Florida Virtual School, teachers made a considerable investment toward the achievement of their students. The Florida TaxWatch reported that during the school years 2004-2005 and 2005-2006, FLVS teachers emailed each of their Florida students an average of thirty-eight times during their coursework. In addition, the FLVS instructors made regular phone calls to both their students and parents. The Florida TaxWatch report cited these specific data as indicative of the personal investment made by both FLVS teachers and students, which could be attributed to increased student achievement.⁵⁷

Florida TaxWatch identified the structure of the teacher contract as another indicator of success, noting that “performance goals relative to successful course completion by students are established for each individual teacher. Those who exceed their goals are rewarded in the form of teacher bonuses. Those who do not reach their goals for two consecutive years face termination.”⁵⁸

⁵⁵ Florida Tax Watch, 2007. 1

⁵⁶ Ibid. 60

⁵⁷ Ibid. 16

⁵⁸ Ibid. 16

Finally, it is stated in the Florida TaxWatch report that “it can be concluded that Florida Virtual School has met its burden of responsibility to be determined as a program that does indeed result in increased student achievement.”⁵⁹ Results of standardized tests were the only evidence used by the Florida TaxWatch to make the previous statement. While not conclusive, it was noted that the use of standardized test scores can shed “considerable light” on program effectiveness when interpreted within an accurate context. They provide an “independent yardstick by which to measure outcomes.”⁶⁰

Summary of the Literature Review

This Literature Review was divided into three sections. The first section provided a summary of current policy studies and reports that have been written about the current state of online and virtual education. The second section provided a comparison of the different types of online and virtual education options available to students through the Fall of 2010. The final section summarized the relatively few research studies and reports that have been written about the efficiency and efficacy of online and virtual education.

⁵⁹ Florida TaxWatch. 2007. 16

⁶⁰ Ibid. 16

CHAPTER 3 METHODOLOGY

The purpose of this study had two primary goals. The first was to determine if instruction of students via Florida Virtual School in a Florida school district were cost effective when compared to traditional brick and mortar instruction. The second purpose of the study was to compare student achievement of district students enrolled in FLVS courses to that of all similar district students. This chapter contained the methodology, the data sources, and the data organization used in this study.

Academic performance and enrollment data of district students enrolled in FLVS courses were analyzed to compare district student achievement with FLVS student achievement, and to analyze effective use of FLVS as an option for the district and its students. Furthermore, analysis of specific course selection and performance of students in high enrollment courses was included to provide information about district middle and high schools which could be used in subsequent years to maximize the use of FLVS at the district middle and high schools.

Methodology and Background

In 2007, Florida TaxWatch, a private, non-profit, non-partisan research institute, conducted an evaluation and study of the Florida Virtual School. The focus of the Florida TaxWatch evaluation was to “examine the viability of Florida Virtual School as a credible alternative to traditional schooling as regards both student achievement outcomes and cost-effectiveness.”¹ This researcher attempted to replicate the study as it pertained to one local school district in Florida.

¹ Florida Tax Watch, 2007. 1

Core areas of the Florida TaxWatch study included “an examination of student demographics and achievement as well as cost effectiveness.”² To that end, this study attempted to obtain data that would allow the researcher to conduct a similar analysis. This study reviewed and analyzed multiple data sets from multiple sources.

After identifying the data necessary for the study, the next step in the process was to locate the data sources. The researcher narrowed the data sources to the Florida Virtual School, the school district, and the State of Florida (Florida Department of Education). Additional data were obtained from the College Board. The College Board is a non-profit agency with a single goal: “to ensure that every student has the opportunity to prepare for, enroll in and graduate from college.”³ The College Board administers the Advanced Placement (AP) program, which is:

a rigorous academic program built on the commitment, passion and hard work of students and educators from secondary schools and higher education. With more than 30 courses in a wide variety of subject areas, AP provides willing and academically prepared high school students with the opportunity to study and learn at the college level.⁴

Finally, data were organized and disaggregated so that a thorough analysis occurred. This final step led to the conclusions, limitations, implications and recommendations supplied in Chapter 5.

Data Sources

Data obtained from the Florida Virtual School to conduct the study were very specific and extensive. It included data from the ten middle schools and the eight high schools in the selected Florida school district. Data spanned three school years: 2007-

² Florida Tax Watch, 2007. 8

³ *College Board.org*. Web. 18 Dec. 2011. <http://www.College Board.org/>

⁴ Ibid.

2008, 2008-2009, and 2009-2010. Among the information included in the study and analysis were the following: students and enrollments by school and by grade, ethnicity and gender of students, enrollment by subject and course, achievement (letter grade earned) by subject and course, and course withdrawals by subject and ethnicity. The specific data requested from the Florida Virtual School included the following information:

- number of students
- number of enrollments
- course enrollment by grade (9, 10, 11 and 12)
- enrollments per High School Student by Grade in School
- ethnicity of district students enrolled
- gender of students enrolled, enrollment by subject
- final grades earned by district students by course
- number of weeks active by final grades
- final course status – succeeded, failed, withdrawn failed, withdrawn no grade
- course withdrawals by subject and ethnicity
- AP enrollment by subject
- AP scores of district students in FLVS AP courses⁵

The FLVS data for the selected school district was disaggregated by school, by year, and by each of the categories identified. This process allowed the researcher to conduct an analysis of these data to identify areas of focus for the school district with regard to the effectiveness of FLVS for its students.

⁵ Data requested of Florida Virtual School by author on June 16, 2011

For the eight high schools, Advanced Placement (AP) data were also considered. AP data examined in the study explored AP course enrollment by school and by subject, final course grades in the AP classes, and AP scores for eight high schools for all three years.

The Florida Department of Education had extensive data bases and many online resources, including reports and statistics from previous years. This resource was used extensively as well. It provided mostly demographic data but was also used for statewide Advanced Placement demographic data as well as statewide results on Advanced Placement exams in the three years of the study. For example, the FLDOE website provided information related to AP performance and participation⁶ in all Florida districts dating to 1999. Information gathered from this website provided the researcher with comparisons relating school, district and state performance and participation in Advanced Placement exams.

A final resource used was the school district itself. Since the study was a comparative analysis, district based data that were comparable to the data received from the Florida Virtual School and from the Florida Department of Education were critical to the integrity and applicability of the results of the study. Specific areas of analysis included demographic comparisons such as ethnicity and gender as well as district and school performance in certain subjects and courses.

Additionally, relative costs of brick and mortar instruction compared to FLVS instruction in the form of full time equivalent (FTE) funding through the Florida Educational Funding Program (FEFP) was explored. Understanding funding for Florida

⁶ Florida Department of Education. "ACT/SAT/AP Data." Florida Department of Education. Accessed February 17, 2012. <http://www.fldoe.org/evaluation/act-sat-aparch.asp>.

schools and the regulations governing such was critical to the methods utilized regarding the cost efficiency of Florida Virtual School for the selected school district.

Summary

This chapter presented and explained the methodology used for this study. Information concerning the nature of the project was discussed, and the data sources were identified. Results of the data analysis were discussed in Chapter 4.

CHAPTER 4 PRESENTATION AND ANALYSIS OF DATA

The purpose of this study was to determine the effectiveness, in terms of both cost and student achievement, of Florida Virtual School in a selected Florida school district. According to a report published by the Florida TaxWatch in 2007, Florida Virtual School was an online school established by the Florida Legislature in 1997.¹ The website for Florida Virtual School stated that Florida school districts were prohibited from denying students' access to the FLVS.² Therefore, this study focused on one Florida school district to examine if FLVS were a cost effective and academically sound option for its students.

To conduct this study, an analysis of varying factors was conducted. The analysis of each factor was presented in this chapter. To conduct the analysis, data and information from the Florida Virtual School, the selected Florida school district, the Florida Department of Education, and the College Board were used.

Demographics

In Chapter 1, information regarding the demographics of the school district were presented which indicated that the population of the school district had shifted from a district with primarily white students to a district with primarily Hispanic students. The information was presented again in this chapter because of its significance to this study.

During the 2009-2010 school year, the demographics of the school district indicated that the majority enrollment was composed of students who listed their

¹ Center for Educational Performance and Accountability. *Final Report: A Comprehensive Assessment of Florida Virtual School*. Tallahassee; Florida TaxWatch, 2007, 1

² The website for Florida Virtual School; flvs.net

ethnicity/race as Hispanic. This was a shift from a predominantly white majority enrollment in previous years. In 2009-2010, the school district was comprised of a student population that was 44% Hispanic, 40% white, 6% Haitian, 5% African-American, and 1% Asian. During the same year, 16% of the district's students were English Language Learners, and nearly 60% qualified for free or reduced lunch. Additionally, the school district had the largest migrant population in Florida with more than 7,017 students meeting the federal definition of migratory child.³

Ethnicity

During the three school-year period (2007-2008, 2008-2009 and 2009-2010), the ethnicity of the district students enrolled in FLVS compared to the ethnicity of all students in the district and the state differed considerably. The ethnicity of the school district during the three year period was as follows: white students, 48.49%; Hispanic students, 36.14%; African-American students, 6.43%, Multi-ethnic students, 1.55%; Asian students, 1.22%, and Native American students, less than 1%.

Chart 1 in Appendix A shows that disparity existed when comparing the ethnicity of high school students in the school district enrolled in FLVS during the three year period to the overall ethnicity of high school students in the district. For the three year period, white students were over-represented in FLVS when compared to the population of white students in the district. White students made up nearly 61% of the district's enrollment in FLVS, as compared to a 48% white population in the district. It is important to note also that the overall Florida white high school population was 43%.

³ Gagliano, Carol. "Florida Department of Education Migrant Office Interview." E-mail interview by author. December 21, 2011.

Hispanic student population grew in the district during the three year period of the study. The demographics for the district indicate the overall population of Hispanic students grew from about 42% to 44%. For this study however, the demographic that was reviewed only included high school students, which, as a subgroup of the district, exhibited slightly different characteristics. During the study period, the overall Hispanic population of high school students in the district was about 36%. However, only 23% of the high school students from the district who took classes through FLVS were Hispanic. This was a difference of about 13%.

The percent of African-American students in the district enrolled in FLVS and district wide were similar; about 6% for both. However, statewide, the percent of African-American students was about 23%. Other demographic groups are reported on Chart 1 in Appendix A. However, the total numbers represented by those groups is insignificant to this study.

In Florida, and in the school district, an achievement gap existed between different ethnic groups. This means that students in different ethnic groups, such as African-American and Hispanic, perform at lower levels academically when compared to white students. An achievement gap can be defined as:

...the disparity in academic performance between groups of students. The achievement gap shows up in grades, standardized-test scores, course selection, dropout rates, and college-completion rates, among other success measures. It is most often used to describe the troubling performance gaps between African-American and Hispanic students, at the lower end of the performance scale, and their non-Hispanic white peers, and the similar academic disparity between students from low-income families and those who are better off. In the past decade, though, scholars and policymakers have begun to focus increasing attention on other

achievement gaps, such as those based on sex, English-language proficiency and learning disabilities.⁴

It was shown later in this chapter that an achievement gap did exist in the school district. One could speculate that there was a correlation between the FLVS demographic enrollment gap and a similar achievement gap that existed between the district and FLVS. Since that was not the focus of this study, it was noted and was addressed in the recommendations and implications of the study that will be reported in Chapter 5.

Gender distribution between the high school students in the district, FLVS and Florida was also analyzed. Interestingly, the district students enrolled in FLVS were overwhelmingly female. As shown in Chart 2, Appendix A, 58 % of district students enrolled in FLVS courses were female. District wide and statewide, females made up 49 % of the high school students. While interesting, this particular statistic was not particularly relevant to the outcome of this study.

Enrollment

This section reported and analyzed the enrollment of district students in FLVS. Data were collected on a school-by-school basis. However, the enrollment data will be reported for the entire district because funding for schools in Florida was district based, not school based. The Florida Education Funding Program (FEFP) was established by the Florida Legislature in 1973.⁵ The FEFP was the “primary mechanism for funding the

⁴ Education Week. “Education Week.” www.edweek.org. July 7, 2011. <http://www.edweek.org/ew/issues/achievement-gap/?r=1568420469>. (accessed 12/4/11).

⁵ Florida Department of Education. “2011-2012 Funding for Florida School Districts.” Statistical Report, Tallahassee, Florida, 2011.

operating costs of Florida school districts.”⁶ FEFP funds were primarily generated by multiplying the number of full-time equivalent (FTE) students... by a base student allocation ...to determine the base funding from state and local FEFP funds.”⁷

Florida Virtual School enrolled students for half-credits.⁸ During the first year of the study, 2007-2008, 969 students in the select school district enrolled in 1,778 half-credit courses. (Chart 3, Appendix A) This equated to enrollment of approximately 1.83 half-credits per student during the first year of the study for students in the district.

During the second year of the study, the number of district students enrolled in Florida Virtual School courses increased from 969 to 1,048; an increase of 8%. During the same year, the number of district half-credit enrollments in Florida Virtual School increased from 1,778 to 1,996, an increase of 12.3%. Finally, in the third year of the study, the number of district students increased to 1,577 which was an increase of 50.5% from the second year to the third year, and an increase of 62.3% from the first year to the third year of the study

The number of half-credit enrollments increased by even greater amounts and percent than did the numbers of district students enrolled in FLVS courses. From year two of the study to year three of the study, the half-credit enrollments increased from 1,997 to 2,973. This represented an increase of 48.9 % between year two and year three, and an increase of 67.2% from the beginning year of the study to the final year of the study. It should be noted that during the same three years the study was conducted, overall enrollment in the district increased by less than 1%. This comparison leads one

⁶ Ibid. 1

⁷ Ibid. 1

⁸ The website for Florida Virtual School; flvs.net

to conclude that the awareness of FLVS as a choice option for students had increased; and that the access to it, as required by statute,⁹ was granted by the district to its students.

Students in the district who enrolled in FLVS were mostly seniors. In fact, during the three years of the study, 87% of the district students taking classes at FLVS were in 12th grade. This information is shown on Chart 4 in Appendix A. It is interesting to observe though, that younger students typically enrolled in larger numbers of half-credit classes, especially in the first two years of the study. So, while more 12th graders were enrolled, they each took fewer half-credits, overall.

As shown on Chart 5 in Appendix A, during the three years of the study, half-course enrollment by district seniors ranged from 1.82 courses per student in 2007-2008 to 1.93 courses per student in 2009-2010. One could speculate why students in 12th grade account for such a large segment of the district population using FLVS as an option. Every year, students enrolled in Florida Virtual School courses were invited to complete a survey which asked opinions on topics such as “what was the main reason you enrolled in the FLVS course,” and “compared to a traditional high school class, the difficulty level of the FLVS class is...”¹⁰ During school year 2009-2010, more than 33,000 FLVS students participated in the survey.¹¹

⁹ FRS §1002.20(6)(a)

¹⁰ "Student Survey 2007-2008." Online High School | Online Middle School | Grades K-12 | Florida Virtual School. Accessed June 12, 2011. <http://flvs.net>.

¹¹ Ibid.

In response to the question “what was the main reason you enrolled in the FLVS course,” 22% indicated “they needed to raise a course grade/grade forgiveness,”¹² and 20% responded that they took a course needed to graduate on time.”¹³ Both could be likely responses for students in 12th grade. Florida statute allowed students to retake any course for grade forgiveness if a grade of D or F had been earned.¹⁴ Frequently, students in upper grades were exercising this option in order to improve their grade point average – for a variety of reasons – including the need to meet a required grade point average for graduation, to improve class rank, to meet athletic eligibility for athletes, or scholarship requirements.

The response to the survey choice “to take a course needed to graduate on time”¹⁵ that tied FLVS enrollment directly to a need to meet graduation requirements in order to graduate with classmates is most likely a response given by upperclassmen, as opposed to younger students. Similar responses were given by FLVS students on FLVS students’ surveys during each of the three years of this study.¹⁶

Courses

This section reported and analyzed subject area enrollments, course enrollments, and the overall success of district students in Florida Virtual School courses. As noted previously, per Florida Statute, students could not be denied access

¹² Ibid.

¹³ Ibid.

¹⁴ FRS §1003.428 (4)(d)

¹⁵ "Student Survey 2007-2008." Online High School | Online Middle School | Grades K-12 | Florida Virtual School. Accessed June 12, 2011. <http://flvs.net>.

¹⁶ Ibid.

to Florida Virtual School.¹⁷ However, districts had the responsibility and flexibility to counsel students to take courses that were appropriate for each student, based on the needs and abilities of the student. The Assistant Superintendent of the district provided schools with clear guidelines regarding the use of Florida Virtual School.¹⁸

The Florida Virtual School offered courses in eleven subject areas during the three-year period from 2007-2008, 2008-2009, and 2009-2010: Art/Visual Arts, Business Technology, Computer Science, English, Foreign Language, Health/Physical Education, Mathematics, Research and Critical Thinking, Safety and Driver Education, Science, and Social Studies. During the three year period, district students took courses in all eleven subject areas. Mathematics courses had the highest participation by district students; nearly 24% of Florida Virtual School courses taken by district students were in Mathematics. As shown in Chart 6 in Appendix A, the top five subject areas for district students were: Mathematics, Social Studies, Health/Physical Education, English, and Science.

Students who enrolled in Florida Virtual School courses could earn grades of A, B, C, D, F, WF, or WNG. Per Florida Statute 1003.437, the letter grades of A, B, C, D, and F were described as:

- (1) Grade "A" equals 90 percent through 100 percent, has a grade point average value of 4, and is defined as "outstanding progress."
- (2) Grade "B" equals 80 percent through 89 percent, has a grade point average value of 3, and is defined as "above average progress."
- (3) Grade "C" equals 70 percent through 79 percent, has a grade point average value of 2, and is defined as "average progress."

¹⁷ FRS §1002.20(6)(a)

¹⁸ "FLVS." Assistant Superintendent to Middle School and High School Principals. February 10, 2008.

(4) Grade “D” equals 60 percent through 69 percent, has a grade point average value of 1, and is defined as “lowest acceptable progress.”

(5) Grade “F” equals zero percent through 59 percent, has a grade point average value of zero, and is defined as “failure.”

(6) Grade “I” equals zero percent, has a grade point average value of zero, and is defined as “incomplete.”¹⁹

Students enrolled in Florida Virtual School classes had a grace period of 28 days during which students could determine if they were going to move forward with course work. The following information was provided to students upon their enrollment in a course:

I acknowledge that during the first 28 days of being activated into my FLVS course I may drop the course without penalty. I understand that for each online course there are a minimum number of assignments that must be completed each week. Failure to submit the minimum number of assignments on a weekly basis will result in my removal from the course and may result in a failing grade being assigned to my academic transcript. If I drop the course after completing 50% of the class requirements and fail to take the final exam, Florida Virtual School will issue an "F" for my final grade.²⁰

If a student withdrew from a FLVS course within the first 28 days, the student earned a WNG – Withdrawn No Grade. If a student withdrew after the 28 day grace period, the student earned WF – Withdrawn Failing.²¹ Grades of WF were included in the category of F for this study. Understanding how grades were awarded to students was important to the overall outcome of this study.

¹⁹ FRS §1003.437

²⁰ "Grading and Final Exam." Online High School | Online Middle School | Grades K-12 | Florida Virtual School. Accessed December 26, 2011. <http://flvs.net/>.

²¹ Ibid.

The grades earned by district students enrolled in FLVS by subject showed that the subject area of Art/Visual Arts had the highest percentage of grades of A earned (54.4% of students enrolled in courses in Art/Visual Arts earned a final grade of A). See Chart 7 in Appendix A for additional information. On the other end of the scale, the subject area with the highest percentage of F's earned was Research and Critical Thinking, 6.8%. And, nearly 60% of students who enrolled in a course in Computer Science withdrew from the course within the first 28 days and earned a grade of W.

During the three years of the study, district students enrolled and completed 58 different courses in the eleven subject areas. Charts 1, 2, and 3 in Appendix B show the courses taken and grades earned by district students during the three year period of the study.

Overall, district students who completed courses earned grades in courses taken through Florida Virtual School during the three years of the study as shown in Table 4-1. Looking at similar data from a different perspective, Chart 8 in Appendix A shows that in 2007-2008, of the district students enrolled in Florida Virtual School courses, 58.7% earned a passing grade of A, B, C or D. During school year 2008-2009, the percent of successful students increased to 61.9%, and in the final year of the study, 64.8% of the district students enrolled in Florida Virtual School courses were successful.

It was shown earlier that the subject area of Mathematics had the largest number of district students who were enrolled in Florida Virtual School courses. Interestingly, the subject area of Mathematics also had the highest number of withdrawals – with 25% of students enrolling in the courses withdrawing – either with no grade, or with a grade of F. This information is depicted on Chart 9 in Appendix A.

Analysis of Student Grades in Select Courses

As described earlier in this study, the researcher sought to determine if FLVS were an effective academic option for the students in the district. Specifically, how did academic achievement of FLVS students from the district compare to academic achievement of other students in the district? To determine if FLVS had a positive impact on the district students enrolled in its courses, the researcher chose three specific courses to analyze in-depth. These courses were selected for several reasons.

First, the three courses were Algebra 2, Geometry and Spanish 1. Algebra 2 and Geometry were among the top fifteen courses taken in all three years of the study. Spanish 1 was among the top fifteen courses taken two of three study years. Other courses might have had larger numbers of enrollments. However, many of those courses were required courses for graduation. For example, Algebra 1 was a graduation requirement for all district students. This course would eventually have a success rate of 100% – as would many others – such as English 1, or American Government. These types of courses were not chosen for in-depth analysis for this reason.

Specific course data were analyzed two different ways. The first approach is discussed here which involved looking at student success in the identified courses. Chart 10 in Appendix A shows that in the first year of the study, district students in FLVS courses performed slightly better than did students district wide in the same courses. The researcher compared the percent of students earning grades of A, B, or C to arrive at this conclusion. In Spanish 1, 86.5% of FLVS students earned grades of A, B, or C compared to 76.2% of district students in the course. For Algebra 2, the percent of FLVS students earning grades of A, B, or C was 82.9%, while the percent of district

students earning similar grades was only 59.9. Finally, in Geometry, 70.6% of FLVS students earned grades of A, B, or C compared to only 60.5% of district students.

During the second year of the study, 2008-2009, a shift in the percent of successful student in the three identified courses was noticed. This information is included in Chart 11 in Appendix A. In Spanish 1, 52.9% of FLVS students earned grades of A, B, or C while 82.8% of district students did the same. In Algebra 2, 74.6% of FLVS students were successful, but only 54.9% of district students were. Finally, for 2008-2009, in Geometry, FLVS students were more successful than district students – 68.2% compared to 60.7%.

In the final year of the study, the results were similar to those in 2008-2009. Chart 12 in Appendix A contains information from 2008-2009. FLVS students in Spanish 1 fared worse than did the district students, 71.2% earning grades of A, B, or C compared to 81%. For Algebra 2, 69.8% of FLVS students earned grades of A, B, or C, and 59.9% of district students did the same. In Geometry, 72.4% of FLVS students earned grades of A, B, or C, but only 60.5% of district students did.

The researcher also approached this comparison from the percent of students who were not successful in the courses; or, what percent of students did not pass the three courses during the three years of the study? Chart 13 in Appendix A compares Spanish 1 grades of F for all three years of the study. These data portray a different scenario than the percent of students who passed the courses.

During all three years of the study, the percent of FLVS students earning grades of F in Spanish 1 was greater than the percent of district students earning grades of F. As noted in Chart 13 in Appendix A, during 2007-2008, 13.5% of FLVS students earned

grades of F as compared to 12.6% of district students. During year two of the study, 44.1% of FLVS students failed the course but only 9.5% of district students did. In the final year of the study, 28.8% of the FLVS students who enrolled in Spanish 1 failed compared to only 5.2% of the district students.

When reviewing the Algebra 2 results, overall, a smaller percentage of district students failed the course. Chart 14 in Appendix A shows data for Algebra 2. In 2007-2008, 12.2% of FLVS students earned a grade of F in Algebra 2, and 18.6% of district students did. In years two and three of the study, 26.7 and 22.7% of FLVS students did not pass Algebra 2, compared to 21.4% and 18.6% of district students.

Chart 15 in Appendix A contains data for the Geometry comparisons, which are very similar to the Algebra 2 results. FLVS students performed marginally better in the first year of the study than they did during years two and three of the study. In the first year of the study, 13.7% of FLVS students earned a grade of F in Geometry, compared to 19% of district students. During year 2 of the study, 26.4% of FLVS students who completed Geometry did not pass it, as opposed to 18.5% of district students. Finally, during the last year of the study, 20.5% of FLVS students failed their Geometry course, but only 19% of the district students did.

The analysis of student achievement data is fairly inconclusive, dependent upon looking at failures or looking at success rates. The inconclusive results are compounded by the subjective nature of awarding grades by classroom teachers. However, it does appear that overall, many students experienced success in FLVS courses, particularly during the first year of the study. In years two and three however, a larger percentage of students earned grades of F in all three courses than had done so in the first year of the

study. It is the opinion of the researcher that this information is significant and was addressed during Chapter 5.

Analysis of State Assessment Results for Students in Geometry

Based on the inconclusive results of students' performance and grades earned in select courses, the researcher narrowed the focus to one course in particular, Geometry. Geometry was chosen for further analysis for several reasons. First, the number of students enrolled in Geometry in both FLVS and in the district was robust enough to conduct the clearest comparison. Also, Geometry was not a required course for graduation, but was self-selected by large numbers of students. In fact, more than 90% of district students enrolled in Geometry during the study period. Finally, the content of the course in both FLVS and in the district would be comparable as well.

As mentioned previously, high school students in Florida were required to pass a state assessment in order to graduate.²² Florida's Comprehensive Assessment Test (FCAT) was given to students in Grade 10 and had assessments in both Reading and Mathematics. The Grade 10 FCAT Mathematics assessed content in five strands: Number Sense and Operations; which accounted for approximately 17% of a student's score, Measurement, also approximately 17%; Geometry and Algebraic Thinking each counted 25% of a student's score; and finally, Data Analysis and Probability, which also was about 17% of a student's score.²³ Geometry and Algebraic Thinking comprised about 50% of a student's score. Student performance on FCAT was reported by level.²⁴

²² FRS §1008.22(3)(c)5

²³ FCAT/FCAT2.0/EOC Test Design Summary." Florida Department of Education. 2011. <http://fcats.fldoe.org/pdf/designsummary.pdf>.

²⁴ Achievement Level Definitions/Tables." Florida Department of Education. July 2008. <http://fcats.fldoe.org/pdf/fcAchievementLevels.pdf>.

Students earned scores ranging from Level 1 (lowest) to Level 5 (highest), with Level 3 and above considered proficient. Since student performance on FCAT was not subjective and could be used as an additional gauge to determine if FLVS were a viable academic option for district students, results from the assessment for the students in Geometry was analyzed. Scores of district students in Geometry on FCAT were compared to FCAT scores of FLVS students taking geometry.

Chart 16 in Appendix A shows that the percent of Geometry students scoring Level 3 or higher during the three years of the study was nearly the same for both district students and for FLVS students. Approximately 72.10% of district students taking Geometry through FLVS were proficient and scored a Level 3 or higher, while 71.54% of district students taking Geometry were proficient on FCAT. The difference between the percent of students proficient was less than 1%. However, when analyzing the performance of Geometry students by level, it is clear that more FLVS students scored in Level 4 or Level 5, the highest levels of proficiency, as compared to district students. Approximately 52.33% of FLVS Geometry students scored at Level 4 or Level 5 compared to only 32.7% of district Geometry students. And, fewer FLVS students scored in the lowest proficiency level, Level 1, 4.65% than did district Geometry students, 7.52%. This information is presented in Chart 17 in Appendix A.

Similar to the analysis of students in three selected courses, the analysis of district and FLVS Geometry students on FCAT proved to be inconclusive. However, implications from this analysis were important and were discussed in Chapter 5.

Withdrawals

Students enrolled in Florida Virtual School had a 28-day grace period in which they were able to withdraw without penalty.²⁵ Data were analyzed regarding the ethnicity of student withdrawals from courses, both WNG (Withdrawn No Grade) and WF (Withdrawn Failing).²⁶ As noted in Chart 18 in Appendix A, the ethnicity of district students who withdrew from FLVS courses was consistent with the enrollment of the different ethnic groups. District students who were white made up the largest percent of enrollments (60.8%) as well as the largest percentage of withdrawals (57.6%).

It is interesting to note that the students of Hispanic ethnicity and African-American ethnicity did have a slightly larger percentage of the overall withdrawals by ethnicity. It is difficult and unwise to speculate why this occurred. However, the implications for these two ethnic groups, in light of the previously mentioned achievement gap, should be noted.

Advanced Placement

Students who chose to take courses through Florida Virtual School had a wide variety of courses from which to choose. Several College Board Advanced Placement²⁷ courses were offered. According to the College Board website, Advanced Placement courses are “developed by a committee composed of college faculty and AP teachers, and cover the breadth of information, skills, and assignments found in the

²⁵ "Grading and Final Exam." Online High School | Online Middle School | Grades K-12 | Florida Virtual School. Accessed December 26, 2011. <http://flvs.net/>.

²⁶ Ibid.

²⁷ "AP Courses and Exams." College Admissions - SAT - University & College Search Tool. Accessed December 25, 2011. <http://www.College Board.com>.

corresponding college course.”²⁸ Students enrolled in Advanced Placement courses typically were required to take an Advanced Placement examination. “The AP Examinations are administered each year in May and represent the culmination of college-level work in a given discipline in a secondary school setting. Rigorously developed by committees of college and AP high school faculty, the AP Exams test students' ability to perform at a college level.”²⁹

As shown in Chart 19, Appendix A, relatively few students district wide chose Advanced Placement courses offered by the Florida Virtual School during the three year period of the study. Not reflected in the chart is the specific school-based data which showed that not all high schools were represented during any of the three years of the study with respect to district students enrolled in Advanced Placement courses with Florida Virtual School. In other words, not all high schools had students enrolled in Advanced Placement courses through FLVS. It is also interesting to note that one district high school, in particular, had considerably more students enrolled in the FLVS Advanced Placement courses than any other high school.

However, Chart 20 in Appendix A shows that during the final year of the study when the number of district students participating in FLVS Advanced Placement courses was the greatest, those few students (69 district-wide) outperformed their Advanced Placement counterparts, both at the district and state levels.

The researcher noticed some anomalies during the analysis of the Advanced Placement data at one of the district high schools. This likely had an impact on the

²⁸ Ibid.

²⁹ Ibid.

overall Advanced Placement results during the first year of the study when the district students in Advanced Placement courses at FLVS were out-performed by the overall Advanced Placement scores of district.

Students who took Advanced Placement exams earned scores ranging from one to five. Scores of three, four, or five on an Advanced Placement exam were considered “passing”. According to information from the College Board website, “overall, nearly 60% of all AP test takers receive AP scores of at least 3. This score is regarded as an indicator of an ability to do successful work at most colleges.”³⁰ During the first year of the study, the FLVS average (out of five points) was 1.98 while the District average was 2.37. During that year of the study, several students from the particular high school reported scores of zero on the Advanced Placement exams.³¹

Students who took Advanced Placement courses through Florida Virtual School took the corresponding Advanced Placement exams at their assigned high school. Because of this arrangement, any one of the four reasons listed here might have occurred with regard to the students taking the Advanced Placement exam: 1) students did take the corresponding Advanced Placement exams; 2) students did not take the corresponding Advanced Placement exams; 3) students took the Advanced Placement exam but scored poorly on it if they had completed the course work much earlier in the school year; or 4) students took the Advanced Placement exam and chose to have the score invalidated – which resulted in a score of zero.

³⁰ "Frequently Asked Questions." College Admissions - SAT - University & College Search Tool. Accessed December 26, 2011. <http://www.College Board.com>.

³¹ Conidis, Christine. "AP Score Questions." Instructional Manager of the Florida Virtual School, “we store exactly what the College Board reported to us. They occasionally report zeros, and we did not filter those out when storing scores.” E-mail interview by author. September 27, 2011.

As shown in Charts 21, 22, and 23, during the first two years of the study (represented on Charts 21 and 22), FLVS students in Advanced Placement courses did not fare as well on the Advanced Placement exams as did the students in the district, largely due to the high number of scores of zero reported for FLVS students. On the other hand, during the third year of the study, no scores of zero were reported for FLVS students, which led to more students experiencing success; scores of three, four, or five;³² on the Advanced Placement exams than district students.

It is impossible to know with complete certainty why this situation of a large number of zero scores occurred. However, this researcher feels it is significant for future policy development for both the district and the Florida Virtual School and was addressed in Chapter 5.

Achievement Gap

The Education Commission of the States reports that “The gap in achievement that separates economically disadvantaged students and students of color from less disadvantaged students has been the focus of discussion, research and controversy for nearly 40 years.”³³ The selected school district was similarly challenged to close the achievement gap. District students whose ethnicity is African-American or Hispanic did not perform as well as their white counterparts on the state assessment, the Florida Comprehensive Assessment Test. The information contained in Charts 24 and 25 in Appendix A depicts the achievement gap in the district on the state assessment. During the past several years, the gap has not narrowed for either reading or mathematics.

³² "Frequently Asked Questions." College Admissions - SAT - University & College Search Tool. Accessed December 26, 2011. <http://www.College Board.com>.

³³ "Closing the Achievement Gap." Education Commission of the States--Helping State Leaders Shape Education Policy. Accessed December 26, 2011. <http://ecs.org/>.

As explained earlier, disparity existed with district students who enrolled in FLVS courses and was actually more evident, particularly with the Hispanic students. Hispanic students were less represented in FLVS courses than either African-American or white students when compared to the overall district or state population. Since Hispanic students are the majority population in the district, but are underrepresented in FLVS, the district will need to study this particular area closely to determine the reasons and the remedies.

Middle Schools

Florida Virtual School offered a full range of courses for middle schools students during the three years of the study, including Career Education, Computer Science 1, 2, and 3, Keyboarding, Language Arts 1, 2, and 3, Math 1, 2, and 3, Orientation to Art 2-D, Reading 1, Spanish Beginning, US History, World Cultures, and World Geography. As shown in Chart 26 in Appendix A, the subject areas of English, Math, and Science had the greatest percent of enrollments for district middle school students, each having 22 % of the total enrollment during the three years of the study.

During the three years of the study, the overall percent of middle school students in the district who chose to enroll in Florida Virtual School courses was minimal, and in fact, insignificant. Table 4.2 shows the percent of district middle school students who enrolled in Florida Virtual School Courses during the three years of the study.

Given the relatively low number of district Middle School students using Florida Virtual School as an option, the significance of these data were limited and recommendations and implications specific to the district was discussed in Chapter 5.

Analysis of Financial Impact

Public schools in Florida were funded through the Florida Educational Funding Program (FEFP)³⁴ and secondary students were funded for 900 hours of instruction per year through the FEFP.³⁵ Florida Statute required that students attend school for 180 days per school year.³⁶ This means that secondary students were funded by FEFP for 300 minutes of instruction for each of the 180 required days.

During the three years of the study, students attended classes in the district high schools for approximately 350 minutes each day. Therefore, the students were provided instructional time in excess of the statutory requirement of 300 minutes per day. The cost of the additional minutes of instruction that were provided each day was absorbed by the district. A Florida school district was prohibited from earning more than one full-time equivalent (FTE) funding per student. However, it was possible that a student could have taken six courses at school and one outside the school day through FLVS and would have earned more than a full FTE because both the district and FLVS would have earned some FTE funds.

Students who chose to enroll in FLVS courses were encouraged to schedule the courses at the beginning or end of the school day.³⁷ This was emphasized in the memo written by the Assistant Superintendent that is Appendix C. Even though Florida Statute

³⁴ Florida Department of Education. "2011-2012 Funding for Florida School Districts." Statistical Report, Tallahassee, Florida, 2011.

³⁵ Ibid. 9

³⁶ FRS §1011.60(2)

³⁷ "FLVS." Assistant Superintendent to Middle School and High School Principals. February 10, 2008.

restricted a district's ability to "deny access,"³⁸ the district was able to schedule the student appropriately based "upon the student's academic history, grade level, and age."³⁹ Additionally, neither FLVS nor Florida Statute required that student access to FLVS occur during the school day.⁴⁰ Florida Statute included the following: "Access shall be available to students during and after the normal school day."⁴¹

The financial impact on the district would be felt primarily by students who chose to enroll in more than one credit per year in a FLVS course. Since the district received funding for 300 minutes per day and was already providing instruction for 350 minutes per day, a student choosing to enroll in only one FLVS credit (course) per year which could be scheduled at the beginning or end of the student's day would have minimal impact on the amount of funding that was lost to the FLVS.

However, some schools in the district chose to schedule students in requested FLVS courses during the school day. It is recognized that fixed costs exist in a brick-and-mortar school. These include day-to-day costs of operating a school, as well as other human and capital resources, such as teachers and other staff, or computers/technology. However, marginal or variable costs would be associated with a school choosing to schedule a student during the school day in lieu of a class offered by the school.

³⁸ FRS §1002.37(3)(c)

³⁹ "FLDOE Policy." Online High School | Online Middle School | Grades K-12 | Florida Virtual School. Accessed December 29, 2011. <http://flvs.net/>.

⁴⁰ FRS §1001.42(23)

⁴¹ Ibid

The following scenario would be representative of such a situation: a student requested that he or she be allowed to enroll in English 2 through FLVS. The student had English 2 on his schedule during period 3. The school, upon confirmation that the student had been assigned a teacher at FLVS, withdrew the student from the period 3 class. At this point, the FTE for the student shifted from the district to FLVS, in essence, reducing the FTE earned by the district. In order for the student to be able to take his FLVS class from a computer at school, school staff provided the student with access to a school computer, and provided supervision for the student as well. Both were the variable costs associated with this situation.

While these costs might have seemed minimal, school administrators saw these as real costs associated with allowing access to FLVS during the school day. And, some would argue that these costs existed for the student regardless of the course the student is taking.

Quantifying the actual cost of providing district students access to FLVS during the school day would be very challenging. As noted earlier, during the three years of the study, students attended classes in the district high schools for approximately 350 minutes each day. Therefore, the students were provided instructional time in excess of the statutory requirement of 300 minutes per day. The cost of the additional minutes of instruction that were provided each day was absorbed by the district. It has been established that the only real cost to the district would occur if a district student enrolled in FLVS for more than one period, or one credit, or two FLVS enrollments per school year. The researcher determined that average enrollment per student would be useful to try to determine the actual cost to the district.

Table 4-3 shows that during the first year of the study, 2007-2008, only one district student in 9th Grade enrolled in FLVS. That student had five FLVS enrollments (Table 4-4). Therefore, the average enrollment for 9th Grade during 2007-2008 was five enrollments per student (Table 4-5). It is important to note that for the school district, five enrollments was the equivalent of 2.5 credits/courses on the district schedule. Table 4-3 also shows that two students in 10th Grade, seven students in 11th Grade and 959 students in 12th grade enrolled in FLVS classes during the first year of the study.

Table 4-4 shows the number of enrollments by grade per student during each year of the study. In Table 4-5, the Average Enrollment per Student is shown. Students in 10th Grade had an average enrollment of four per student. Students in 11th Grade had an average enrollment of 3.29 per student, and students in 12th grade had an average enrollment of 1.82 per student.

As noted in earlier discussions, the cost to the district for a student enrolled in FLVS courses only occurred when a district student enrolled in more than one full credit per school year. Since FLVS enrolled students on a half-credit basis, only when the average enrollment per student exceeded 2.00 would the district conceivably have incurred any additional costs because two FLVS enrollments would have been the equivalent of one period in the district. Using enrollment greater than two, the district would have incurred costs only during 2007-2008 and 2008-2009, based on grade level enrollments.

When reviewing the total average enrollment per student during the three years of the study, Table 4-6 shows that the average enrollment per year during each year of

the study was less than 2.00. Therefore, lost revenue, or additional costs, did not exist during any of the three years of the study.

The results of this fiscal analysis for this selected school district showed that there were no additional costs to the district during the three years of the study. Because district procedures and practice encouraged schools to enroll students in FLVS courses at the beginning or end of the school day, and because the average enrollment in each of the three years was below 2.00, no additional costs existed. This particular finding is applicable only to this district. Other Florida school districts would need to conduct similar analyses to determine additional costs incurred by students enrolling FLVS courses.

Even though the analysis showed that no real additional costs were incurred, scheduling students at the beginning or end of the school day was not always possible, And, another factor that must be considered is that students could start a FLVS course at any point during the school year. The student in the example could have requested FLVS English 2 to replace the school's English 2 at any point during the school year. When schools build master schedules, class sizes had to be considered, per Florida Statute.⁴² Students dropping school courses for FLVS courses could have an impact on staffing and space issues. These variable costs were compounded if multiple students chose FLVS classes throughout the school day. Perhaps a school with exceptional technology and human resources would not be greatly impacted by providing students with these options. However, providing technology and supervision for only one student was a variable cost that must be considered.

⁴² FRS §1003.03(1)(c)

Summary

The information provided in Chapter 4 was an analysis of data related to several factors. The researcher reviewed and provided analysis of data related to both middle and high school demographic information for district students enrolled in FLVS courses; academic success in selected courses taken both in the district and through FLVS; a comparison of Advanced Placement courses both in the district and through FLVS; and a summary of the financial impact to the district for students enrolled in FLVS courses.

During the analysis of these data, the researcher noted several areas that should be addressed in the form of recommendations to the district. These areas and suggestions will be discussed in detail in Chapter 5.

Table 4-1. Final FLVS Course Grades Earned by District Students

Final course grade	Percent of total grades earned
A	53%
B	26%
C	12%
D	3%
F	6%

Table 4-2. District Middle School Students enrolled in FLVS Course.

Percent of District Middle School Students enrolled in Florida Virtual School Courses			
School Year	District Middle School Students	District students enrolled in Florida Virtual School Courses	Percent of District middle school students enrolled in middle school courses at Florida Virtual School Courses
2007-2008	9359	4	.04%
2008-2009	9541	12	.12%
2009-2010	9569	34	.35%

Table 4-3. FLVS Enrollment by Student

Students by Grade	07-08	08-09	09-10
9th Grade	1	2	23
10th Grade	2	17	112
11th Grade	7	61	254
12th Grade	959	968	1188

Table 4-4. FLVS Enrollments by Grade

Enrollments by Grade	07-08	08-09	09-10
9th Grade	5	7	34
10th Grade	8	34	193
11th Grade	23	98	457
12th Grade	1742	1858	2289

Table 4-5. Average Enrollment per Student

Average Enrollment per student	07-08	08-09	09-10
9th Grade	5.00	3.50	1.48
10th Grade	4.00	2.00	1.72
11th Grade	3.29	1.61	1.80
12th Grade	1.82	1.92	1.93

Table 4-6. Average Enrollment per Year

	07-08	08-09	09-10
Total Students Enrolled	969	1048	1577
Number of Enrollments	1778	1997	2973
Average Enrollment per year	1.83	1.91	1.89

CHAPTER 5 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

In order to determine the effectiveness of Florida Virtual School in terms of both student achievement and cost for a selected Florida school district, the researcher reviewed data from several sources. The data sources included the Florida Virtual School, the Florida Department of Education, the College Board, and the school district. The analysis of data was presented in Chapter 4.

During the three years of the study, the enrollment of district students in FLVS courses increased by 62.3%. This increase in FLVS enrollment is significant. Such an increase warrants additional scrutiny, oversight and policy at the district level.

The questions to be answered by this study were: 1) how did student achievement by the students who enrolled in FLVS classes compare with students enrolled in the same classes in traditional classroom settings; and 2) was instruction of district students via FLVS a cost-effective approach during 2006-2007, 2007-2008, and 2008-2009?

Student Achievement

The analysis of student achievement for this study looked at several factors, including ethnicity of student enrollment and success in FLVS courses compared to the overall district enrollment, a comparison of grades in selected courses, and enrollment and success in Advanced Placement courses,

Enrollment of district students in FLVS did not match the ethnicity of students in the district during the three years of the study. As identified in Chapter 4, during the three years of the study, nearly 50% of the district high school students were white. However, of the district students enrolled in FLVS, more than 60% were white. Hispanic

students accounted for approximately 40% of the total student population in the district but only 23% of FLVS students were Hispanic. As the district struggles to close the achievement gap, students of all ethnic backgrounds should have equal access to options such as Florida Virtual School. It should also be noted that minority students (African American and Hispanic) withdrew from FLVS classes at a higher rate than did white students. This indicates that minority students were not successful in the FLVS courses. For the reasons stated in this section, FLVS did not support student achievement for all students, particularly African-American and Hispanic students during the three years of the study.

The Florida TaxWatch report of 2007 identified similar inequities among ethnic groups.¹ According to the report, “White, Non-Hispanic students represented a majority of the withdrawals at 59.8%. Hispanics accounted for 16.8%.”²

As a result of this disparity between large ethnic groups in the district with regard to both enrollment and success in online courses, the researcher recommends that the district look into the situation further. Recognizing that disproportionately fewer Hispanic and Black students from the district enroll in the online classes, and that a large percent of those students either withdraw or are not successful in the classes, the district should make an effort to understand the reasons for the differences and identify strategies to overcome them.

The comparison of district students in FLVS courses with district students in the same courses provided another picture of academic achievement. The courses selected

¹ Florida Tax Watch, 66

² Ibid. 66

for this more in-depth analysis were Algebra 2, Geometry and Spanish 1. When looking at student success in these three courses, during year one of the study, a larger percentage of FLVS students were successful in all three. However, in years two and three, district students enrolled in Spanish 1 at FLVS were not as successful as those students who enrolled in Spanish 1 at their schools.

When examining the overall student performance in the three courses during the three year period, students enrolled in the FLVS courses earned considerably more failing grades in the courses. Additionally, data presented in Chapter 4 for the three courses over the three years did not include students who had withdrawn during the twenty-eight day grace period which is allowed by FLVS. These numbers were substantial for the three courses. The number of students who received a WNG – withdrawn no grade – ranged from 18% of enrolled students up to 43% of enrolled students in the three courses. In light of the high percentage of withdrawals from each course, coupled with the high percentage of failures in the three courses, the use of FLVS for these particular courses did not support academic achievement or student success during the three years of the study, based solely on this particular analysis.

The analysis of the students enrolled in Geometry and their performance on FCAT shows that students enrolled in Geometry through FLVS appeared to perform marginally better on FCAT than did the students taking Geometry in the district schools. The percent of students earning a proficient score, as defined by the Florida Department of Education, was nearly the same – 72% for both. However, when looking at proficiency levels more closely, a larger percent of FLVS students performed at the higher levels of proficiency, and fewer FLVS students performed in the lowest

proficiency levels. Some would argue that students who are more motivated and better students would enroll in the FLVS courses, which could explain the slightly better results for FLVS students. And, as reported in the Florida TaxWatch report, “while not conclusive...use of standardized test scores can shed “considerable light” on program effectiveness when interpreted within an accurate context. They provide an “independent yardstick by which to measure outcomes.”³

This information reflects research cited in Chapter 2 which had been reported by the Southern Region Education Board (SREB) in the report “Overcoming Doubts About Online Learning.” According to the report which was published in 2009, “online learning *can* increase students’ learning.”⁴ The SREB report went on to state that “online classes, whether completely online or hybrid...produce stronger student learning than those conducted solely in a traditional classroom environment.”⁵

Overall, the analysis of academic achievement is very inconclusive. When examining student performance alone in courses, very inconsistent results occurred. Analyzing assessment results shed a slightly different light on this issue. However, the results are not overwhelmingly supportive of either FLVS or District providing the better option for students. This inconsistency with previous research as related to the District students in the FLVS courses is an area where further research about online learning would be beneficial.

³ Florida TaxWatch. 2007. 16

⁴ Thomas, William R. *Overcoming Doubts About Online Learning*. Publication no. 09T20. Atlanta: Southern Region Education Board, 2009.

⁵ Ibid. 3

In Chapter 4, it was shown that the relative number of students enrolled in Advanced Placement courses was very small compared to district enrollment. In fact, during year two of the study, the district saw a 33% increase in Advanced Placement enrollment, but FLVS enrollment in Advanced Placement courses by district students fell by 52%. It can be speculated that students who enroll in Advanced Placement courses through FLVS may be at a disadvantage when taking the Advanced Placement exams which are given during a testing window that is established by the College Board, typically the first two full weeks in May of each year.⁶ This would be the case if the student completed course work in the Advanced Placement course prior to the actual exam dates. Chart 20 in Appendix A shows that the district outperformed FLVS students on Advanced Placement exams in the first two years of the study.

While specific demographic information was not analyzed with respect to Advanced Placement courses taken by district students through FLVS, disparity existed. During the three years of the study, HS D (Table 1-2) in the district had only one student enroll in an Advanced Placement course, during year three. Hispanic students comprised 72% of the enrollment of the students in HS D, and 87% qualified for free or reduced lunch. Additionally, HS B had no students enrolled in Advanced Placement courses through FLVS during year three of the study. HS B had a 53% Hispanic student population and 70% who qualified for free or reduced lunch. For both HS B and HS D, the percentage of African-American students is disproportionate to the overall African-American population of the district. The researcher believes that the under-representation of students from HS B and HS D in Advanced Placement courses

⁶ "AP Courses and Exams." College Admissions - SAT - University & College Search Tool. Accessed December 25, 2011. <http://www.College Board.com>.

through FLVS could have had a negative impact on the achievement gap, and therefore, on overall student achievement for students in these two schools. Again, FLVS did not support student success or academic achievement for students in these two schools, nor district wide. This is based on lower overall performance of district students in FLVS Advanced Placement exams during the three years of the study.

The final analysis in Chapter 4 focused on the cost of using FLVS in the selected school district. Based on that analysis of the funding for students by FLDOE, and the rules in the FEFP regarding FLVS, if a student chose to take the FLVS course as a seventh class (or in excess of two enrollments), the district lost FTE funding. Therefore, in cases where students chose to take more than one of seven FLVS courses, the use of FLVS in the district was not cost effective. However, since the average enrollment was less than two in each of the three years, it appears that the district did not lose any FTE funding for students who enrolled in FLVS courses.

Recommendations

Since the time the researcher began the study of FLVS in the select Florida school district, state law has changed regarding graduation requirements. Beginning with students entering high school in 2011-2012, students will be required to complete one online course⁷ as part of graduation requirements.

Based on the analysis of data completed for this survey, pertinent research studied in the review of the literature in Chapter 2, and recent legislative changes, the researcher has several recommendations for the district:

1. Each high school's use of FLVS should be studied along with the interpretation of the rules and laws associated with FLVS to support consistent and equitable

⁷ FRS §1003.428(2)(c) (2011)

usage district wide and access to all ethnic groups. This should be subject to ongoing monitoring so adjustments can be made as needed.

2. Comprehensive policy regarding FLVS should be developed and implemented that will provide all stakeholders – including parents, students, and administrators with a written resource to guide decision making that abides by statute while providing viable, cost-effective options that will support student success and academic achievement for all students in the district. Included in the policy should be a plan to develop and provide information and resources to all students and their parents in secondary schools regarding the required online course, options for meeting the requirement, and specific information about virtual learning.

3. The district should develop a mechanism to monitor student enrollments and success in online classes, mainly because of the new online course required for graduation.

4. The district should explore many options for providing online courses for its students, including the option to become a franchise of FLVS.⁸ As a franchise of the FLVS, or as a provider of online courses through other sources, the district employs its own teachers but relies on the resources of FLVS, or other provider, for the instructional platform.⁹ Specifically, if the District chooses to operate a FLVS Franchise, the following occurs: “the District uses its own teachers, retains FTE but pays \$50 per enrollment, and uses FLVS courses, student support and teacher training.”¹⁰ The District would incur initial start up costs associated with becoming a franchise of FLVS which would involve human and capital resources. However, in the long-term, becoming a FLVS Franchise could be a more cost-effective approach to providing equitable online options for all of the District students.

5. To make the FLVS franchise or other online option most effective the district should research, identify, and provide courses that have a high success rate statewide and for all ethnic groups.

6. The district should also examine its own success and failure rates of courses offered in the schools to determine why certain subject areas consistently had the largest FLVS enrollment by district students.

7. The district should survey students who have enrolled in FLVS courses to determine reasons for their choices. This information would be beneficial in determining which courses should be offered through the FLVS franchise.

⁸ http://www.flvs.net/areas/elearning/Pages/FLORIDA%20DISTRICTS/Florida_Franchise.aspx." Online High School | Online Middle School | Grades K-12 | Florida Virtual School. Accessed January 15, 2012. <http://www.flvs.net>.

⁹ Ibid.

¹⁰ Ibid.

8. Ongoing professional development and training must be provided for school counselors so that counselors fully understand student options and so that students are provided correct and current information regarding them.

Additionally, school administrators should:

1. If the district chooses to become a FLVS Franchise, each secondary school administrator should, based on data from FLVS, identify resources at the building level which are needed to support the graduation requirement of one online class beginning with students entering high school during 2011-2012. Such resources include human (teachers, support staff) and capital (technology, space) resources.
2. Utilize resources from the College Board to identify students with "AP Potential."¹¹ The College Board uses results from the PSAT and previous AP Exam results to identify students who have potential to be successful in Advanced Placement courses. Using this resource, the school administrators could identify high school students, particularly underrepresented ethnic groups, who exhibit potential for success in Advanced Placement courses. These students could be enrolled in Advanced Placement courses through FLVS.

Conclusion

In conclusion, this study was conducted to determine the effectiveness of Florida Virtual School in terms of both student achievement and cost for a selected Florida school district. It is the opinion of the researcher that the use of FLVS by district students related to student achievement and success was inconclusive and would rely heavily on individual student motivation and ability – as would student achievement in any setting. Additionally, based on the analysis in this study, FLVS did provide a cost-neutral option for students. In other words, the district did not lose FTE to FLVS during the three years of the study, based on average enrollment per year. In light of these outcomes, the district should take steps that will better support students in their endeavors while continuing to maintain and control costs.

¹¹ "AP Potential." College Admissions - SAT - University & College Search Tool. Accessed January 15, 2012. <http://www.College Board.org/>.

Florida Virtual School continues to grow and will continue to be a compelling factor in public education in Florida. The district has the ability to maximize the resource to its advantage, as well as to the advantage of its students. Doing so, through thoughtful and explicit policy development and implementation will provide the needed structure for success and collaboration.

APPENDIX A
FLVS AND DISTRICT DATA COMPARISON CHARTS

Chart 1: Percentage of Enrolled High School Students by Ethnicity

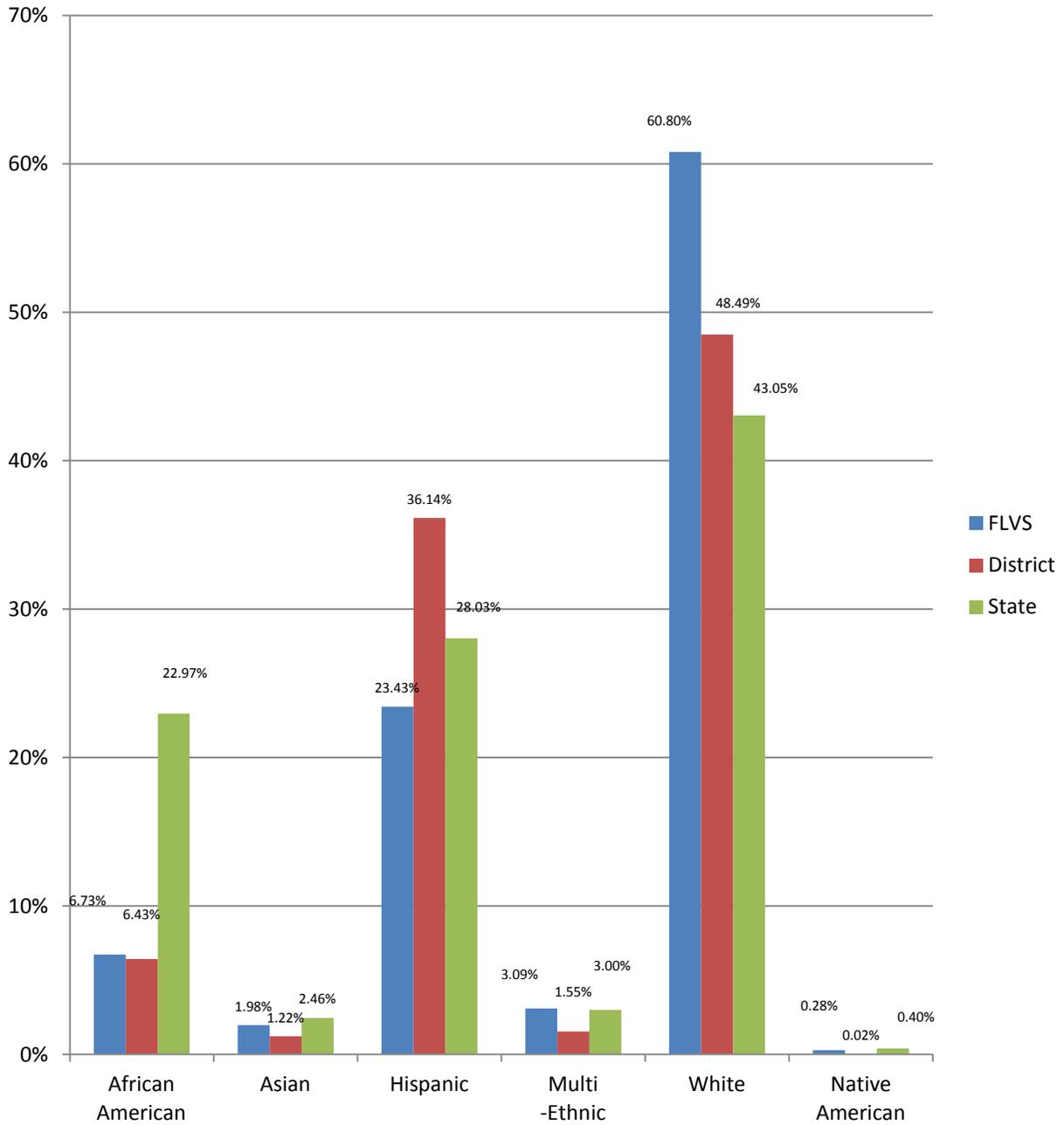


Chart 2: Percentage of FLVS, District and All Public High School Students by Gender

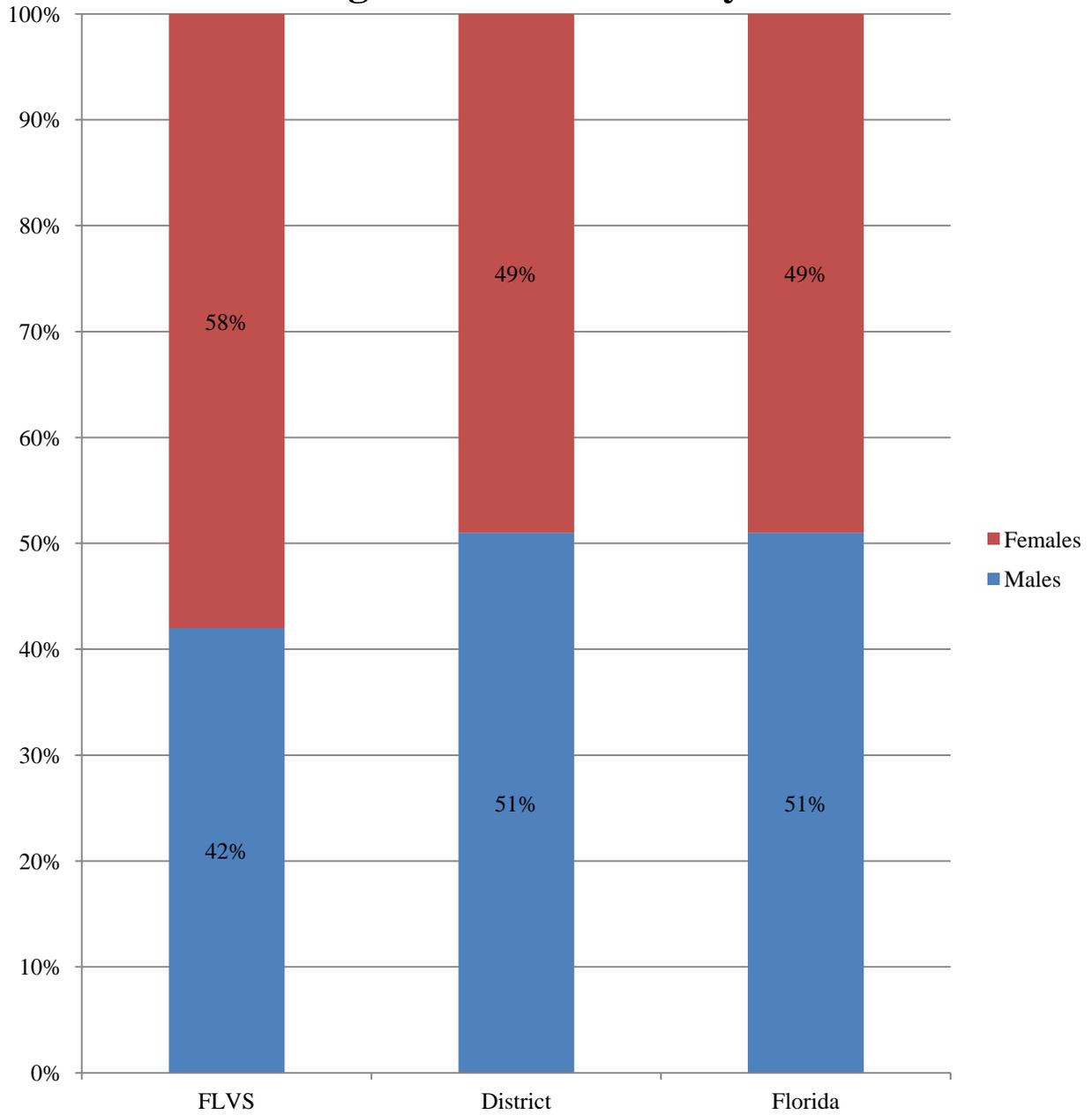
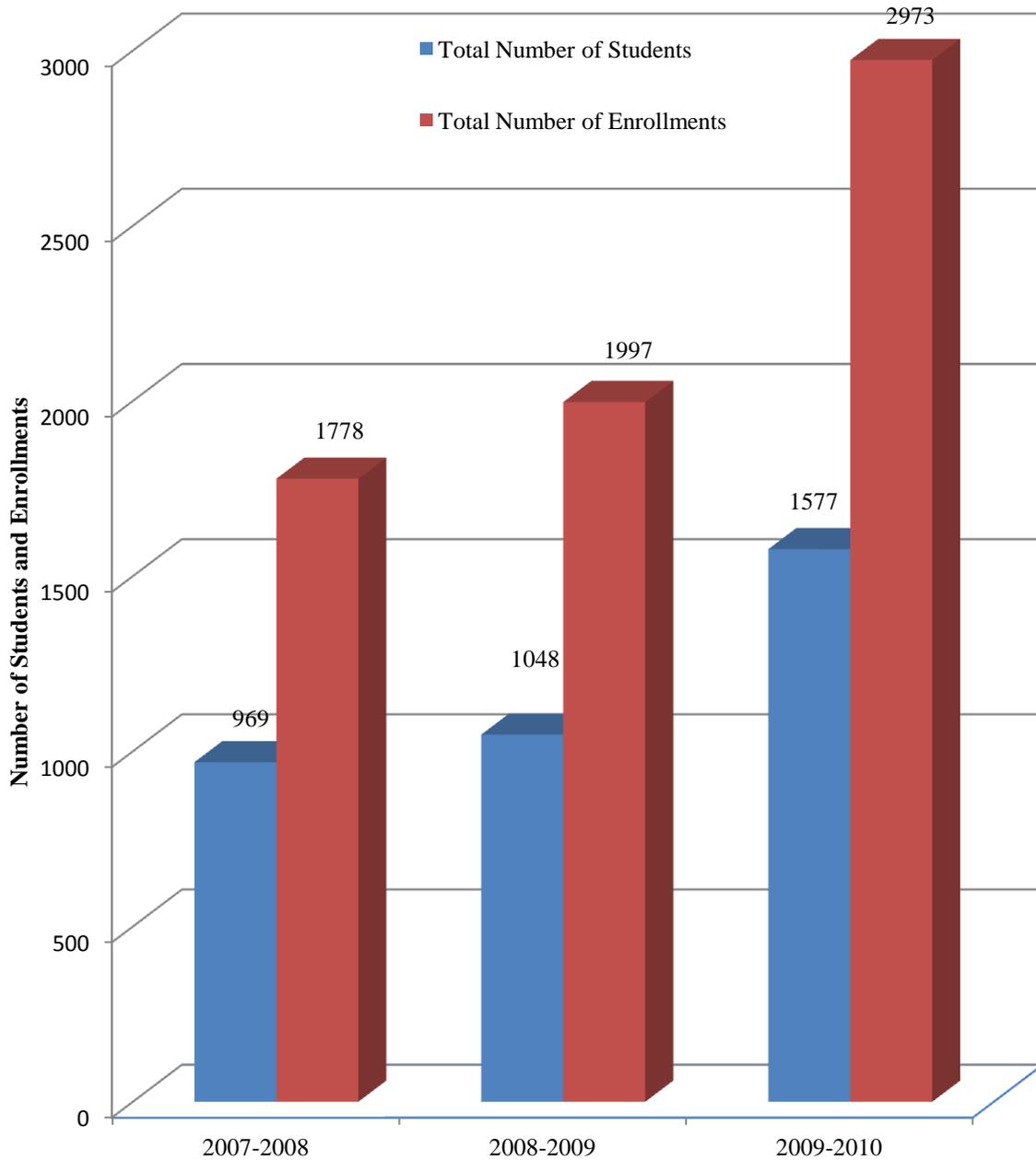


Chart 3: Number of High School Students and Enrollments



**Chart 4: High School Course Enrollment
by Grade in School**

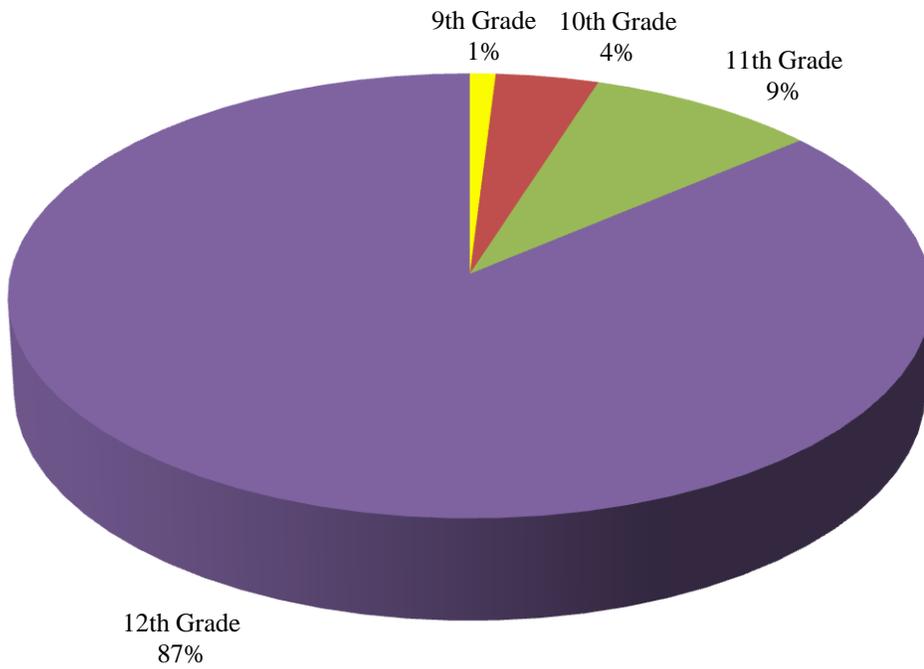


Chart 5: Enrollments per High School Student by Grade in School

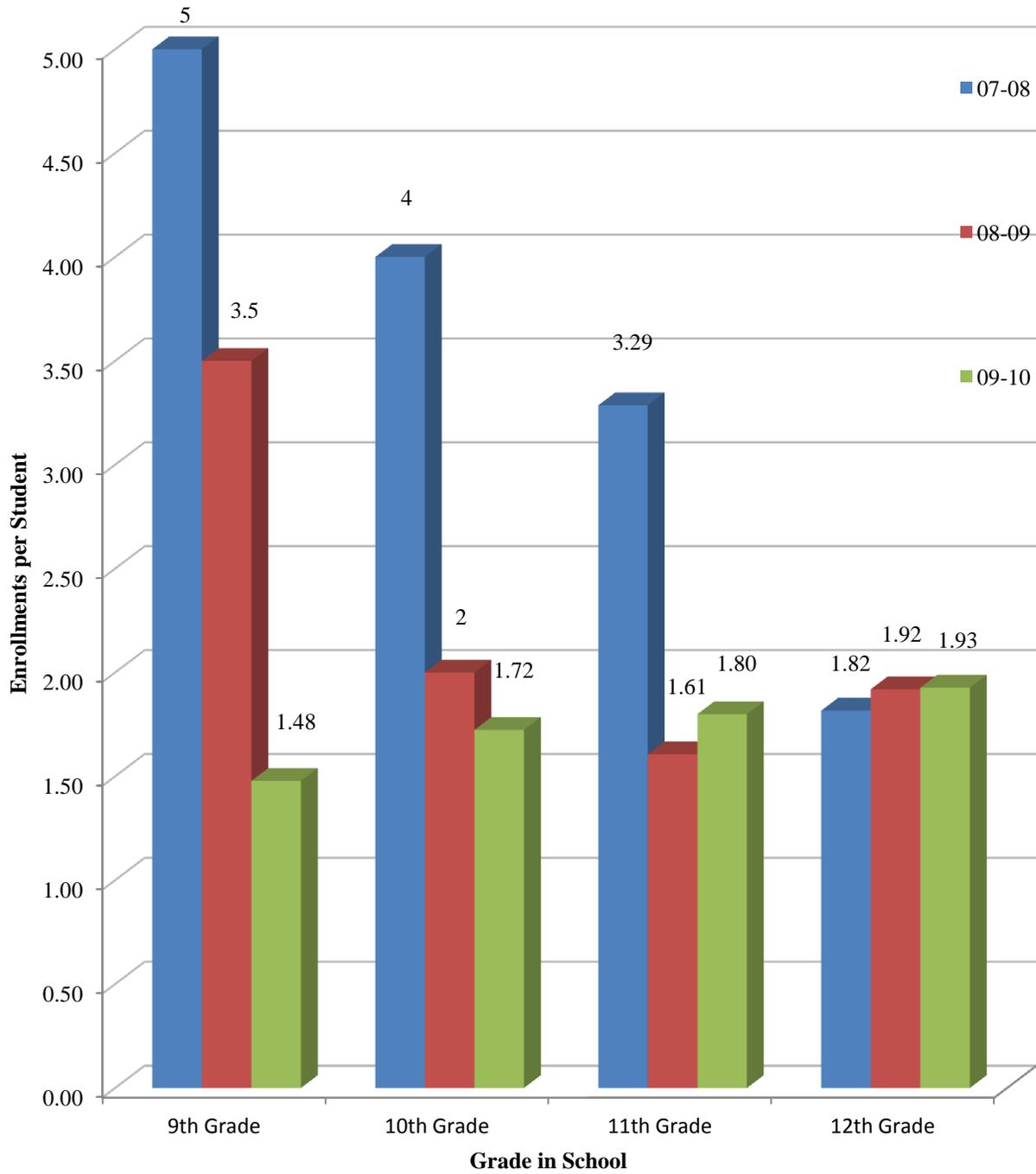


Chart 6: FLVS High School Course Enrollments by Subject

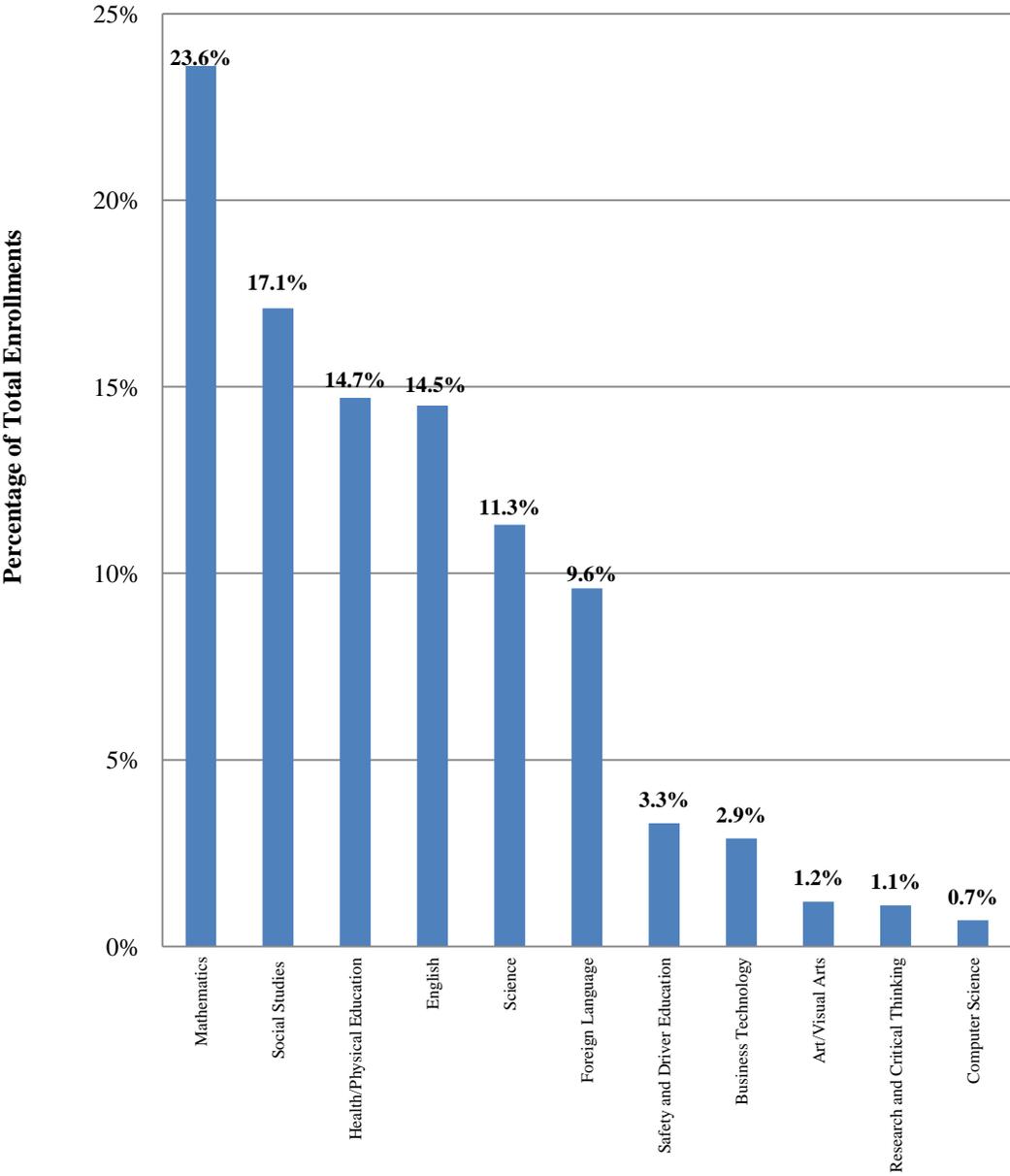


Chart 7: Final Grade Distribution by High School Course Subject

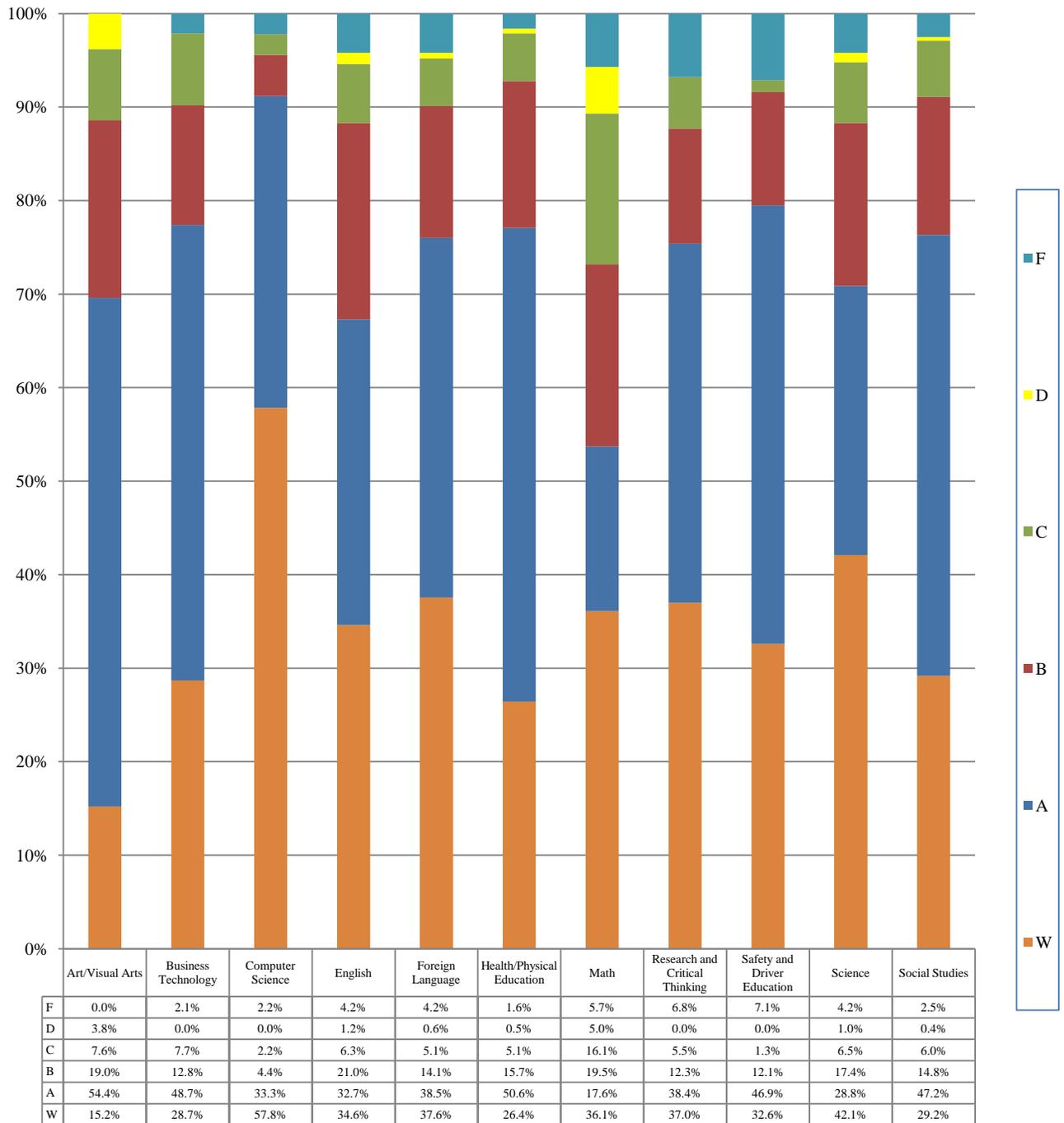


Chart 8: High School Course Enrollment by Final Status

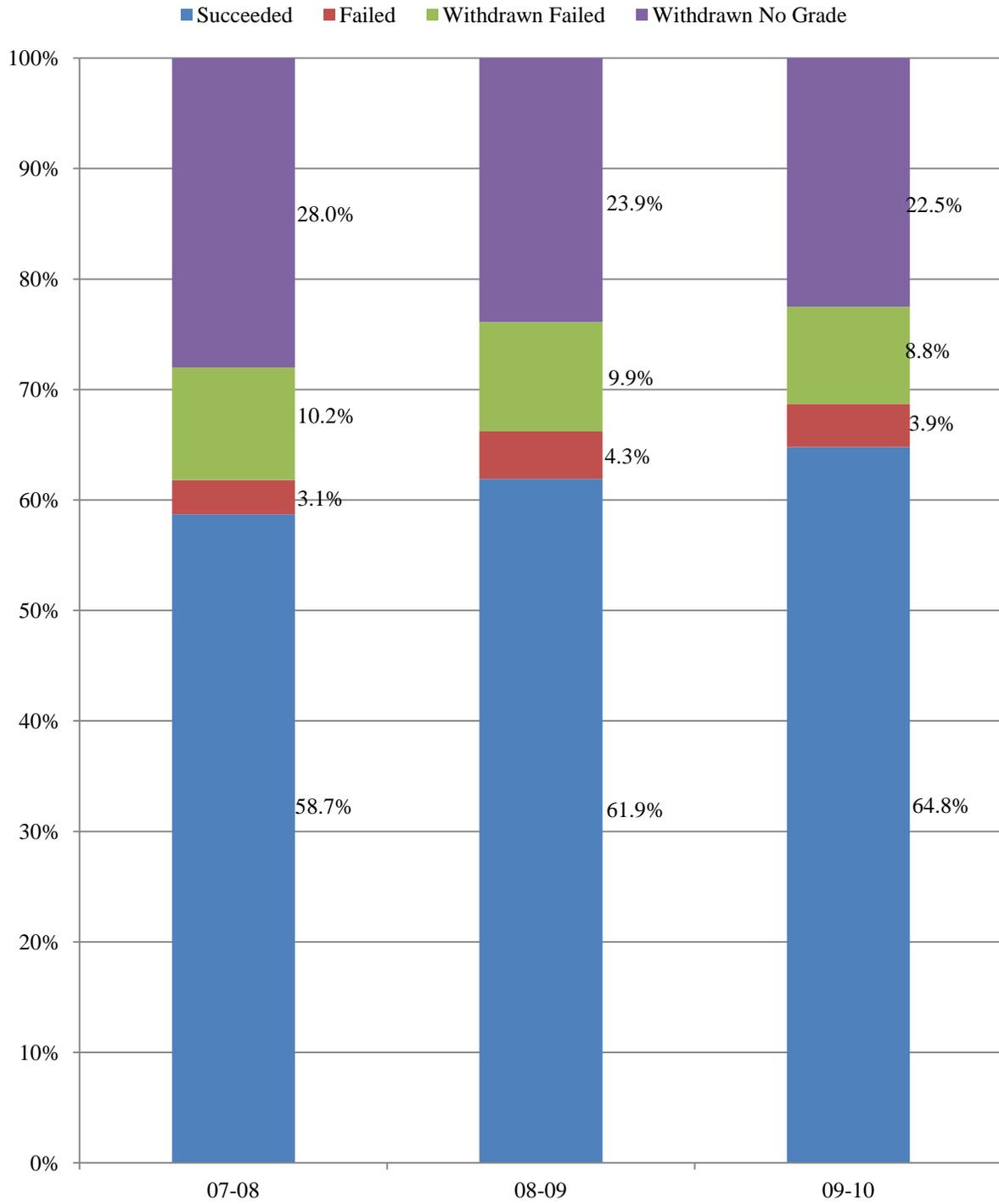


Chart 9: High School Course Enrollments and Withdrawals by Subject

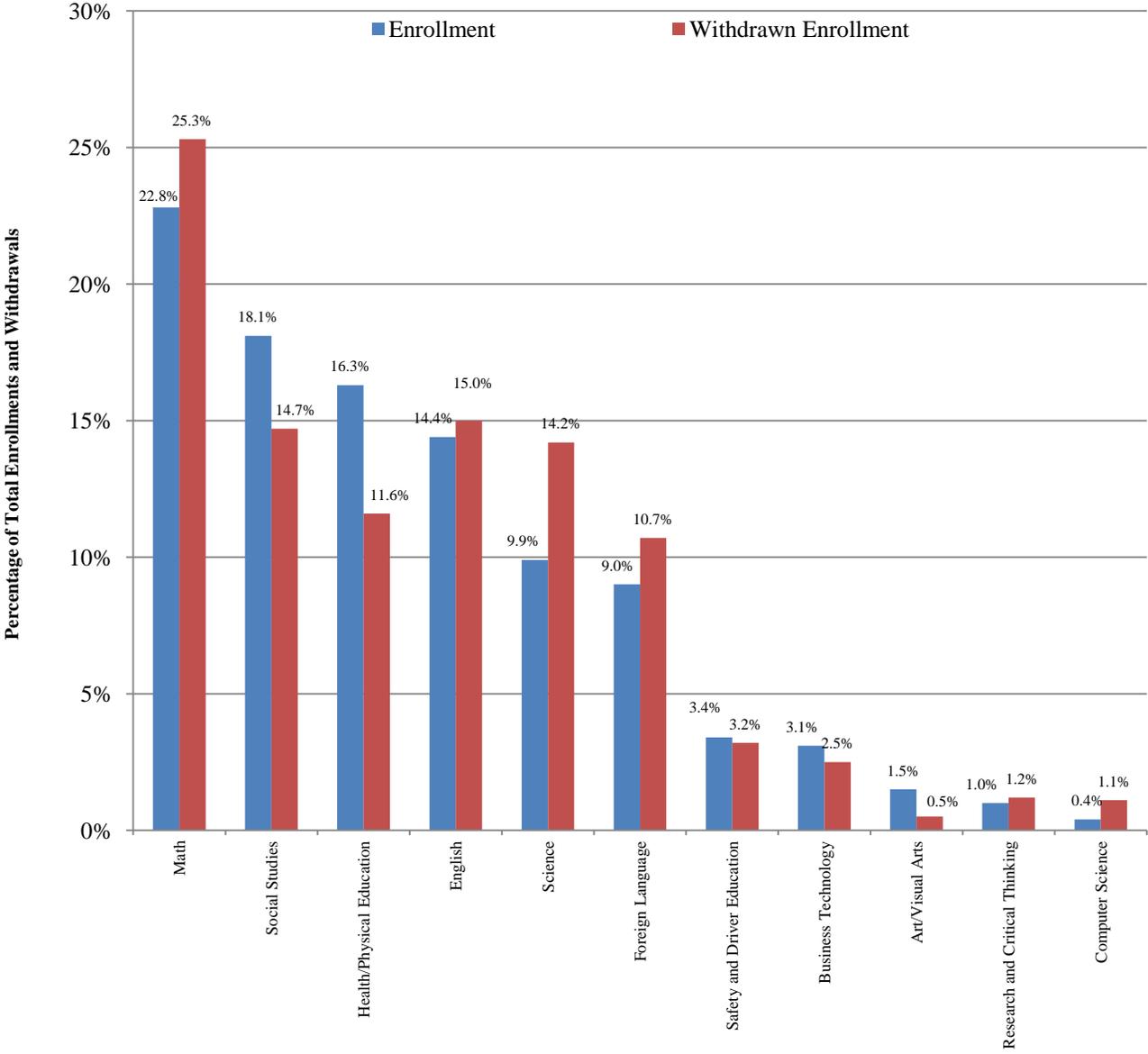
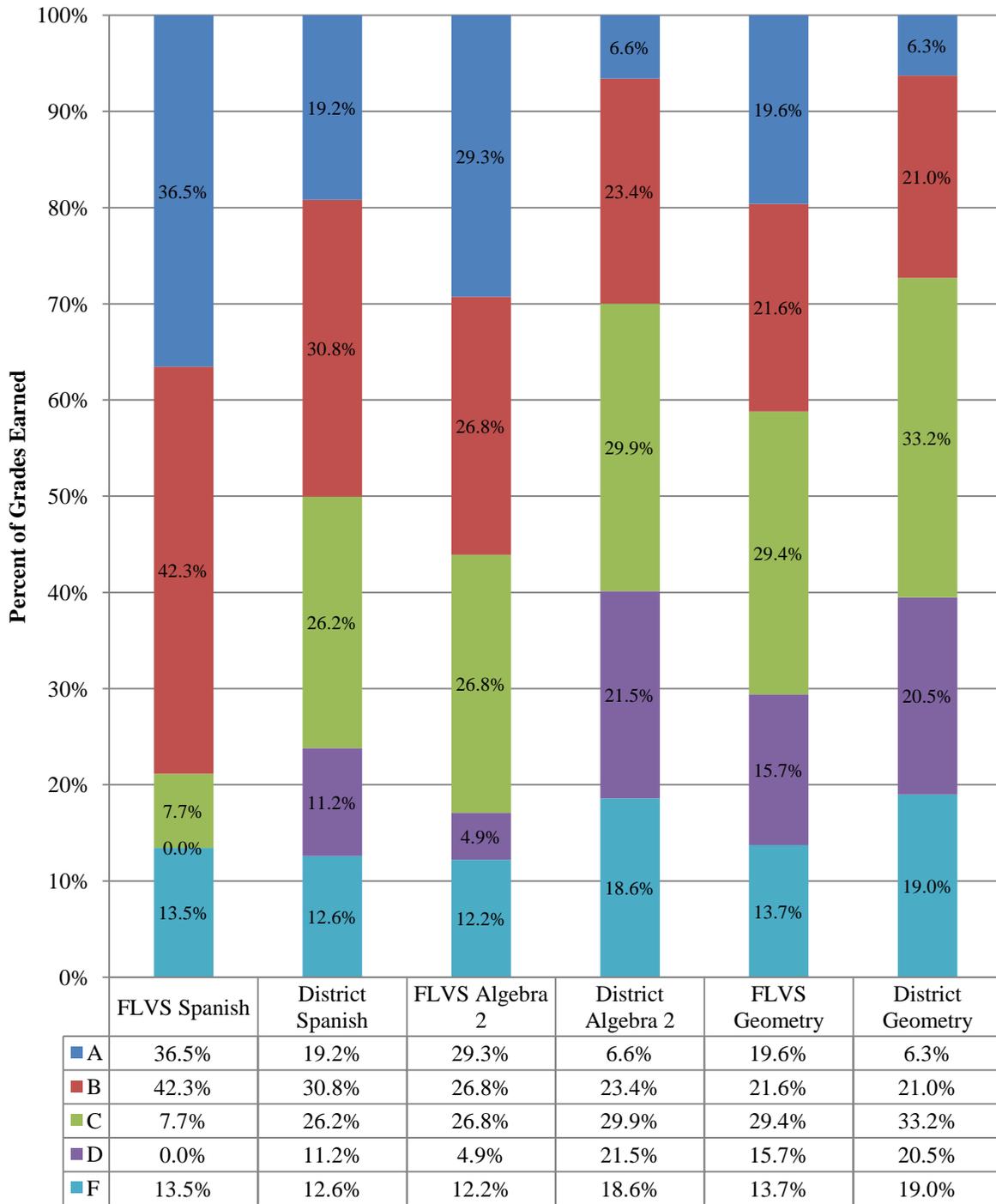
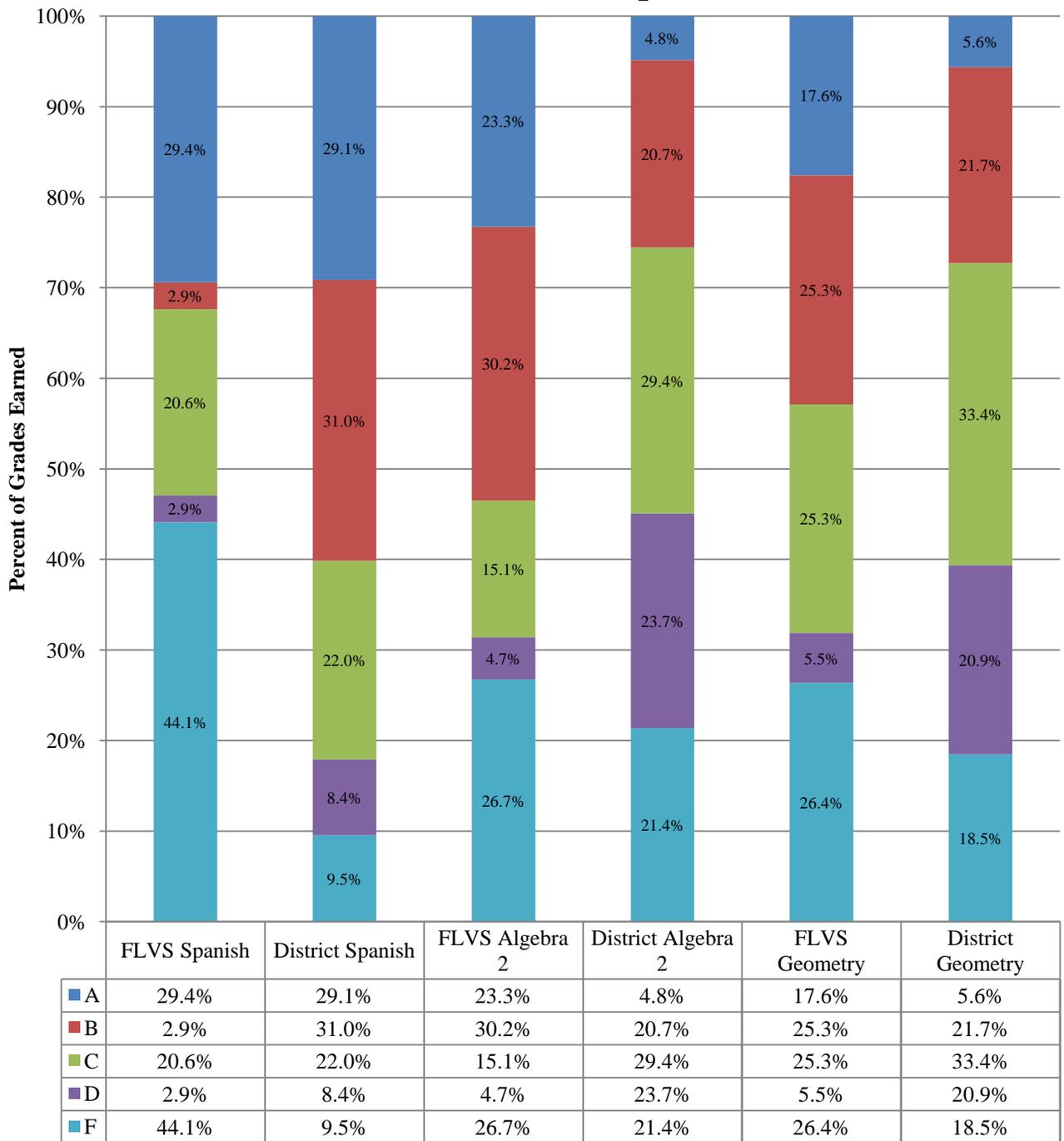


Chart 10: FLVS v District Comparison 07-08



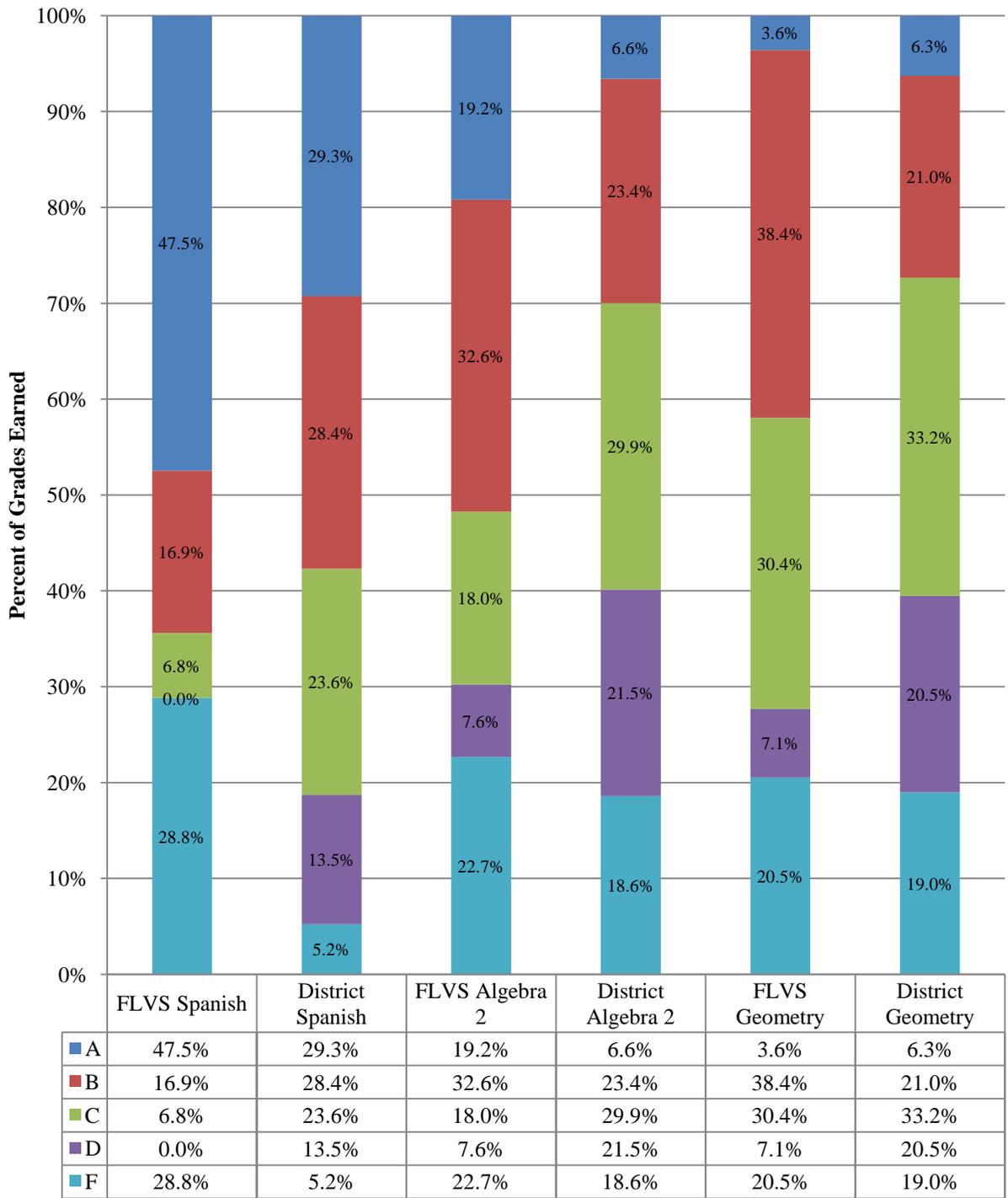
Courses

Chart 11: FLVS v District Comparison 08-09



Courses

Chart 12: FLVS v District Course Comparison 09-10



Courses

Chart 13: Spanish 1 "F" grades

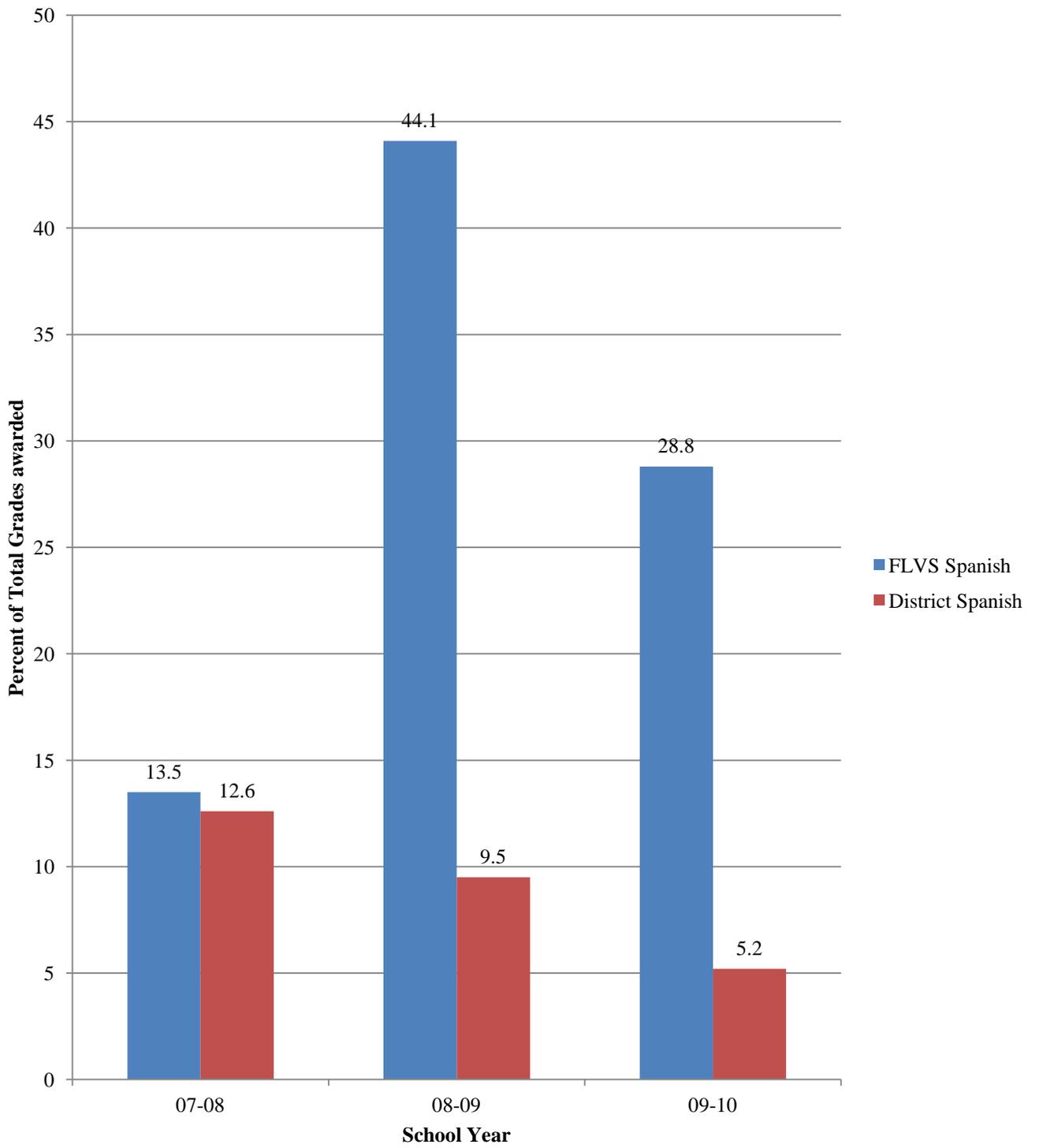


Chart 14: Algebra 2 "F" Grades

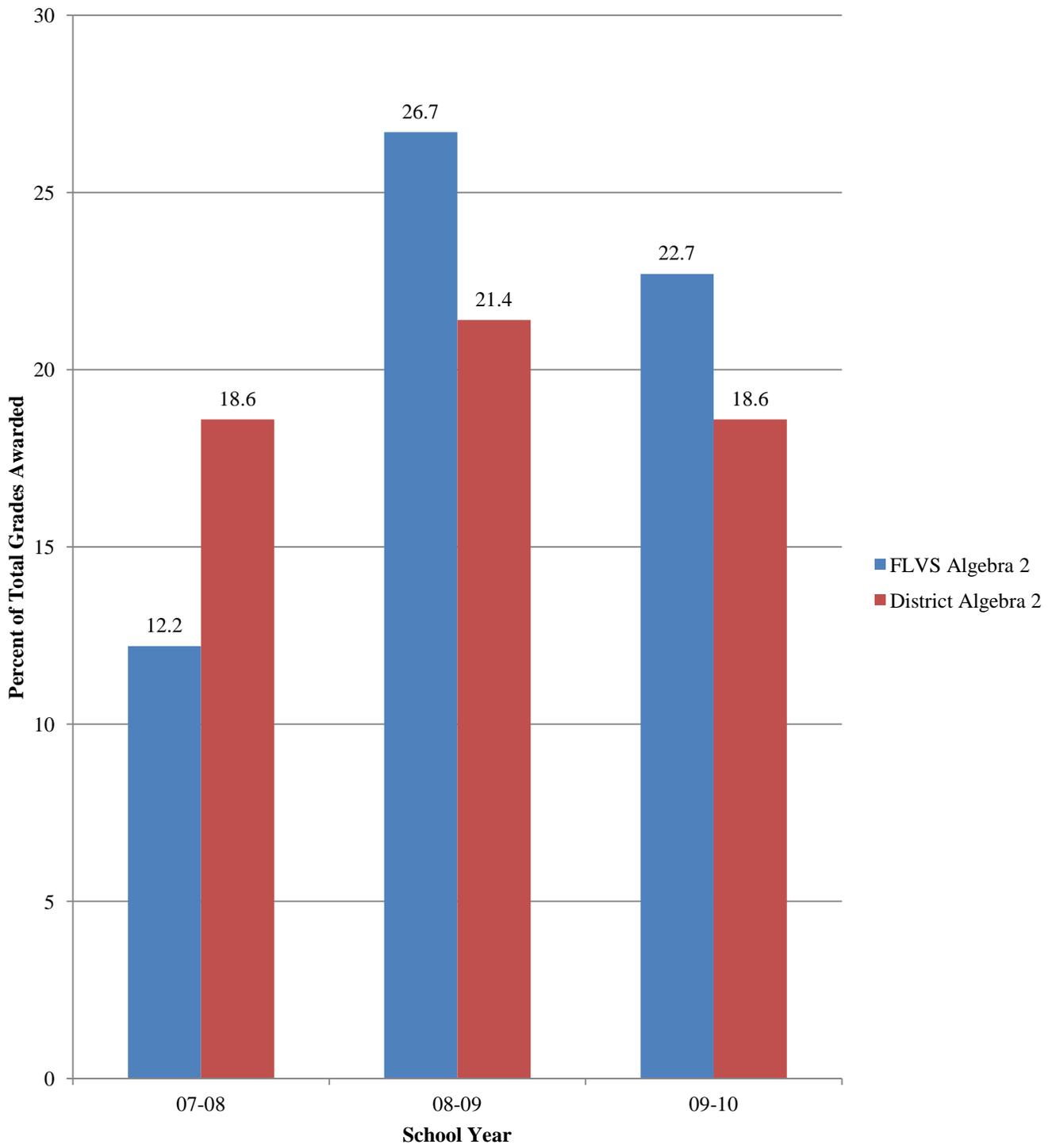


Chart 15: Geometry "F" Grades

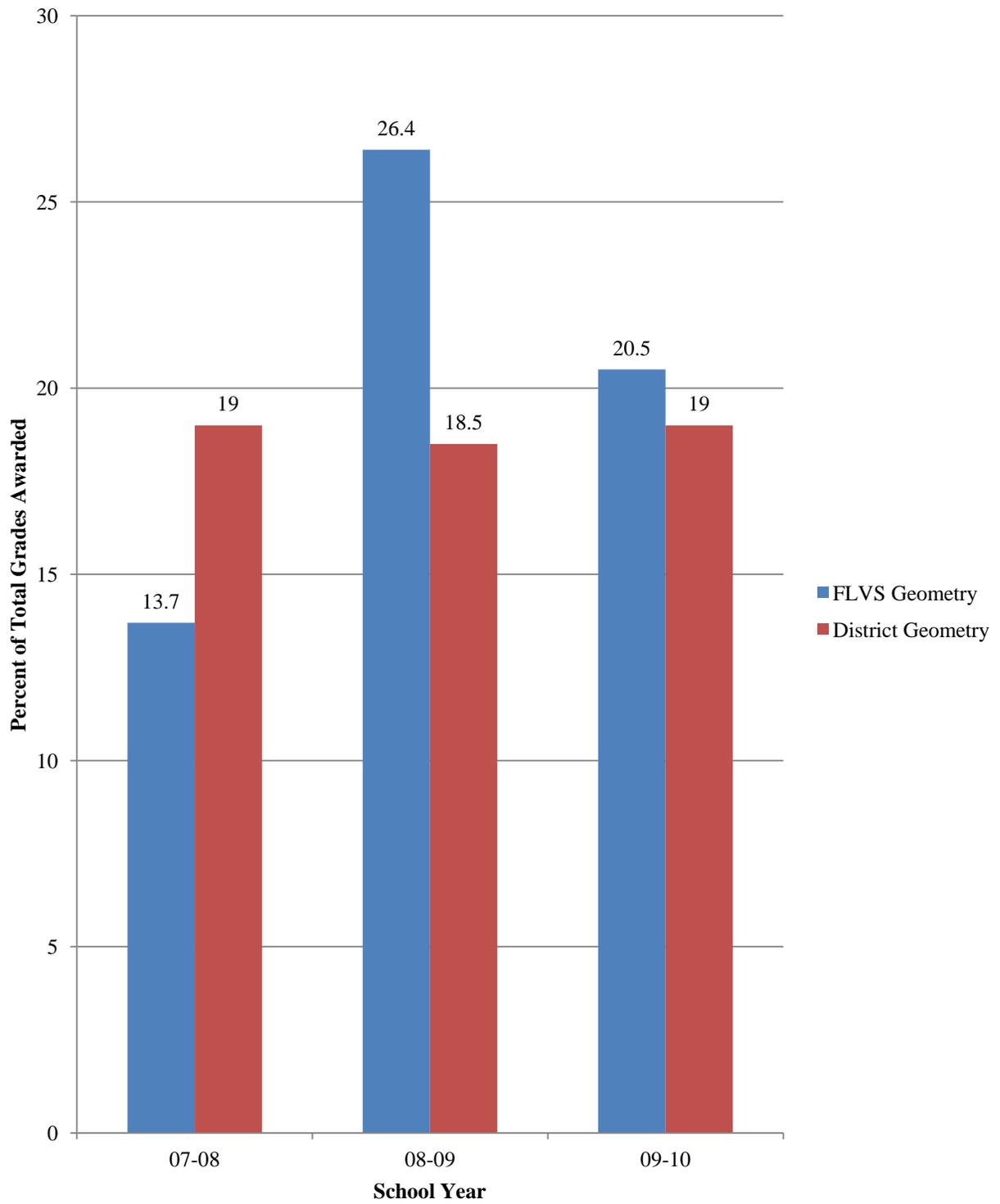


Chart 16: Percent of Geometry Students scoring Level 3 or Higher on Grade 10 FCAT Math between 2008-2010

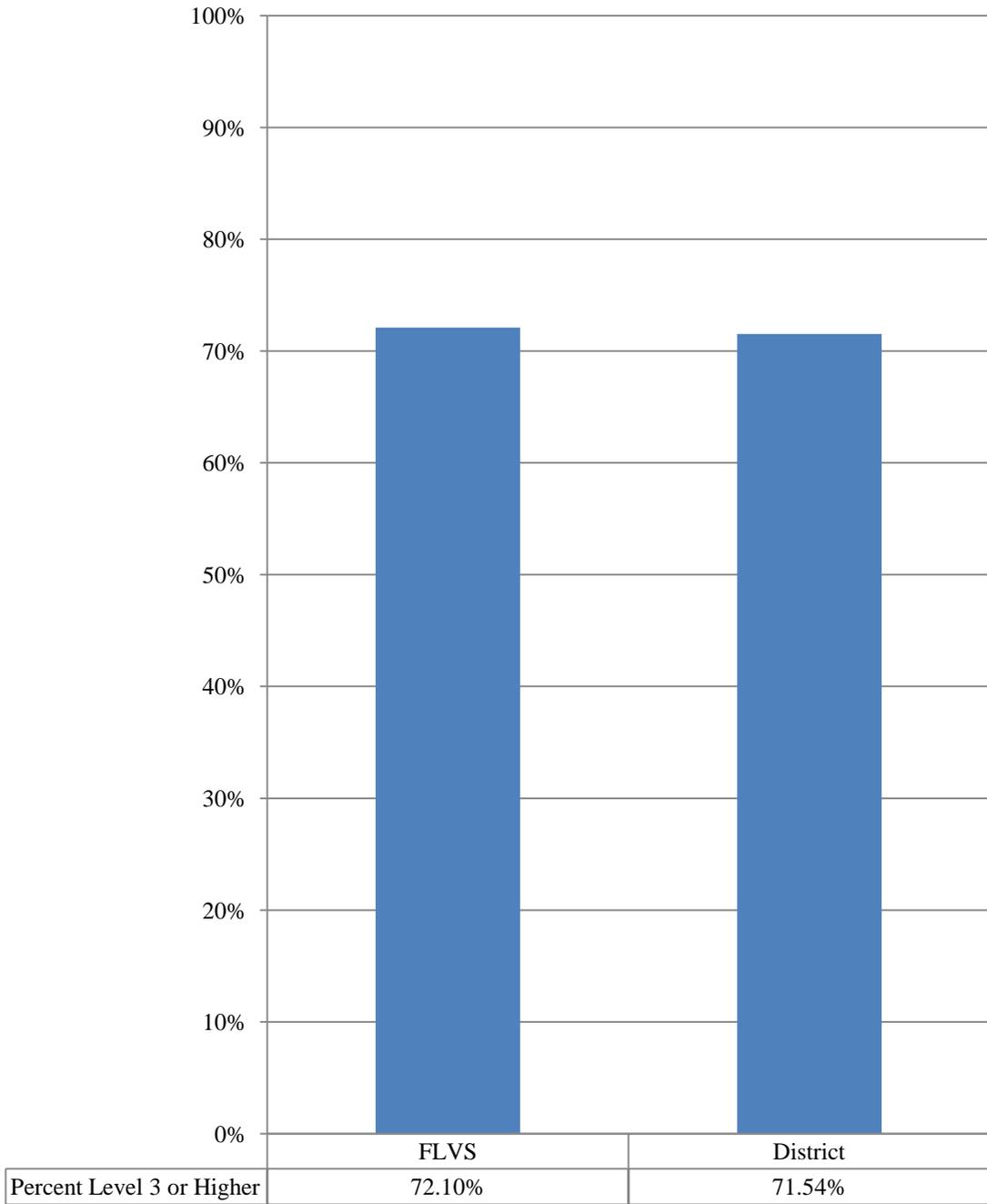


Chart 17: Comparison of Grade 10 FCAT Math scores for Geometry students from 2008-2010

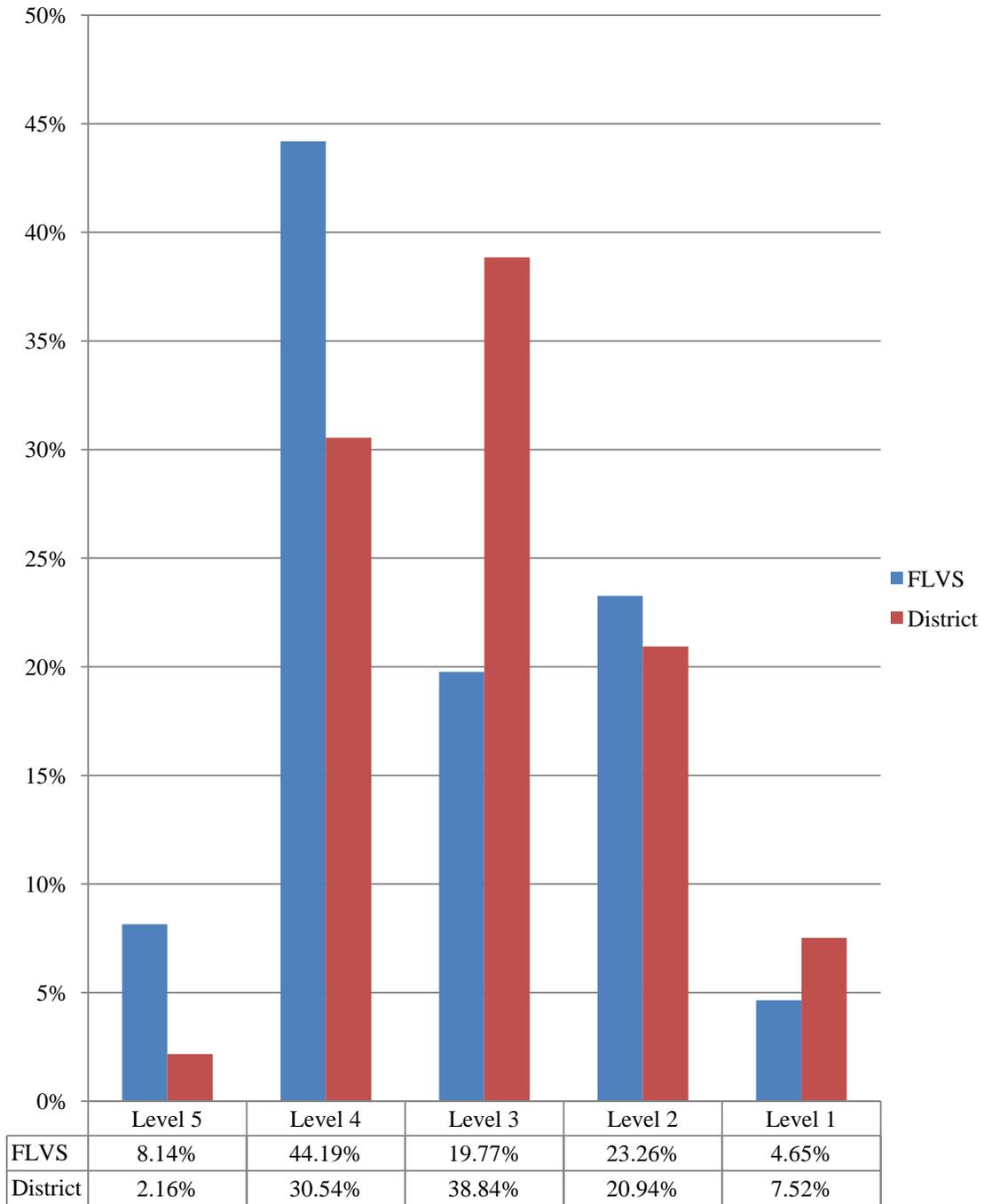


Chart 18: Percentage of Enrolled Students and Withdrawn Enrollments by Ethnicity

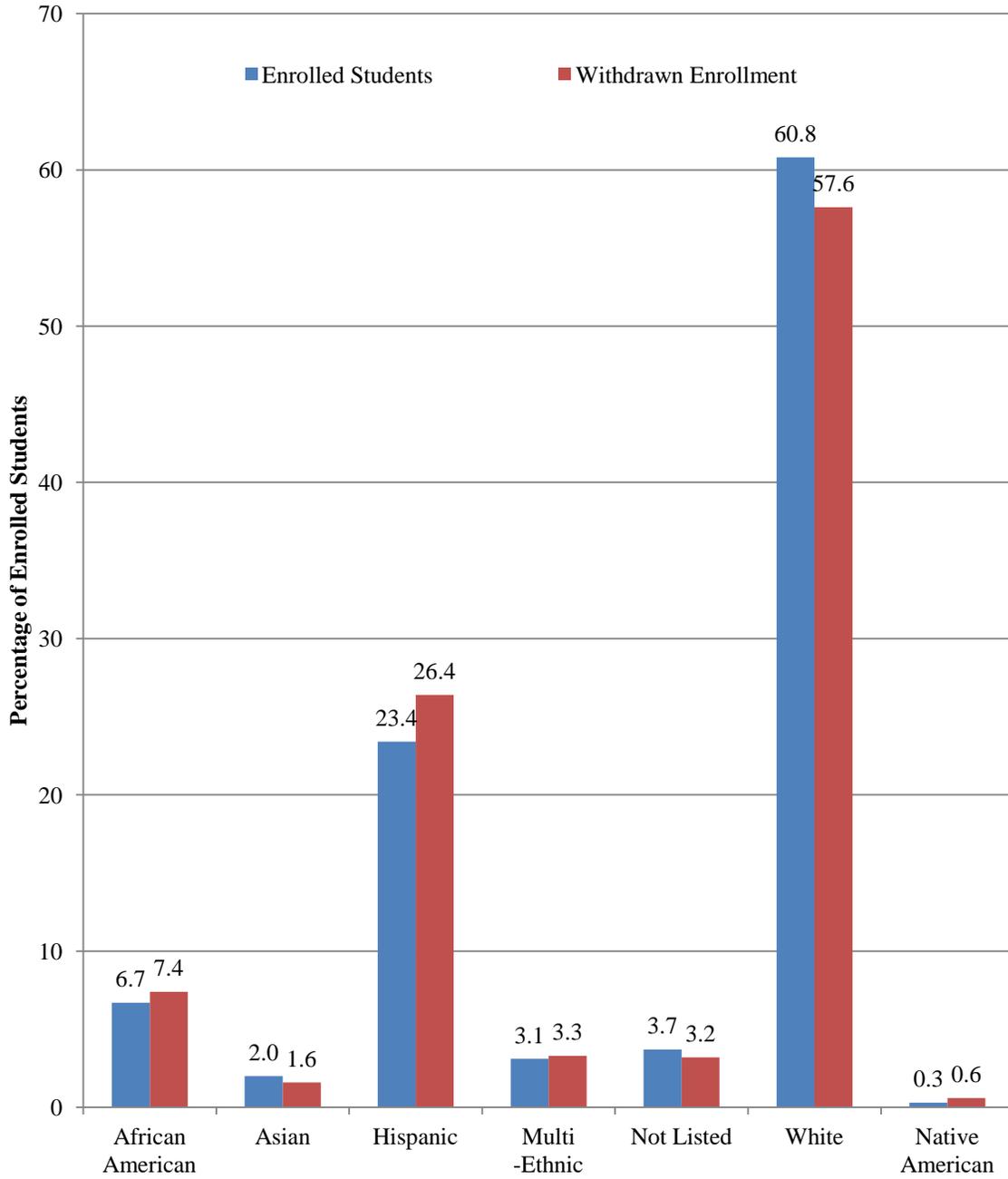


Chart 19: AP Course Enrollments by Years

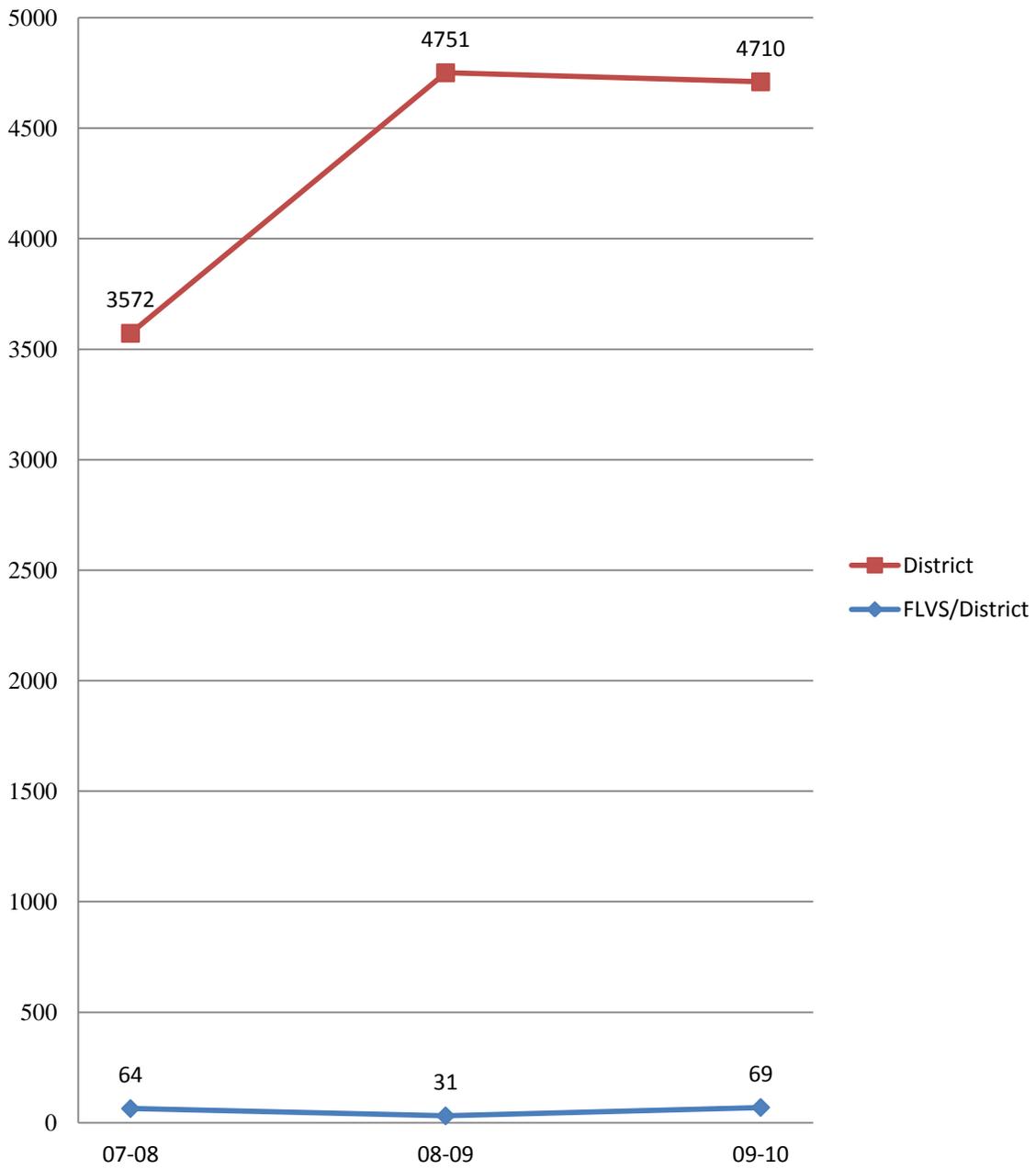


Chart 20: Advanced Placement Performance

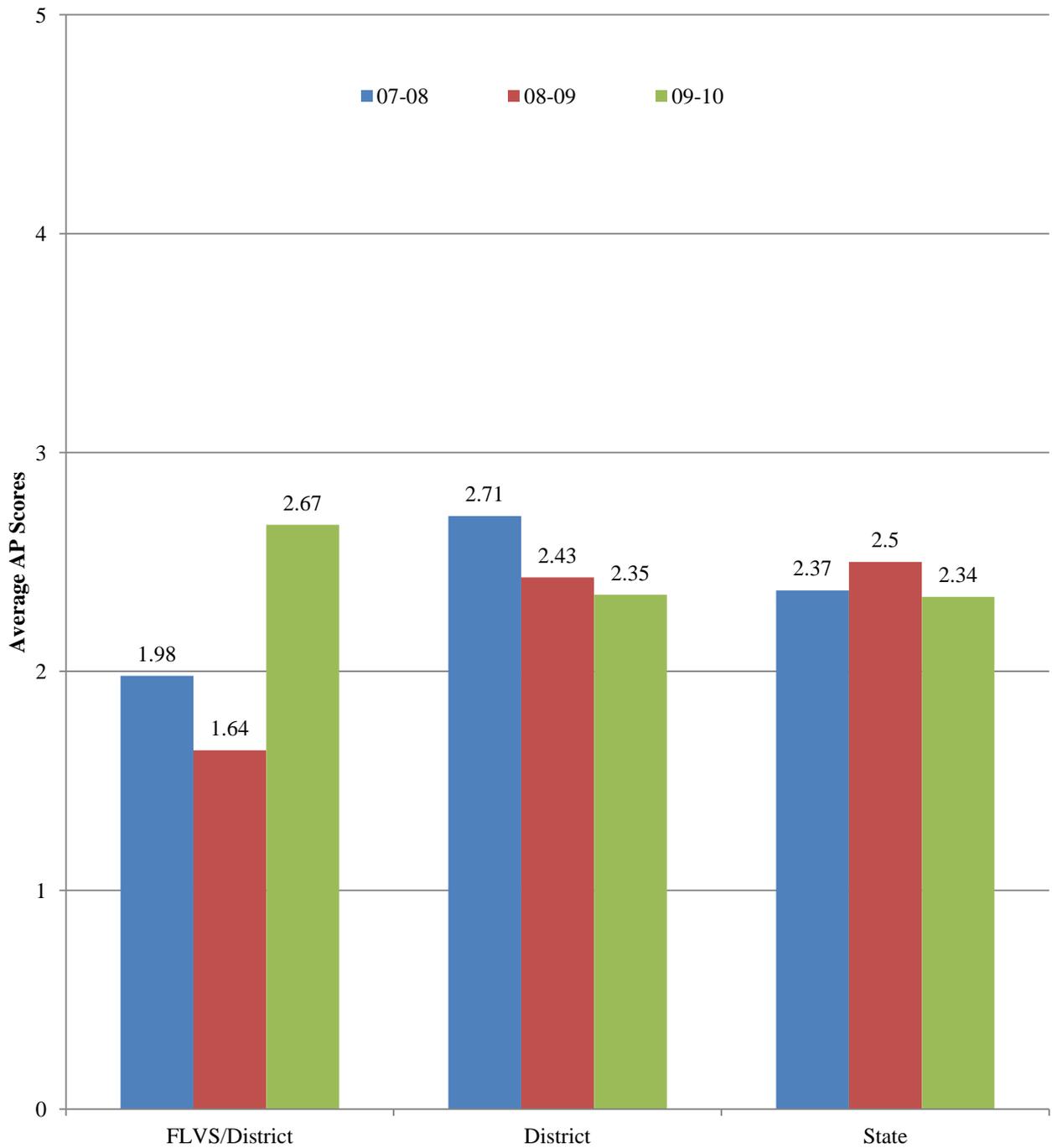


Chart 21: The Percentage Distribution of AP Scores 07-08

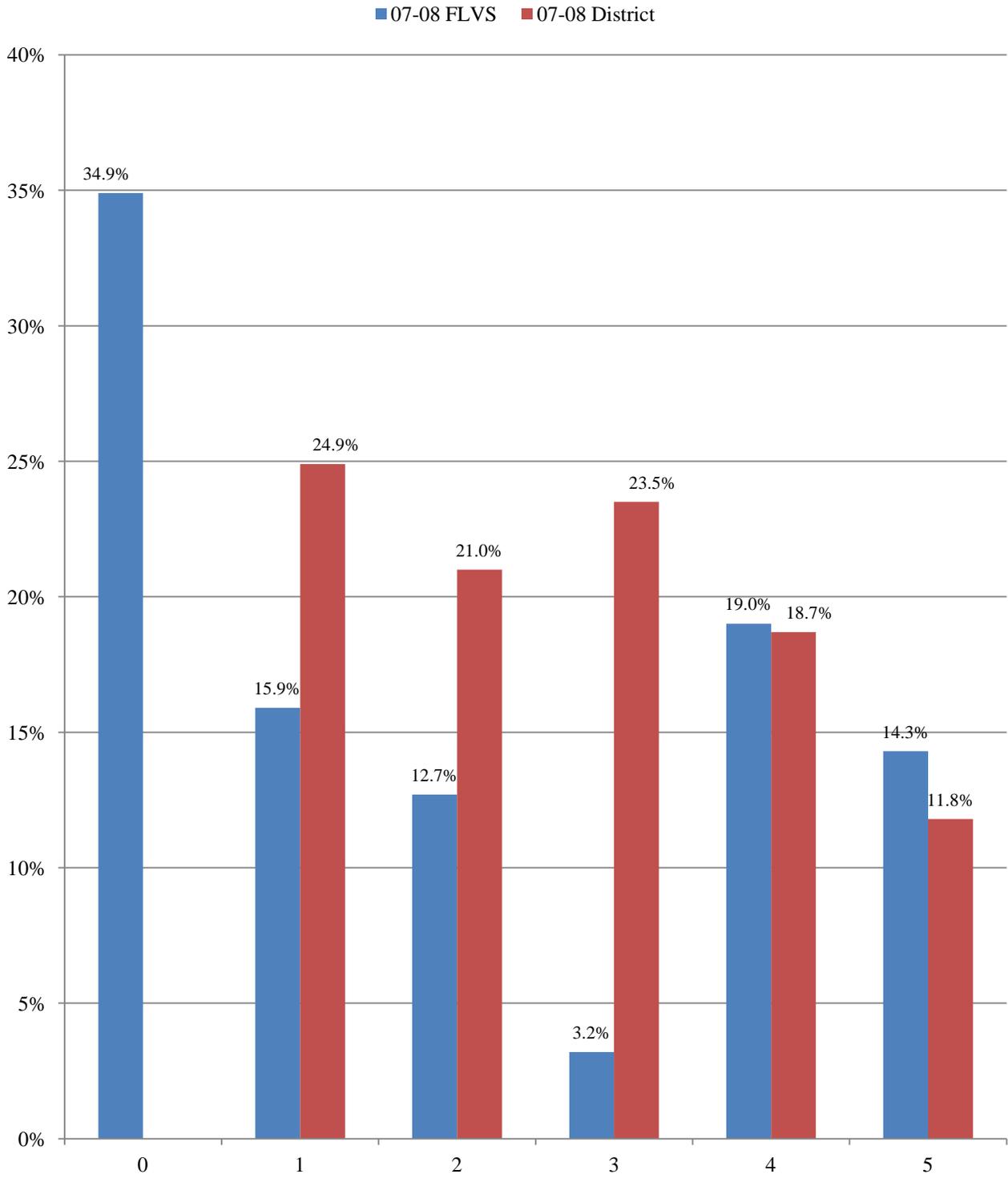


Chart 22: The Percentage Distribution of AP Scores 08-09

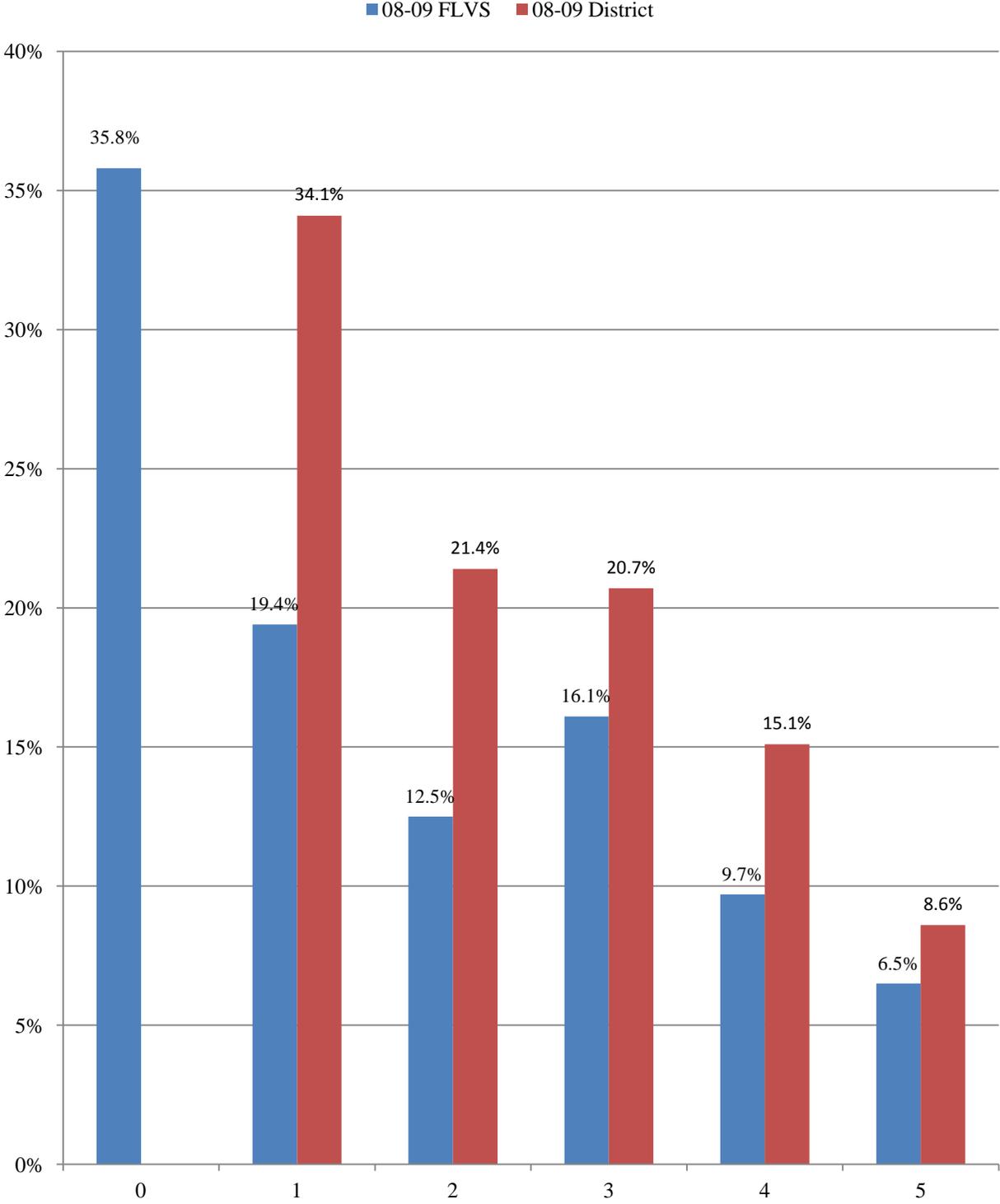


Chart 23: The Percentage Distribution of AP Scores 09-10

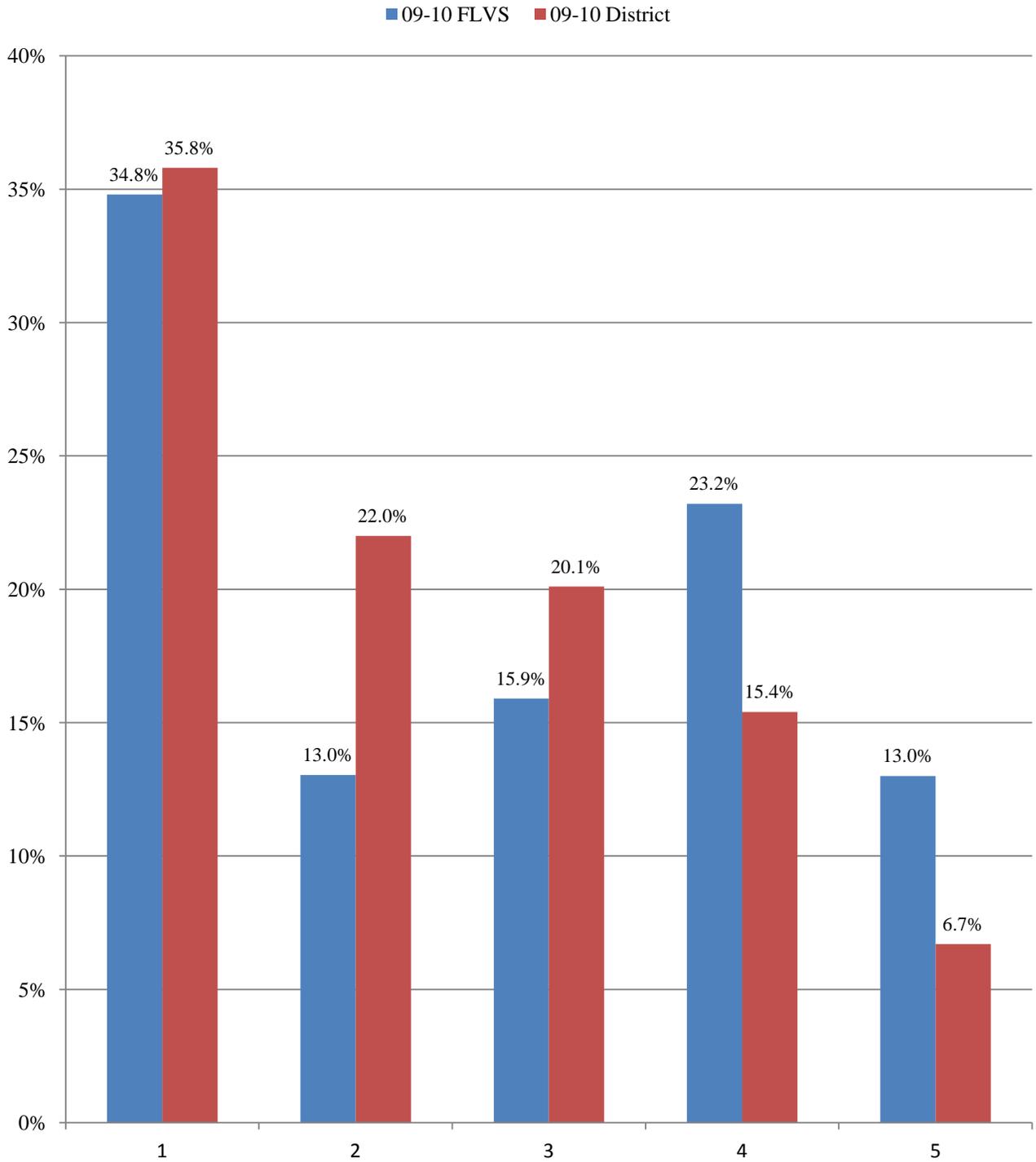


Chart 24: FCAT Reading Grade 10

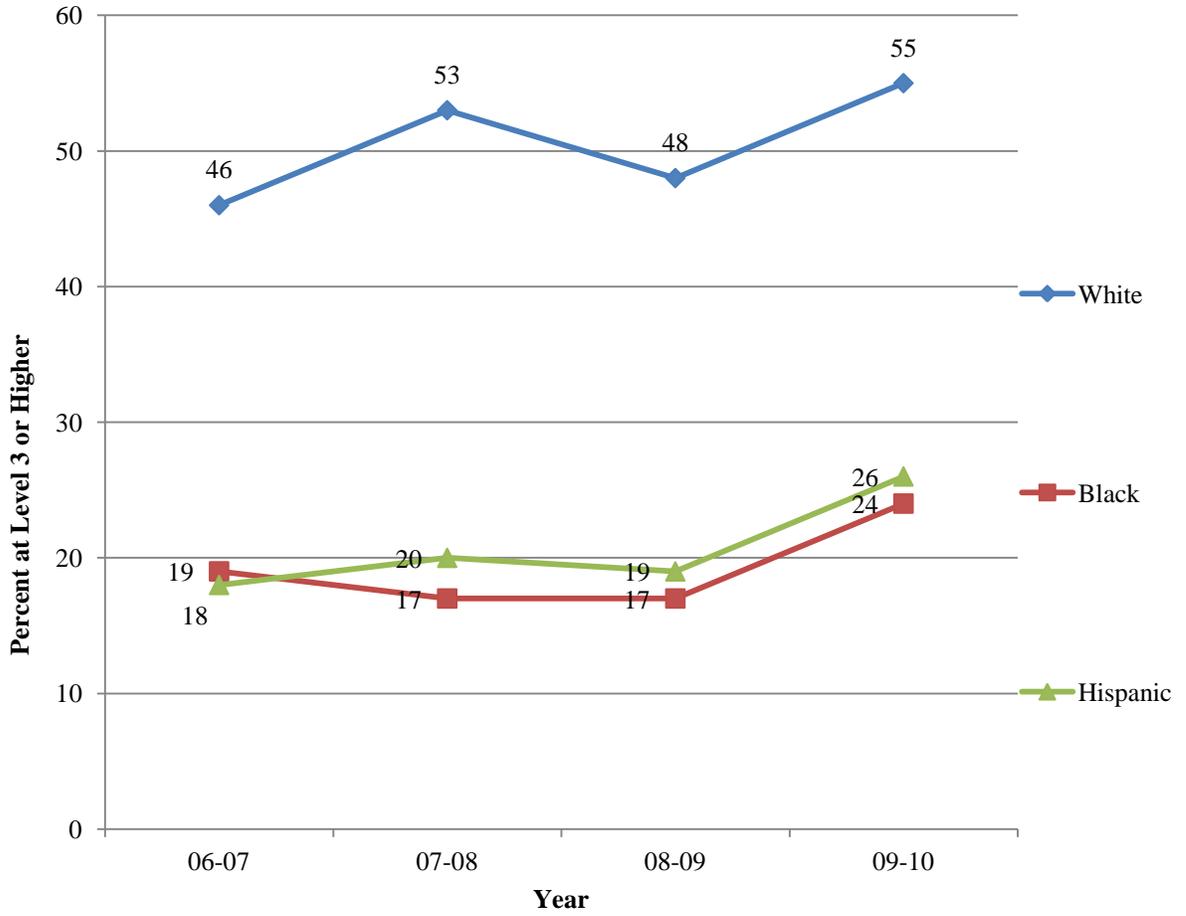


Chart 25: FCAT Math Grade 10

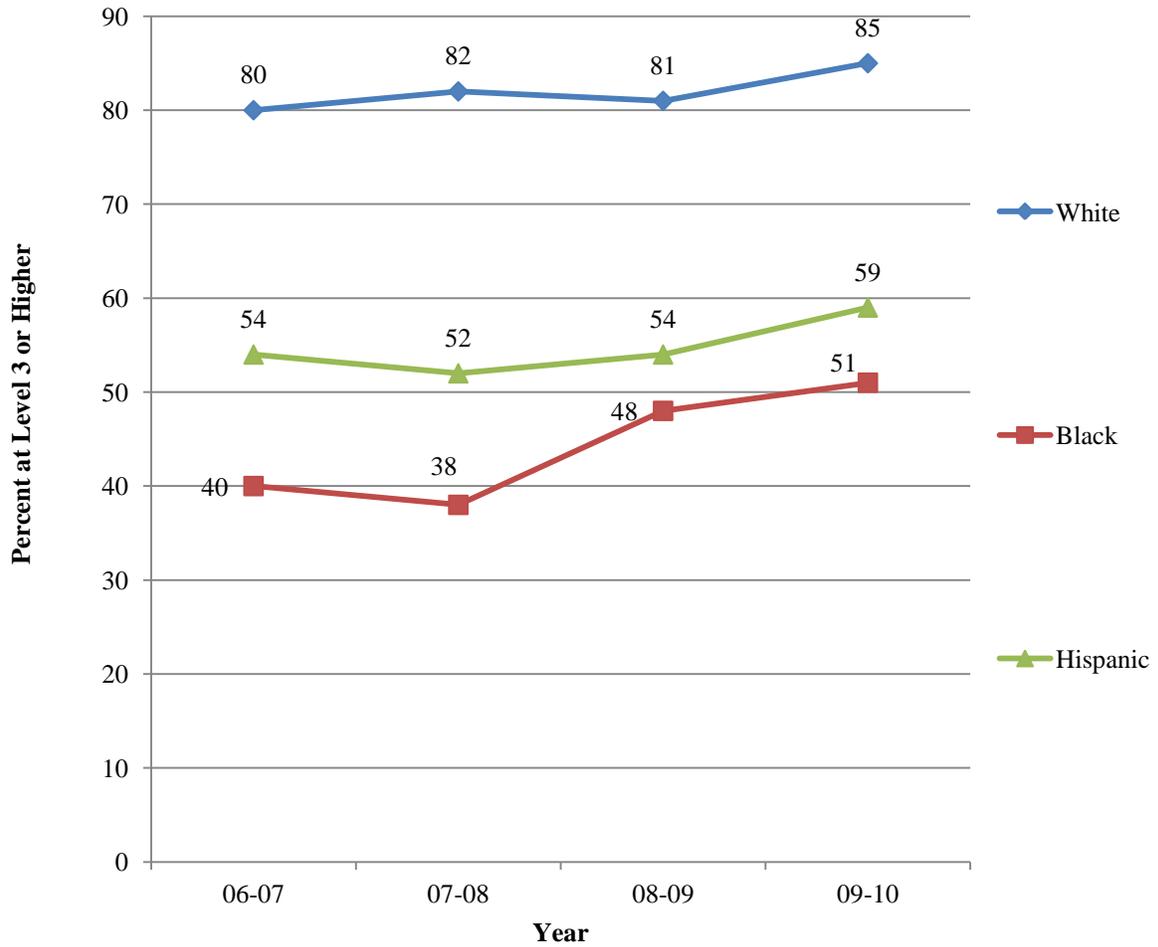


Chart 26: Middle School Course Enrollments by Subject

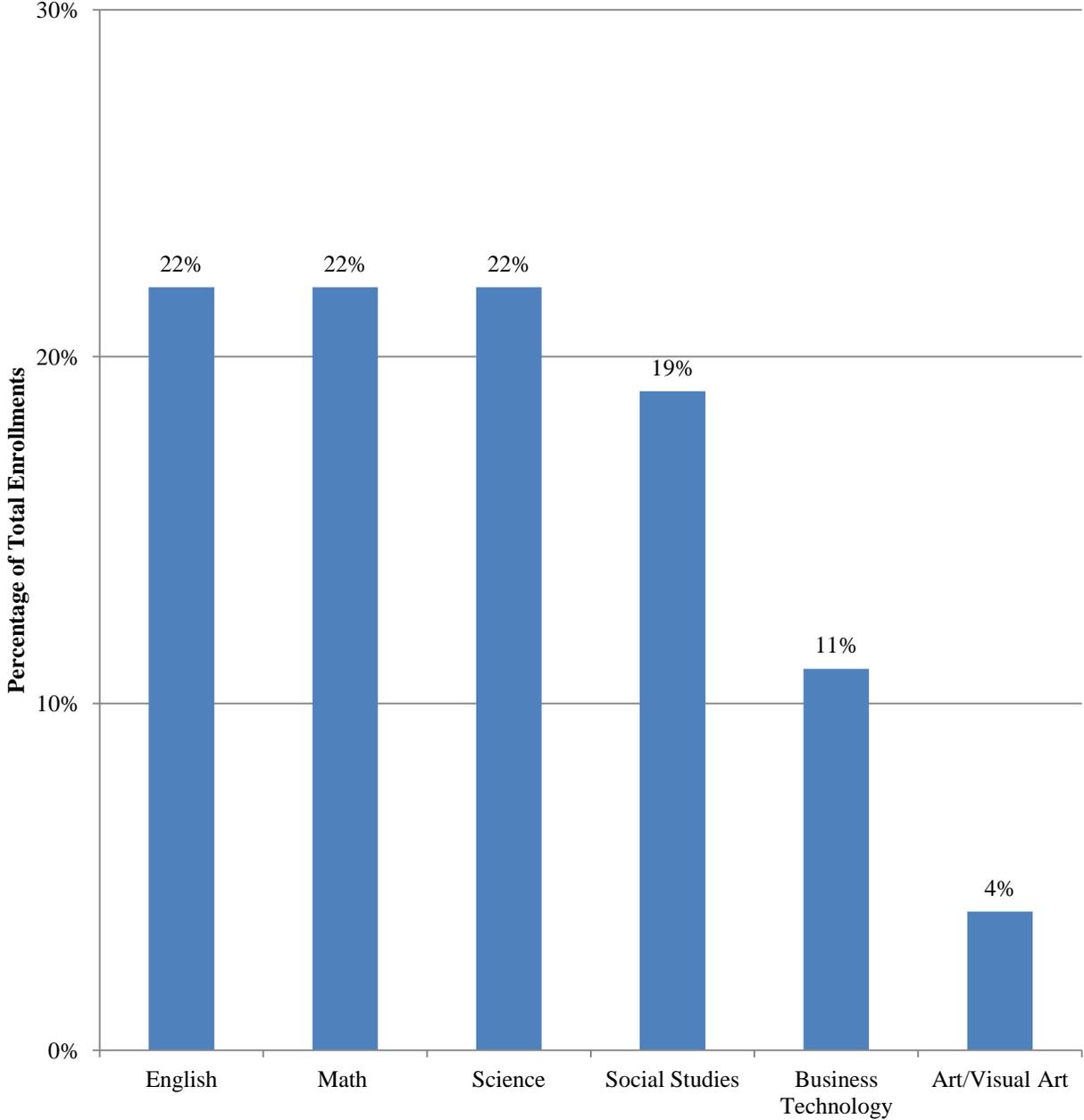
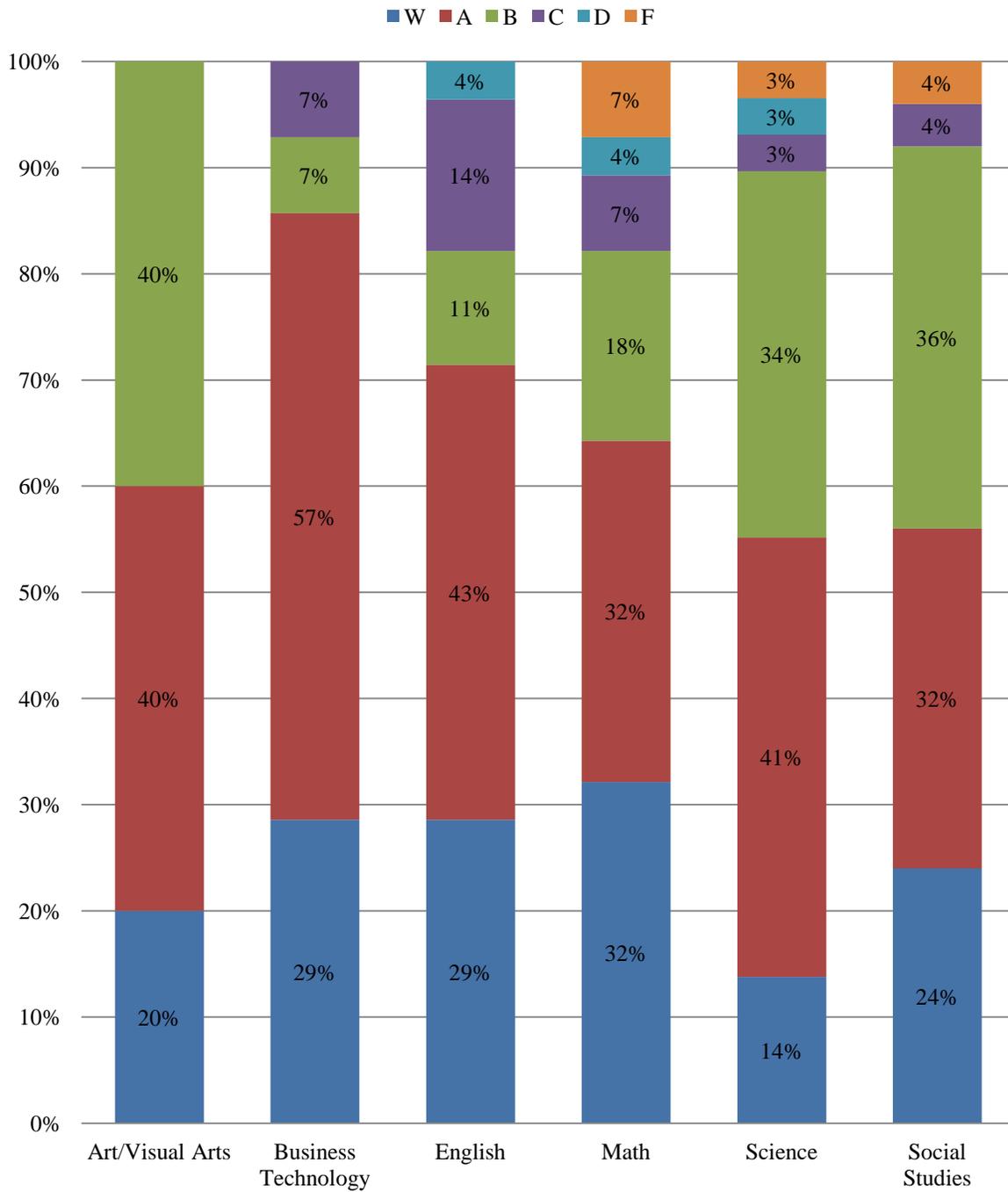


Chart 27: Final Grade Distribution for Middle School Courses by Subject



APPENDIX B
TOP FIFTEEN FLVS COURSE ENROLLMENTS BY DISTRICT STUDENTS

Chart 1: Top Fifteen Courses 2007-2008

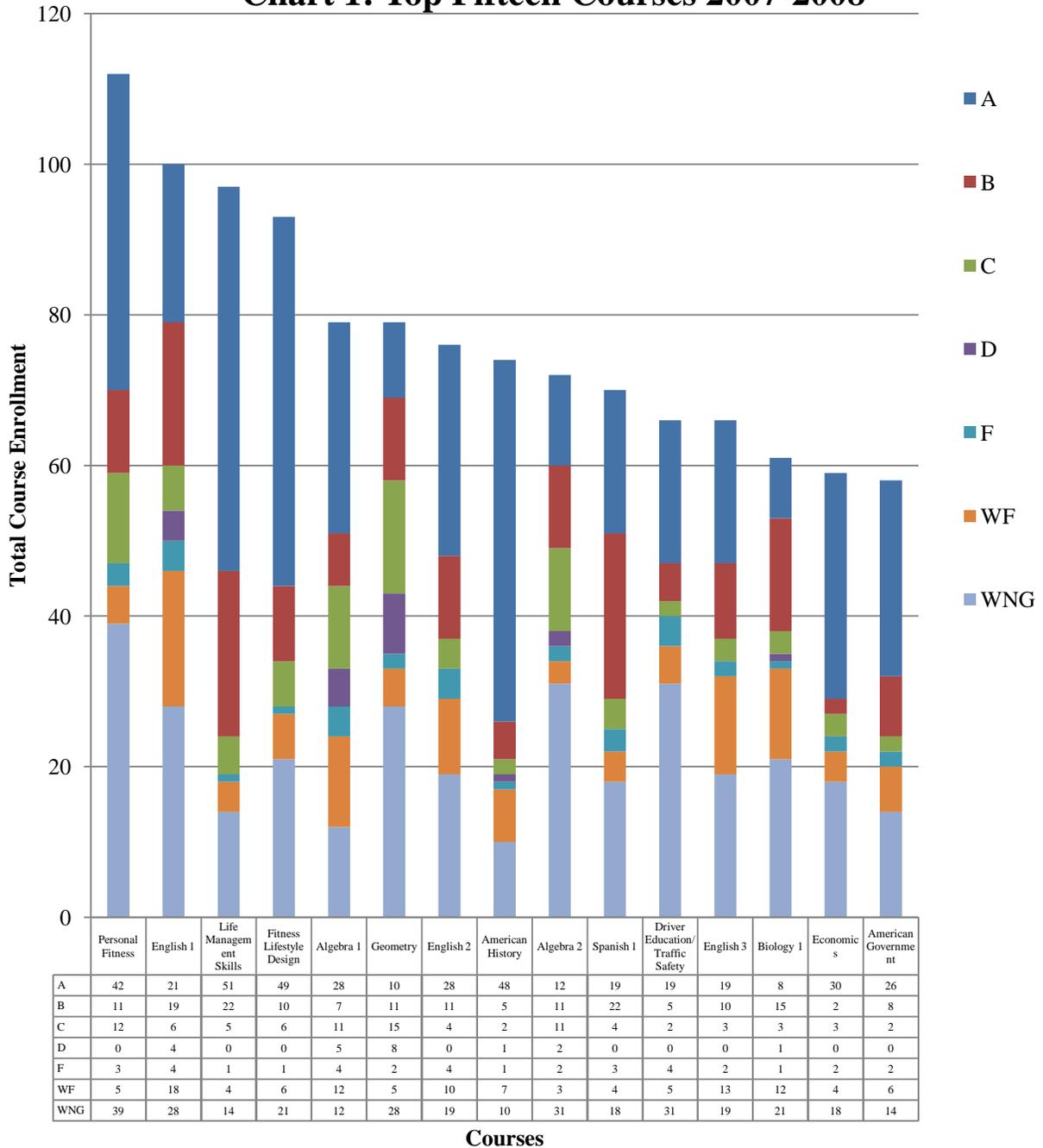


Chart 2: Top Fifteen Courses 2008-2009

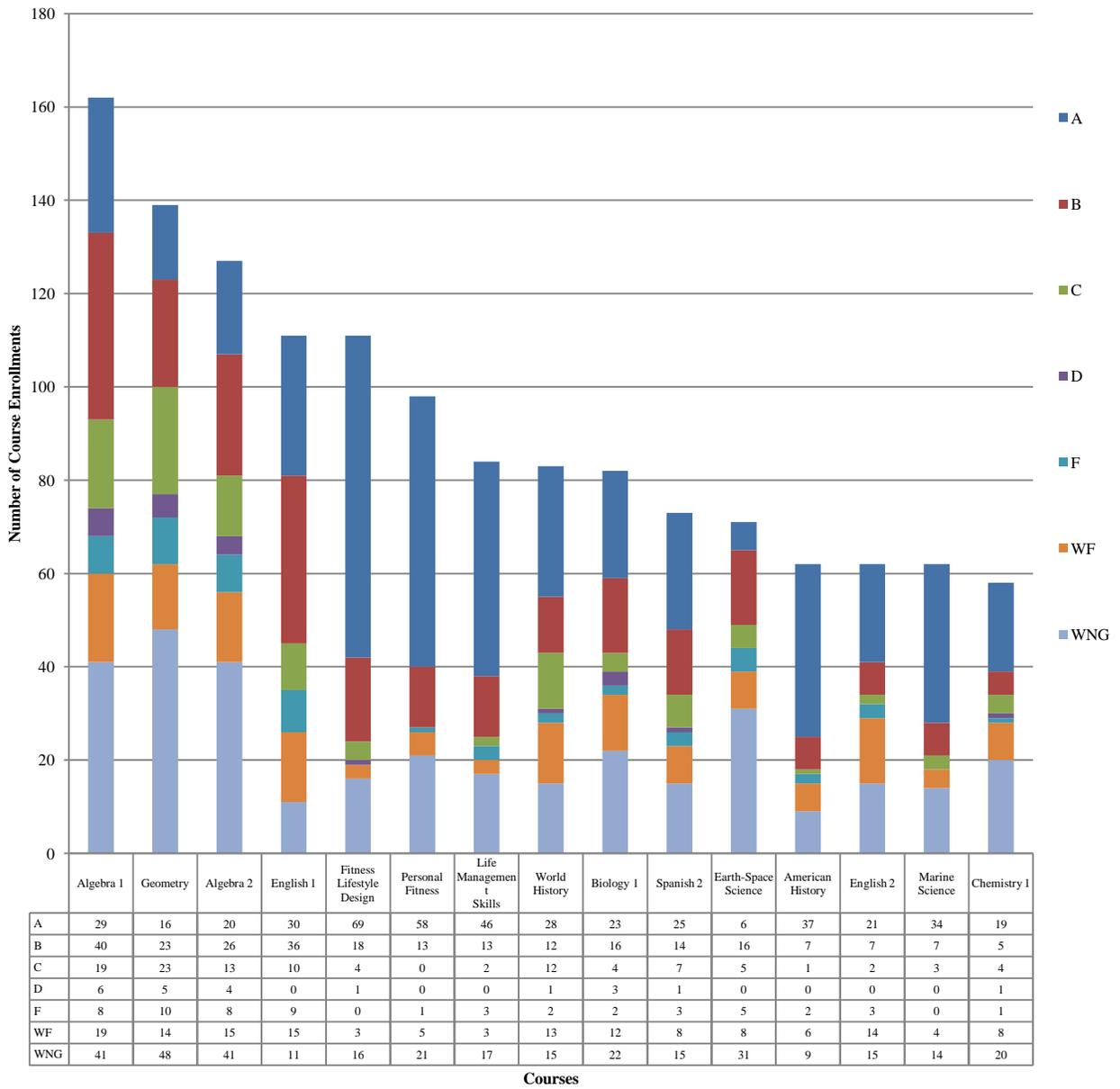
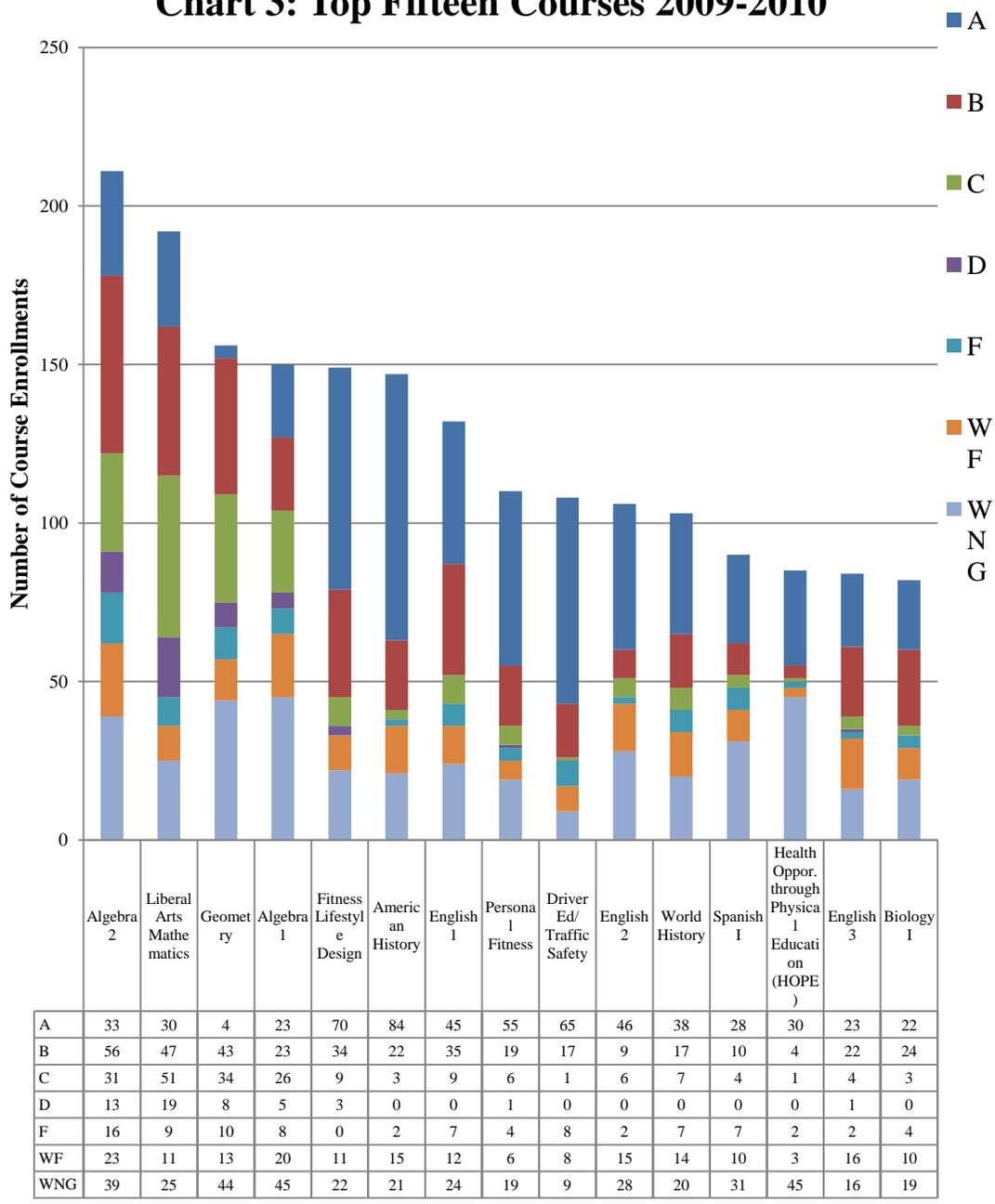


Chart 3: Top Fifteen Courses 2009-2010



APPENDIX C
DISTRICT SUPERINTENDENT FLVS MEMO

REGIONAL OFFICER

DATE: November 2, 2007

TO: High School Principals; High School Assistant Principals, Curriculum; Middle School Principals;
Middle School Assistant Principals

FR: [REDACTED]

RE: Florida Virtual School

I am writing regarding Florida Virtual School. In a memo dated June 21, 2006, John Wain, who was Florida Commissioner of Education at the time, described some of the implications of section 1001.42 (2) F.S.:

Students indicating a desire to take courses with FLVS during the summer, or during and/or after the normal scope of a school day, must be allowed access to FLVS courses. Access means the student must be allowed to take an FLVS course as part of the student's full day curriculum (during the school day), in addition to the normal school day (e.g., 7th period), and during the summer term. For a student choosing to take an FLVS course as part of his or her full day of instruction, the school should make every effort to provide a place for the student to access FLVS content at the school site or allow the student to access the FLVS course at another location.

1. If a student wishes to take a specific FLVS course outside the "normal school day," can a school instead require the student to take the course in a traditional class during the "normal school day"?

No. The statement from the DOE that students must have access to FLVS outside the "normal school day" indicates that students cannot be required to take particular courses in a traditional class during the school day. Students register for and are enrolled in a required course in a traditional class during the school day until they are enrolled in a FLVS course and assigned a FLVS teacher. Before allowing a student not to take a required course during the "normal school day," a counselor must confirm that a student has been assigned a FLVS teacher. Students must remain enrolled in a "full day of instruction" until this confirmation occurs.

2. Can students who take a FLVS course outside of school and outside the normal school day still have a "full day of instruction" at school?
Yes.

3. Can students who take a FLVS course outside of school and outside the normal school day have less than a "full day of instruction" at school?

Yes. For example, a student who is enrolled in a FLVS course could enroll in seven credits of courses in a high school, rather than eight. Before allowing a student to have less than a "full day of instruction" at school, a counselor must confirm that a student has been assigned a FLVS course. Students must remain enrolled in a "full day of instruction" until this confirmation occurs.

MANAGER OF EDUCATION TRAINING
Civility Cooperation Honesty Integrity Patience Perseverance
Respect Responsibility Self-Control Tolerance

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BIOGRAPHICAL SKETCH

Susan McNally grew up in Berea, Kentucky and received a Bachelor of Science from Morehead State University in 1980, with majors in journalism, business administration and mathematics. She completed her Master of Science in educational administration from Florida State University in 2002.

Susan taught middle and high school mathematics from 1985 until 1999 in Florida, Texas, Indiana, Georgia and Pennsylvania. In 1999, she began work with the Florida Department of Education where she had many roles, including FCAT Project Manager, K-12 Mathematics Program Specialist, and Director of the Office of Curriculum.

Since 2007, Susan has been the Executive Director of Secondary Programs for Collier County Public Schools in Naples, FL. Susan is married and has one daughter.