

Statewide Review of Educational Opportunities

Delaware Department of Education and Delaware State Board of Education

December 2015

PCG | Education

CONTENTS

Chapter I: Introduction and Methodology 2
Chapter II: Delaware's Specialized Education Program Availability 8
Chapter III: School Choice: Geographic and District Enrollment Patterns 28
Chapter IV: School Choice: Student Characteristics 34
Chapter V: Student Demand for Education Options 55
Chapter VI: Summary and Recommendations 61

CHAPTER I: INTRODUCTION AND METHODOLOGY

Introduction

There has been recent and growing interest in reviewing the landscape of Delaware's public schools, and more specifically the diversity of specialized educational opportunities available to Delaware's families and students. In March 2015, Governor Markell charged the Delaware State Board of Education (SBE) and Delaware Department of Education (DOE) with conducting a review of the available specialized educational opportunities.

Statewide school choice was instituted in 1996 to provide a mechanism for student access to the range of specialized educational opportunities available to Delaware's students.[1] The State of Delaware provides an opportunity for families and students to attend schools outside of the traditional resident feeder patterns thus allowing for students to attend schools that may be better suited to their interests or learning profiles. Education options are offered through a range of school types including magnet schools, vocational technical schools, charter schools, and traditional public schools. Currently about 90% of all Delaware public schools accept choice students.

In July 2015, Public Consulting Group (PCG) was contracted by the SBE and the DOE to conduct a study, a *Statewide Review of Educational Opportunities for Delaware Students (SREO),* to document the educational opportunities available to Delaware's school age children. The goal of the review is to provide an up-to-date view of educational program opportunities and an analysis of opportunity access, availability and enrollment. This information is provided to stakeholders in the form of a written report as well as an interactive statewide geographical map detailing school data and information.

The study presented in the pages that follow describes the specialized educational options available to students and provides detailed analysis of their geographic location, choice demographics, and student choice patterns.

PK-12 Education in Delaware

At 2,044 square miles, Delaware is the second smallest state in the United States.[2] Its compact size allows for easy transportation across the state. Delaware is separated into three counties: Kent; New Castle; and Sussex. New Castle County, home to Wilmington, is the state's most populous county. At the southern end of the state, Sussex County is the least populated, but largest in area.

Delaware has 231 schools across traditional school districts, charter districts, and vocational technical districts. This includes magnet schools, early childhood centers within traditional districts as well as specialized schools for students with specific learning needs. Over half of all schools are located in New Castle County.

The number of charter schools fluctuates based on new schools opening or closing. The analyses presented in the report include the 23 charter schools in operation during both the 2014-15 and 2015-2016 school years. The interactive map uses 2015-16 data and includes details about programmatic offerings in the four charter schools that first opened in the 2015-16 school year. The state's 27 charters are primarily all located in the northern half of the state.[3]

Each county has a vocational technical school district.[4] There are three magnet schools in the state which are housed within traditional school districts but accept students from throughout Delaware. In addition to magnet

[1] The State of Delaware, *Title 14,* http://www.delcode.delaware.gov/title14/c004/index.shtml
[2] http://www.city-data.com/states/Delaware-Location-size-and-extent.html
[3] There are 20 charter schools in New Castle County, 6 in Kent County and 1 in Sussex County.
[4] New Castle County Vocational-Technical School District has 4 schools in the district. Sussex Technical School District and POLYTECH School District are both one school districts.

schools, there are several statewide specialized programs in Delaware for students with special needs, such as the Delaware School for the Deaf, which are housed within traditional school districts. Overall, the distribution of schools of all types in the state mirrors the state's population density.

DISTRIBUTION OF SCHOOL OPTIONS ACROSS DELAWARE, 2014-15

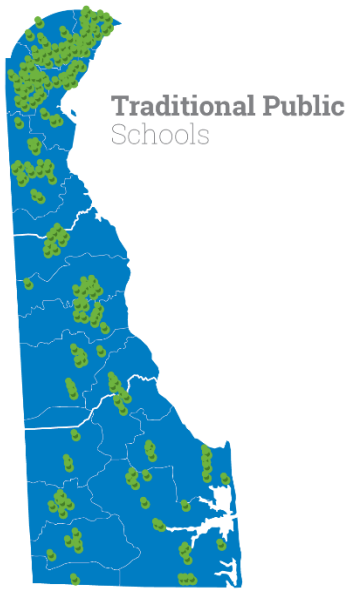


Figure 1.1

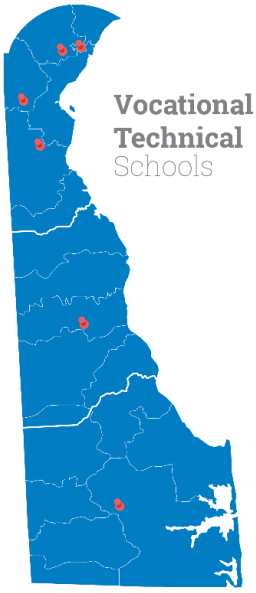


Figure 1.2

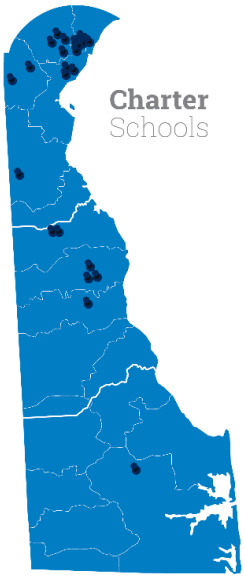


Figure 1.3

There are 135,000 students who attend Delaware public schools in 2015-2016. Over the past decade, the student population has risen by 10%. During this time period, student demographic characteristics have shifted. Hispanic/Latino (90% increase) and Asian (45% increase) students saw the greatest overall population growth, while the number of white students declined by 5%. The state also saw a dramatic increase in students from low income families (70%) and English Language Learners (64%).

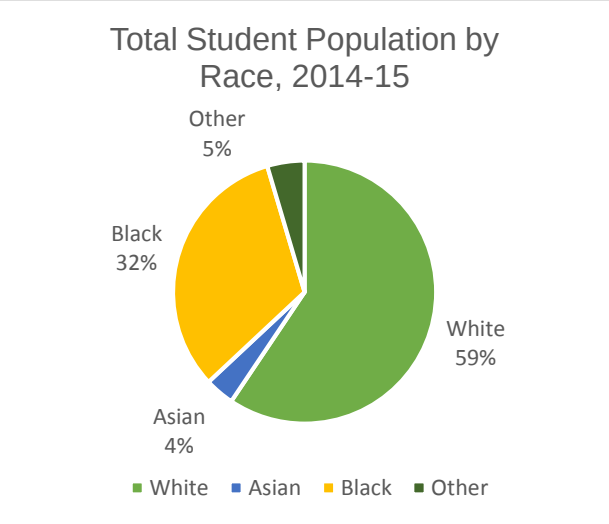


Figure 1.4

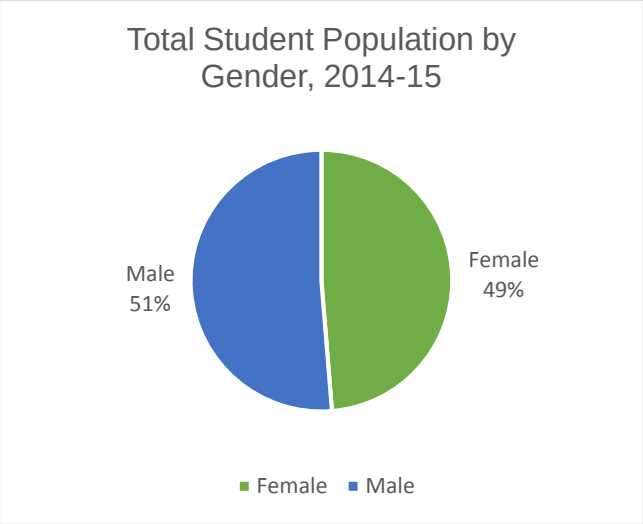


Figure 1.5

Low Income	Students With Disabilities	English Learner
35%	14%	6%

A quarter of all Delaware public school students exercise school choice in some capacity, either by electing to attend other schools in their home district or to attend other public schools outside of their home district. Beyond the school options available through school choice, students also participate in specialized educational program opportunities offered by their schools, including but not limited to: arts programs; Science, Technology, Engineering and Mathematics (STEM) programs; Gifted and Talented programs; World Language Immersion; International Baccalaureate (IB); Advanced Placement (AP) courses; Career and Technical Education (CTE) pathways or courses; dual enrollment; or credit recovery.

Delaware students also attend non-public schools, including private, religious/parochial, and home schools. More than 20,000 students attend non-public schools in Delaware, representing roughly 13% of the state's school age population. Among the students in non-public schools, 13% are home schooled and 87% attend a private school.[5] While participation in private schools is considered a form of school choice, this report, when referring to school choice, will focus on public school choice options for students.

Research Questions

The study conducted by PCG is framed by three research questions.

1. What is the current landscape of specialized educational offerings?
2. What are student choice patterns across the state?
3. Are schools/districts and the state meeting the known demand? If not, where and in what ways?

School Choice Application Process

For students who are interested in education options beyond those offered by their geographically determined School of Residence, Delaware has established a common application for use in applying to schools accepting choice students. In addition to the common application, schools are permitted to have a supplemental form and may request additional information from applicants specific to their mission or program. The application process is locally determined and districts and schools manage their own lotteries for available seats. DDOE provides information on the choice process in general through its website with links to school and district websites where specific applications may be found. Further information about the school choice application process can be found at the following link: http://www.doe.k12.de.us/domain/81.

Data

Data collected for the study include all district, vocational technical, magnet, charter schools, and public schools identified to serve particular populations (e.g., students with severe cognitive disorders, students who are hearing impaired). Magnet school data were included in the analysis of traditional school districts as they are each part of a district.[6]

[5] State of Delaware, *School Choice Information, http://profiles.doe.k12.de.us/SchoolProfiles/State/Account.aspx*
[6] Magnet schools are located in Red Clay Consolidated School District and Indian River School District.

Data were drawn from multiple sources including Delaware's longitudinal data system, a separate enrollment projection study, and a survey of traditional and vocational technical districts, and charter schools developed and administered by PCG. Data collected include:

- Demographics
- Geographic information
- Enrollment patterns/trends
- Choice trends (including application information and wait list numbers)
- Specific information about specialized educational programs

The analyses of these data are intended to help education stakeholders in Delaware make data-driven policy, program, and enrollment decisions going forward.

Because this study was conducted during fall 2015, data span the 2014-2015 and 2015-2016 school years based on data availability at the time of the analysis.

Survey Development and Administration

A targeted, online survey was developed in collaboration with DDOE and SBE to solicit current (school year 2015-2016) and historical information from district and charter school leaders to fill knowledge gaps regarding specialized programs, enrollment, and demand for educational programs. Surveys were administered at the district level for traditional schools and vocational technical schools in an effort to minimize the burden on building administrators. Surveys were directly distributed to charter school leaders.

DDOE and PCG introduced the survey through an email to potential respondents that alerted them to the pending survey and invited them to a WebEx presentation to clarify the purposes and data needs of the survey. Following the information meeting, DDOE sent an invitation to respondents that provided a link to the online survey. The survey was open for 5.5 weeks in the fall of 2015, and reminder emails were sent regularly to local education leaders to maximize participation. In some cases, follow up phone calls were also required.

Overall, 93% of school districts and charter schools responded to the survey. All traditional public school districts and vocational technical districts responded to the survey on behalf of all schools within the district, and all but three charter schools submitted responses.

SURVEY DATA LIMITATIONS

Data quality and survey completeness varied widely by respondent. Several respondents indicated either not collecting or maintaining data required to answer certain questions. While charter schools were able to provide their number of applicants and waitlist data, traditional schools did not provide uniform data around applicants or waitlist. Very few schools were able to provide data regarding previous years of applicants or waitlist information. Availability of program level data was also limited. Several districts indicated these data were kept by individual schools, many of whom maintain course-level enrollment data in lieu of program-level enrollment data.

Respondents provided the most complete data on questions related to school capacity and whether programs were offered at each school. Although survey respondents were asked to submit choice applicant numbers and applicant demographic information, these data were not universally available and therefore could not be included in the analysis. Other data that were not available in all districts include specialized educational program applicant numbers and demographics, historical specialized education program waitlists, and historical number of school choice applicants.

To the fullest extent possible, PCG included survey data in our analysis. However, the lack of consistent data limited our ability to perform certain analyses related to both known and future demand.

Interactive Map of School Choice Offerings

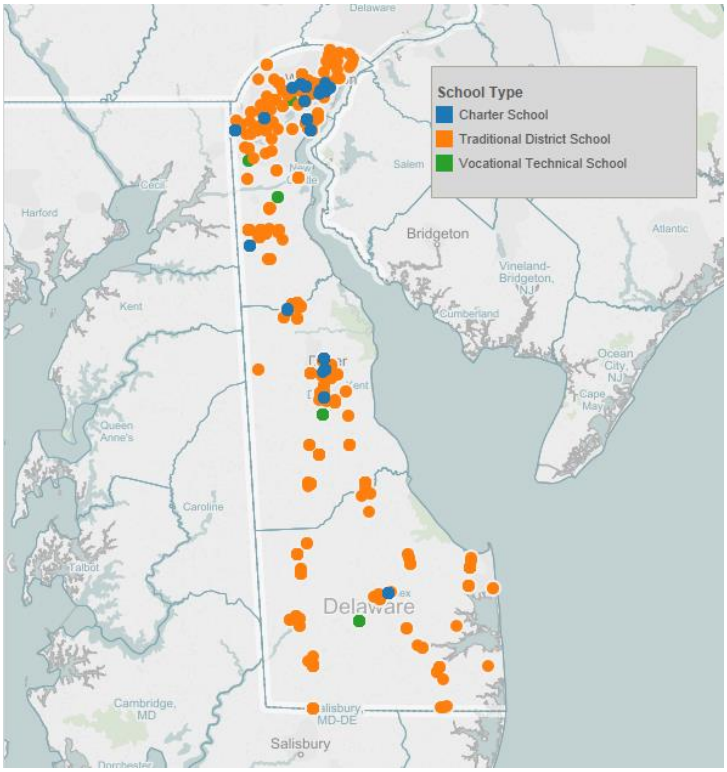


Figure 1.6

As a separate deliverable, PCG created an interactive map of program offerings using the Tableau Software and mapping tool. All schools in the state of Delaware are included in the map. Various filters allow for data disaggregation. These filters include: district; county; program offering; instructional focus; and school type (traditional district school, charter school, vocational technical school). Schools are color coded on the map to distinguish between school types. Hovering over a school, will display additional details about the school including school name, district name, address, school type, grades served, whether the school is open to choice, and the 2014-15 school enrollment. Selecting a school, will trigger a dropdown on the right hand side of the programs offered at that school. Two additional tabs offer a more detailed look at the Career and Technical Pathway offerings as well as Advanced Placement/International Baccalaureate offerings. These charts can be filtered by school, district, county, and CTE Pathway or AP/IB Course Offerings. This interactive tool will be publicly available on the DDOE website.

Organization of the Report

The report is organized into six chapters.

- **Chapter 1: Introduction** provides an introduction to the study, the methodology employed and data collected as well as an overall view of K-12 education in Delaware.
- **Chapter 2: Specialized Educational Program Availability** examines the landscape of specialized educational programming in the state, including the availability of specialized educational programs by district.
- **Chapter 3: School Choice – Geographic and District Enrollment Patterns** focuses on where choice schools are located across the state and the overall student enrollment patterns for these schools. .
- **Chapter 4: School Choice – Student Characteristics** examines participation in choice programs by student subgroups, including race, ethnicity, low income status, special education and students who are English Language Learners.
- **Chapter 5: Student Demand for Educational Options** reviews current local demand as reported by schools and districts, identifies gaps in current programming and analyzes future demand for programs based on enrollment projections.
- **Chapter 6: Summary and Recommendations** concludes the report with a set of recommendations concerning the future collection of specialized educational opportunity data to support statewide policy decisions and state and local level actions regarding future specialized educational programs.

Acknowledgements

We would like to thank the *Statewide Review of Educational Opportunities for Delaware Students* project leadership, Susan Haberstroh (DDOE) and Donna Johnson (SBE), for their partnership and support for the study. We would also like to thank DDOE staff, Corey Downer and Sean Anthony, for providing data and answering our questions throughout the project. We would also like to thank Ed Ratledge from the University of Delaware for his contributions on enrollment projections We are grateful to the educators that gave their time to complete the online survey and for providing important information regarding specialized educational opportunities in the state.

CHAPTER II: DELAWARE'S SPECIALIZED EDUCATION PROGRAM AVAILABILITY

What are the current specialized educational opportunities offered in each of the state's public schools?

Across Delaware's public schools, students have the opportunity to participate in a variety of specialized learning opportunities including advanced, college-level coursework, programs designed to provide research-based strategies to struggling learners, and programs that cater to specific student interests, such as visual and performing arts. While most specialized educational opportunities are academic in nature, several are designed to equip students with the range of skills they will need to succeed in higher education and in the workforce. Some programs prepare students by providing access to advanced academic content during high school. Other programs support students in developing the leadership, organizational, and interpersonal skills that lead to postgraduate success.

This chapter will explore the range of specialized educational opportunities available by school level (elementary, middle, and high school) and geographic location across Delaware's traditional, charter, and vocational technical schools. In the following section, all course level data was provided by the state and is from the 2014-2015 school year. Program level and instructional focus data is from 2015-2016 school year and was provided by schools as part of the PCG survey.

Advanced Courses: Advanced Placement, International Baccalaureate & Dual Enrollment

In Delaware's traditional, charter, and vocational technical schools, students who are seeking increased academic rigor have the option to participate in Advanced Placement (AP), International Baccalaureate (IB), or in a dual enrollment program. Currently, the AP program is available in all of Delaware's traditional and vocational technical high schools serving students in grades 9-12. AP courses are also available in several Delaware charter high schools. IB classes are less widely available and are currently offered in only five traditional school districts (31%). Additionally, several charter and traditional high schools offer opportunities for students to participate in college credit or dual enrollment programs. In 2014-15, there were:

- 9,832 students in AP courses
- 2,421 students in International Baccalaureate courses[7]

[7] Students may be enrolled in more than one course. These numbers do not represent unique student participation, but overall seats.

ADVANCED PLACEMENT

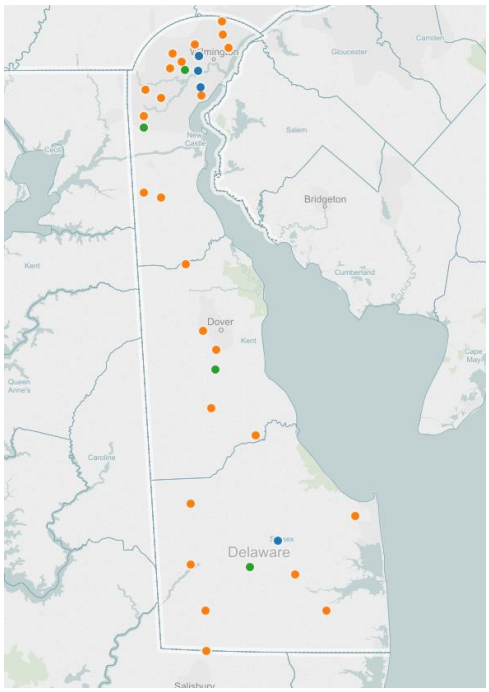


Figure 2.1

Across the state, there are 32 distinct Advanced Placement (AP) courses offered in Delaware's high schools. The number of unique AP courses offered in traditional school districts ranges from 24 in Red Clay Consolidated School District to two in Seaford School District. In vocational technical schools, this number ranges from nine in POLYTECH School District to two in New Castle County Vocational-Technical School District. AP courses are offered in all but two of the nine charter high schools that serve students in grades 9-12 (78%). Of the charter schools offering AP, the Charter School of Wilmington has the greatest number of AP courses (16) and the Delaware Academy of Public Safety and Security has the fewest (1).

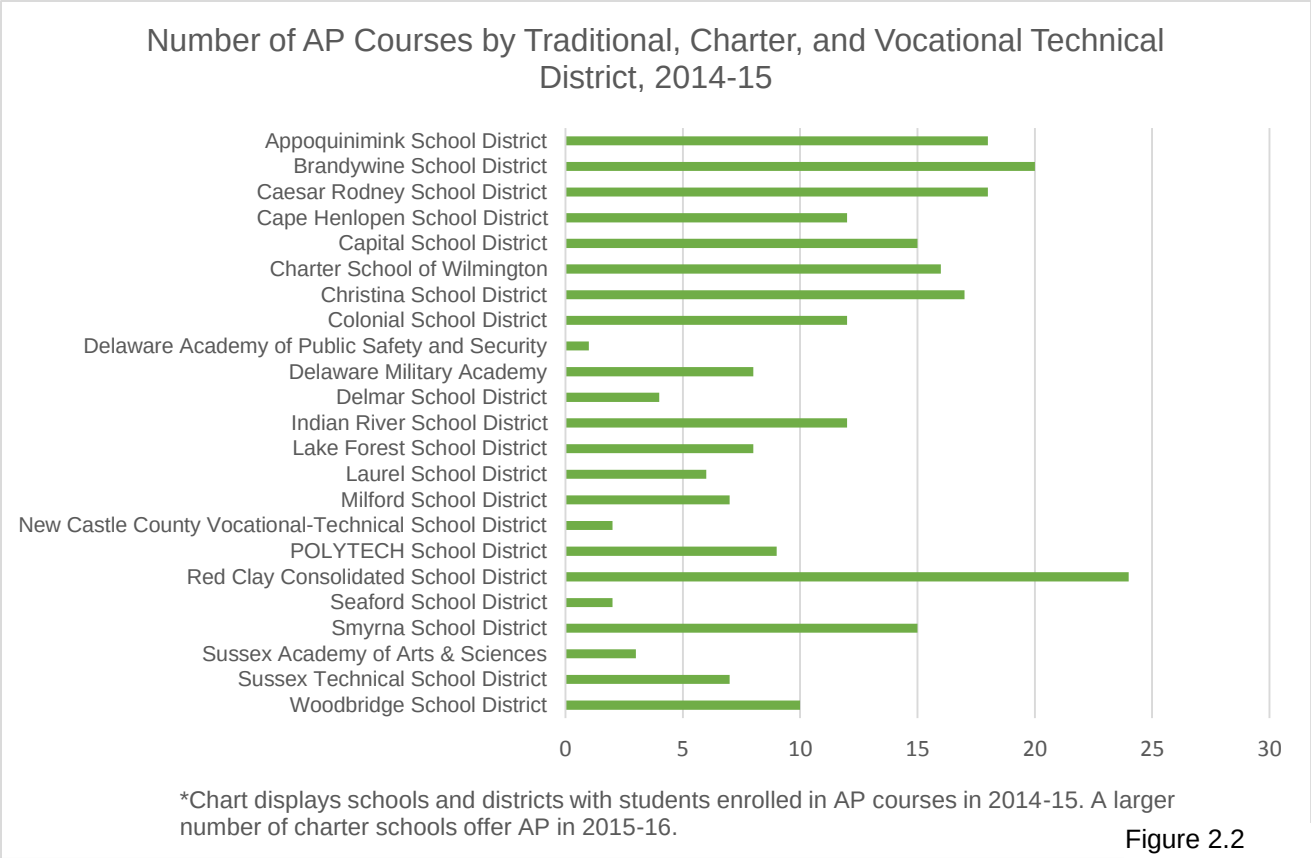


Figure 2.2

The following chart depicts the number of courses available by subject and the number of districts (including traditional, charter and vocational technical) in which they are available.

AP Course Type	# Total Courses	# Districts that Offer
Arts	4	12
English/Language Arts	2	19
History	6	17
Math	6	22
Science	8	21
World Languages	6	12

The following chart displays a full listing of all AP courses available in Delaware.

AP Course Availability			
AP Art: History of Art	AP Economics	AP Italian Language	AP Spanish Language
AP Biology	AP English Language and Composition*	AP Latin (Virgil, Catullus and Horace)	AP Spanish Language and Culture
AP Calculus AB*	AP English Literature and Composition*	AP Macroeconomics	AP Statistics*
AP Calculus BC	AP Environmental Science	AP Microeconomics	AP Studio Art: Drawing Portfolio
AP Chemistry	AP European History	AP Music Theory	AP Studio Art: General Portfolio
AP Comparative Government and Politics	AP French Language	AP Physics B	AP U.S. Government and Politics
AP Computer Science A	AP French Literature	AP Physics C	AP U.S. History*
AP Computer Science AB	AP Human Geography	AP Psychology	AP World History

*most widely available AP courses

The most widely available AP courses in 2014-15 include Statistics, Calculus AB, U.S. History, English Language and Composition, and English Literature and Composition, all of which are offered in 17 or more districts. The courses with the greatest number of students statewide include AP English Language (1,208), AP Psychology (1,158), AP U.S. History (1,126), and AP English Literature and Composition (1,106). The AP courses taken by the

fewest number of students are AP French Language, AP Spanish Language and Culture, AP Latin, AP Italian Language, AP French Literature, and AP Studio Art. Each of these course had less than 20 students registered in 2014-2015.

The largest number of AP courses are available in the state's largest districts and most highly populated areas. The following districts offer the largest number of unique AP courses: Red Clay Consolidated School District (24), Brandywine School District (20), Appoquinimink School District (18), Caesar Rodney School District (18), Christina School District (17), and the Charter School of Wilmington (16). It should be noted that the traditional districts listed also have the largest numbers of schools. Districts in Sussex County have the smallest number of unique AP courses available, with the fewest AP options in Delmar School District, Laurel School District, and Seaford School District.

Although most students enrolled in AP courses are high school juniors and seniors, there were 7 districts with freshman enrolled in AP and 17 districts with sophomores enrolled in AP in 2015. Of the 17 districts offering AP courses to sophomores, 14 were traditional public districts, two were charter districts, and one vocational technical district.

INTERNATIONAL BACCALAUREATE

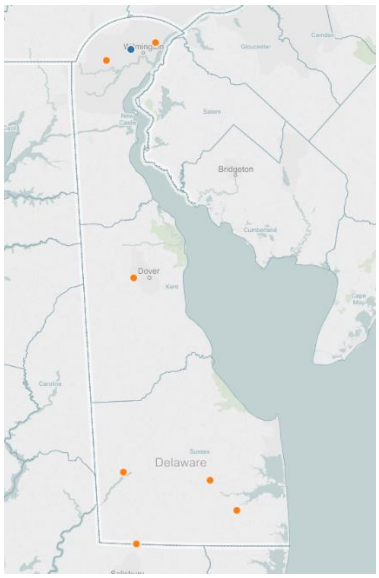


Figure 2.3

International Baccalaureate (IB) courses, which offer a rigorous international curriculum to students, are available in five Delaware school districts. The largest program, offering 16 courses, is in Brandywine School District, and the smallest program, offering one course, is in Capital School District. While the largest quantity of IB courses are in New Castle County districts (3), there is one district in Kent County and one district in Sussex County offering IB courses.

In 2014-15, the most widely available IB courses, offered in four districts, are Chemistry and Language A (English). Art/Design, Biology, History, Language B (Spanish), Music, and Theory of Knowledge are all offered in three districts. The remaining 13 courses are offered in one or two districts. The courses with the greatest number of students enrolled are IB Biology (178), IB Chemistry (181), IB History (262), IB English (400), IB Spanish (257), IB Mathematics (199), and IB Psychology (176). Brandywine School District is the only district offering IB courses to high school freshman. Brandywine School District, Capital School District, Red Clay Consolidated School District, and Seaford School district all offer IB courses to sophomores. All five districts with IB options available offer IB courses to juniors and seniors.

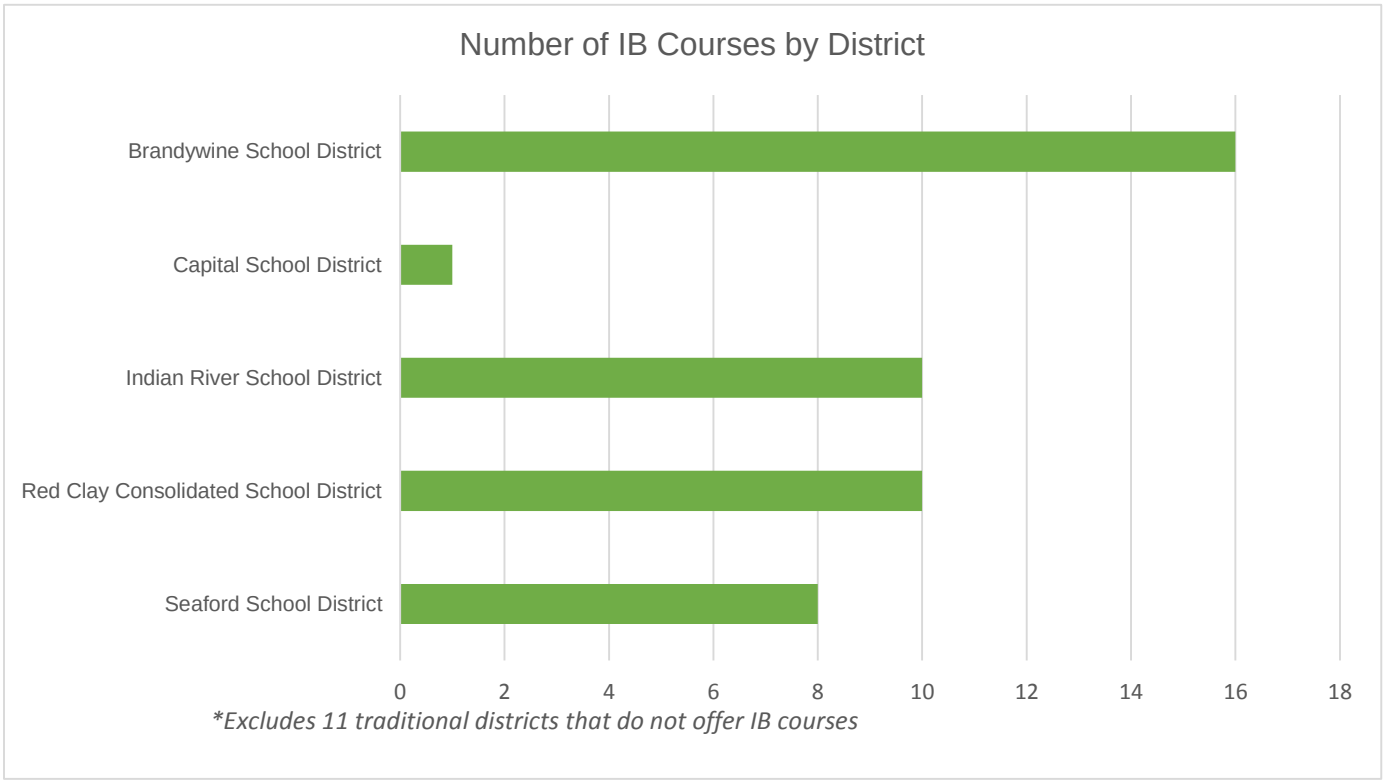
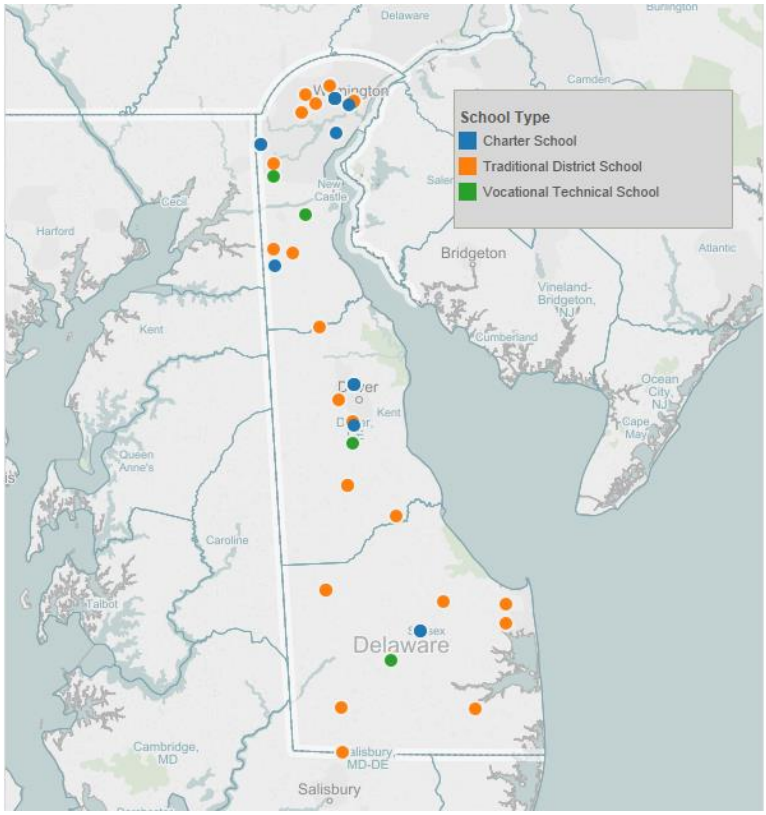


Figure 2.4

COLLEGE CREDIT/DUAL ENROLLMENT



Twenty traditional public schools within 14 school districts offer college credit or dual enrollment opportunities.

Figure 2.5

Of the two districts that do not offer college credit/dual enrollment, both are located in New Castle County (Brandywine School District and Colonial School District). Most districts offer this program in only one school, with the exception of Red Clay Consolidated School District (5 schools), Cape Henlopen School District (3 schools), Indian River School District (2 schools) and Appoquinimink School District (2 schools). Of the 20 schools offering this program, 16 are high schools, three are middle schools, and one is a middle/high school. Eight of these programs are located in New Castle County, four are located in Kent County, and eight are located in Sussex County. Additionally, eight charter schools, including at least one charter school in each county, and all six of the state's vocational technical high schools offer dual enrollment programs.

Career and Technical Education

Career and Technical Education (CTE) courses are available in all 16 traditional school districts, all three vocational technical school districts, and five charter high schools in Delaware. There are 77 unique CTE pathways, which offer a sequence of courses designed to prepare students for a specific career, available in Delaware's schools. Across all counties, Early Childhood Education and Animal Science are among the top five most popular pathways. The chart below displays the five CTE pathways with the highest enrollment by county.

Rank	New Castle	Kent	Sussex
1	FCS: Nutrition and Culinary	FCS: Early Childhood Education	AG: Animal Science
2	BFM: Business & Corporate Management	AG: Animal Science	FCS: Nutrition and Culinary
3	FCS: Early Childhood Education	BFM: Marketing Management	TED: Digital Media and Imaging
4	AG: Animal Science	BFM: Business & Corporate Management	FCS: Early Childhood Education
5	STS: Certified Nurse Assistant	STS: Certified Nurse Assistant	BFM: Accounting

When analyzing pathway enrollment by total number of students, Nutrition and Culinary was the most popular pathway with over 900 students enrolled in 2014-2015. Other programs with over 500 students enrolled in 2014-15 were Animal Science, Early Childhood Education, Business and Corporate Management, Certified Nurse Assistant, and CTE Integrated Pathway.

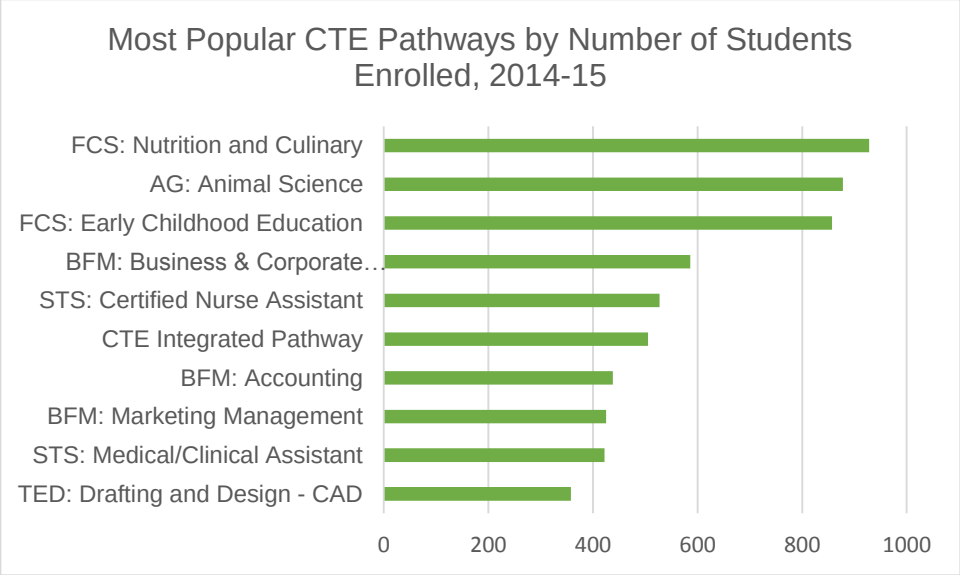


Figure 2.6

TRADITIONAL PUBLIC SCHOOLS

While traditional schools as a whole offer 145 unique CTE courses, the number of CTE courses available in a single district varies: from 14 in Laurel School District to 76 in Red Clay Consolidated School District. The largest number of CTE courses are available in the state's largest school districts located in New Castle County. Jobs for Delaware Graduates (JDG) is the most widely available CTE pathway in traditional schools, with all districts except Indian River School District offering at least three JDG courses in at least one school. Exploring Business, Accounting I and II, and Animal Science III/Vet Tech are all available in 13 or more traditional school districts. Other courses available in more than 10 districts include Marketing Management II and III, Early Childhood Education I, II, and III, Horticultural Science I, II, and III, and Exploring Business II. The CTE courses enrolling the greatest number of students in traditional schools are Exploring Business I (7,282 students) and Exploring Business II (6,035 students).

Other popular CTE courses include Introduction to Technology Education (3,032 students), Business, Finance and Marketing Essentials (2,357 students), and Inventions and Innovations of Technology Education (2,317 students). In addition to CTE courses at the high school level, there are middle schools in all three counties offering career and technical education programs to students below grade 9.

VOCATIONAL TECHNICAL SCHOOLS

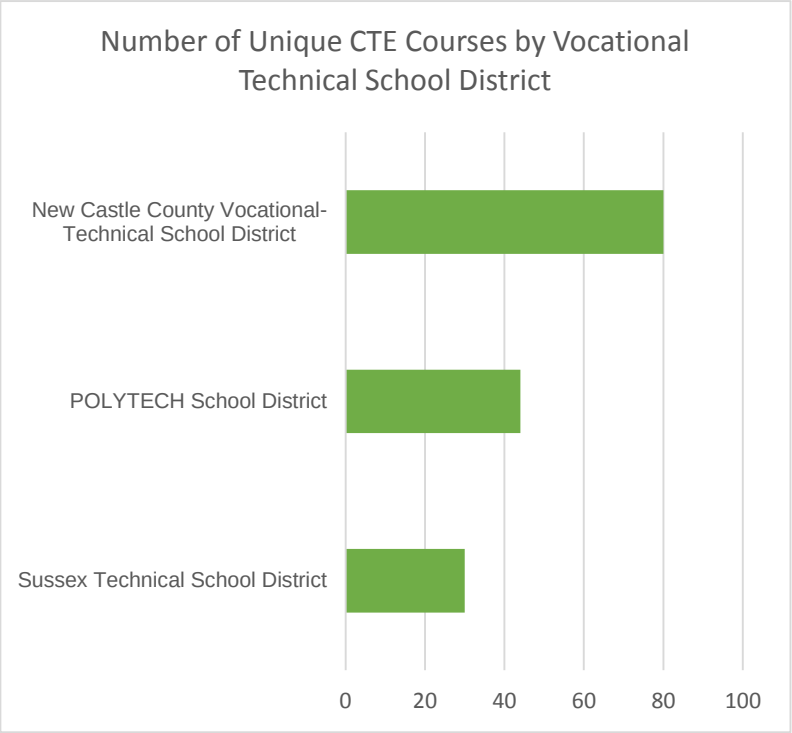


Figure 2.7

CTE course options vary across the state's three vocational technical districts. Of the 97 CTE courses offered in Delaware, 17 are available in all three districts. The subject matter of these widely available courses includes nursing, health aide training, electrician training, dental assistant training, cosmetology, carpentry, and auto body. With the exception of Technical Career Exploration, a course taken by all 9th grade vocational technical students, the courses with the most students enrolled in vocational technical districts include Nursing Assistant and Patient Care Assistant (581 students), Automotive Mechanical Technology (267 students), and Electronic and Communication Engineering Technology (261 students). New Castle County Vocational Technical School District, the state's largest vocational technical district, offers the widest range of courses (80). POLYTECH School District and Sussex Technical School District offer 44 and 30 courses, respectively.

CHARTER SCHOOLS

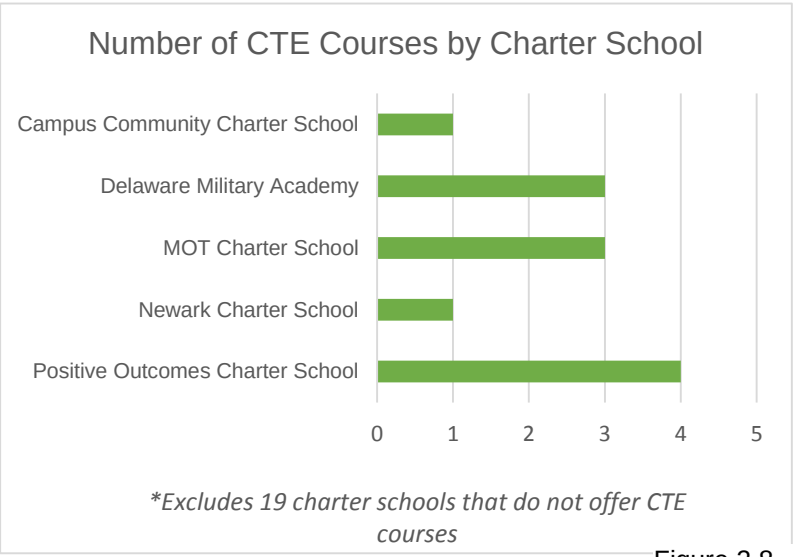


Figure 2.8

Charter schools offer the smallest selection of CTE courses. Of the five charter schools offering CTE, Positive Outcomes Charter Schools has the most courses, with Jobs for Delaware Graduates 9, 10, 11, and 12. Campus Community Charter School has one CTE course, Exploring Business Level I. In addition to CTE classes at the high school level, there are three charter schools in Kent County and five charter schools in New Castle county that offer career and technical education programs to students below grade 9.

World Languages

World language courses are available across Delaware's traditional, charter, and vocational technical high schools. In addition to programs offered at the high school level, several traditional and charter schools offer dual language immersion programs beginning as early as pre-kindergarten. Currently, nine languages are offered in various grade levels and school types across the state.

TRADITIONAL PUBLIC SCHOOLS

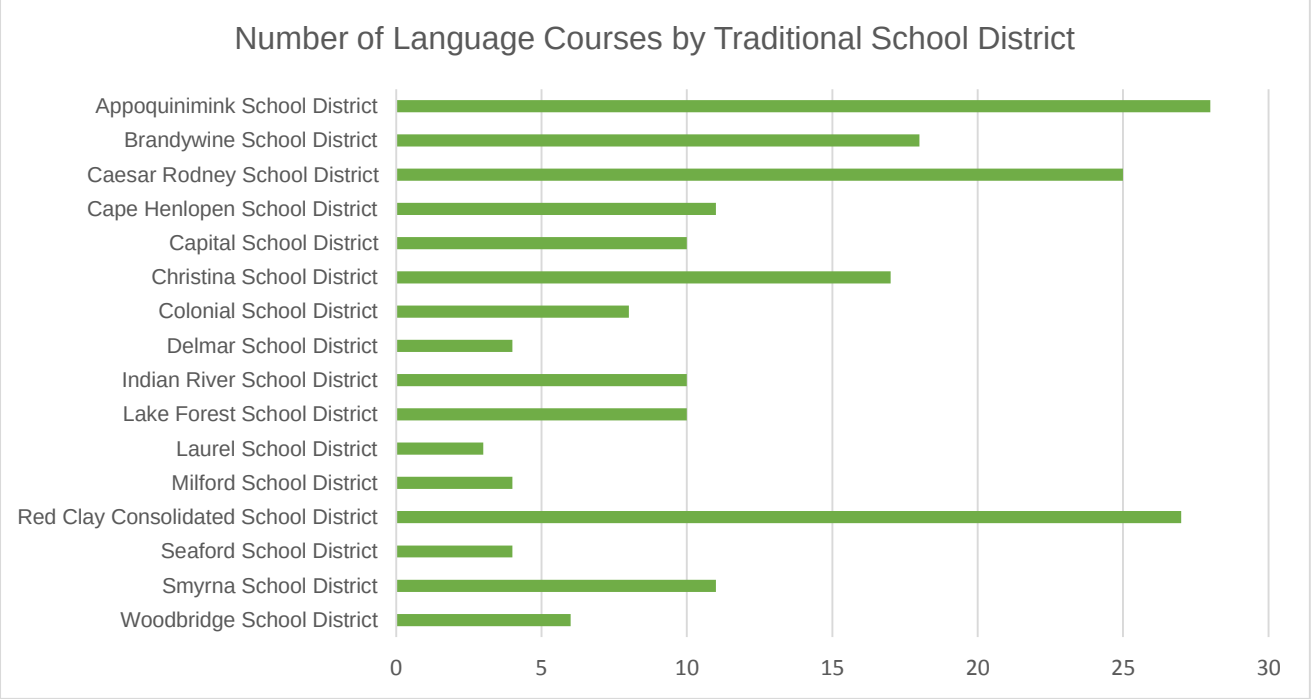


Figure 2.9

The number of world language courses available in traditional districts ranges from three courses at Laurel School District to 28 courses at Appoquinimink School District. Spanish I, II, III, and Spanish Conversation and Culture enroll the largest number of students, with over 2,600 students enrolled in each course. Other courses with high enrollment include French I and II, both enrolling over 1,000 students. At least one upper level world language course is available in 12 traditional school districts. The largest number of upper level world language courses are available in the state's largest districts including Appoquinimink School District (eight courses), Brandywine School District (six courses), Christina School District (five courses), and Red Clay Consolidated School District (six courses). The state's smallest districts, located in Sussex County, offer a limited number of upper level language courses.

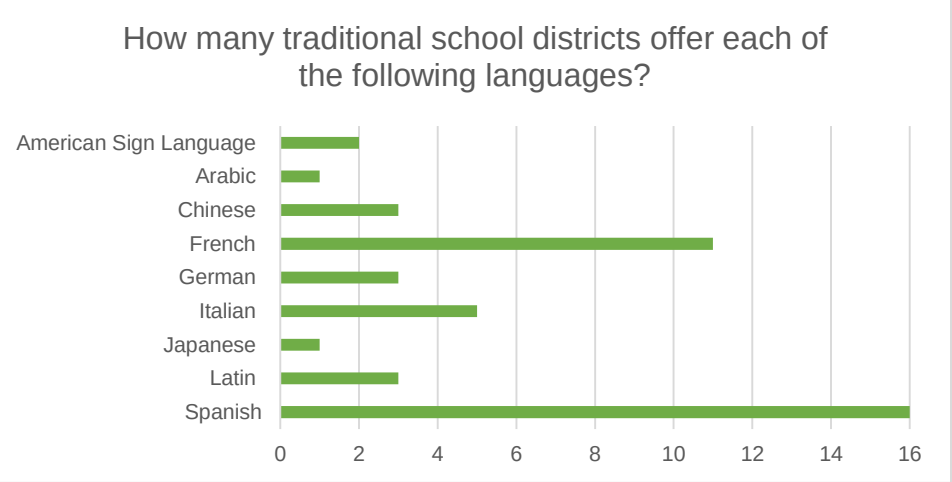


Figure 2.10

Spanish I, II, and III are available in all 16 traditional school districts. Other widely available courses, offered in more than eight districts, include French I, II, III, and IV, Spanish IV, and AP Spanish Language. In addition to French (11 districts) and Spanish (16 districts), a small number of traditional districts offer American Sign Language, Arabic, Chinese, French, German, Italian, Japanese, and Latin.

VOCATIONAL TECHNICAL DISTRICTS

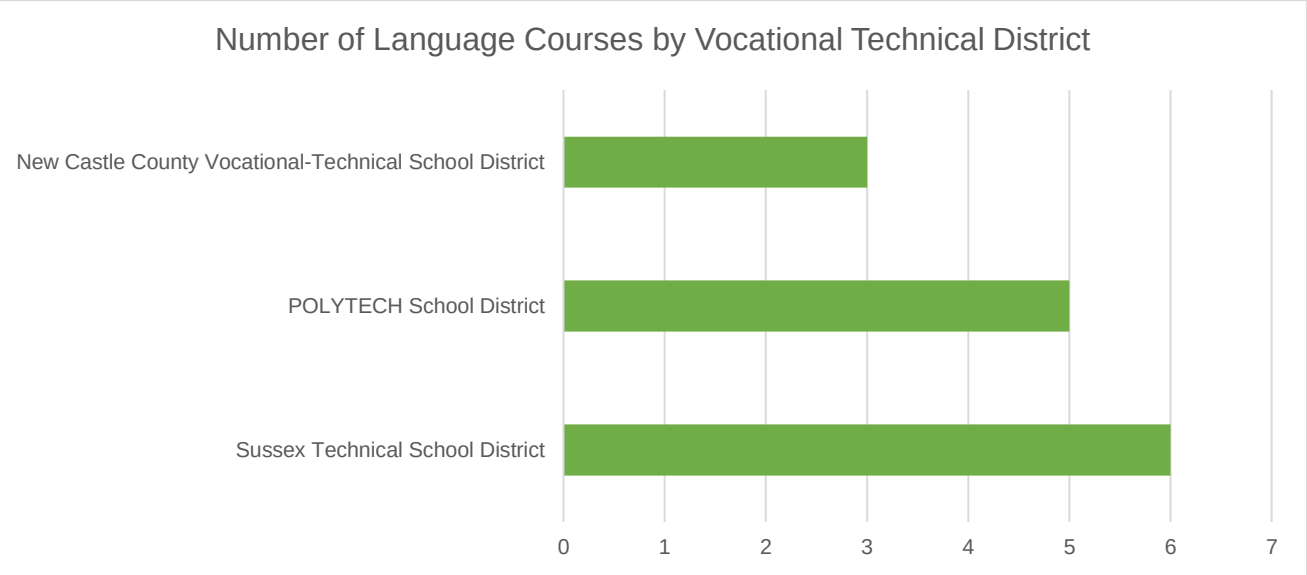


Figure 2.11

Vocational technical districts offer the smallest number of world language courses as well as the most limited selection of languages. All three vocational technical districts offer Spanish I, II, and III. In addition, POLYTECH School District offers Spanish IV and AP Spanish Language and Culture. Sussex Technical School District offers the widest range of language options, with Chinese I, Chinese II, and AP Spanish Language, in addition to Spanish I, II, and III. Spanish I and II enroll the largest number of vocational technical students, with 1,807 and 1,779 students respectively. Spanish IV (36 students) and AP Spanish (25 students) enroll the smallest number of vocational technical students.

CHARTER SCHOOLS

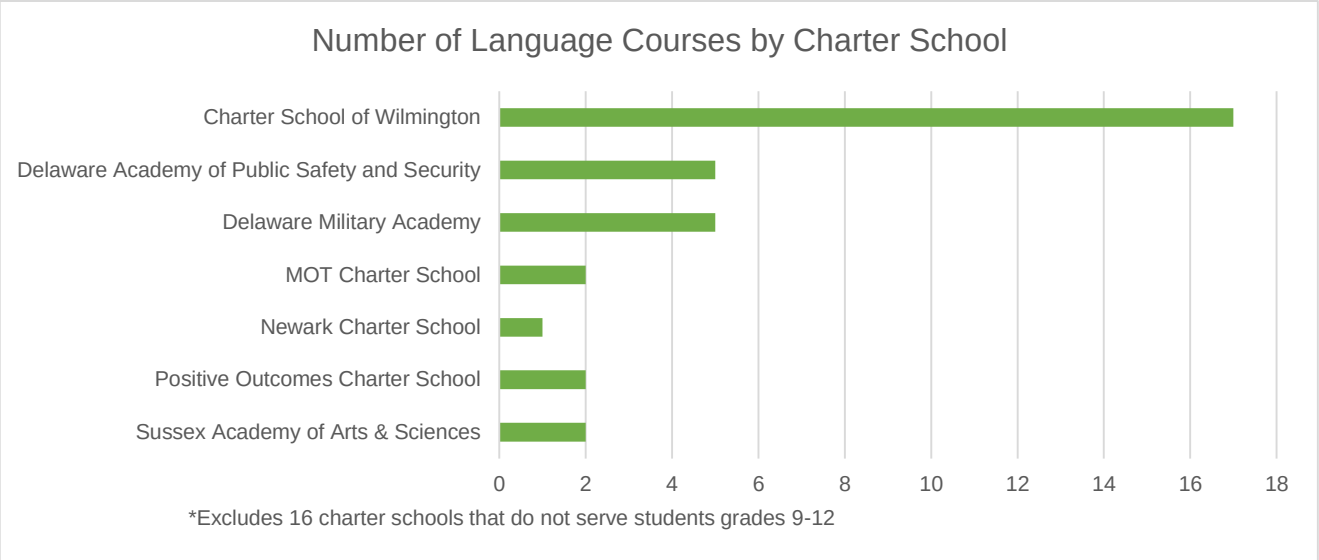


Figure 2.12

With the exception of one newer charter school that is adding grades on a yearly basis, all charter schools serving students in grades 9-12 offer at least one world language. All high schools must offer at least two world language credits, as this is a Delaware graduation requirement. The world language course with the highest enrollment is Spanish I (714 students), offered at eight charter schools. At least one upper level language course (AP, literature, or level IV) is available in three schools: Charter School of Wilmington; Delaware Academy of Public Safety and Security; and Delaware Military Academy. The number of world language courses is limited at most charter schools. The Delaware Academy of Public Safety and Security, Delaware Military Academy, MOT Charter School, Newark Charter School, Positive Outcomes Charter School, and Sussex Academy of Arts & Sciences all offer fewer than six language courses. The Charter School of Wilmington offers 17 world language courses, which is more than any other charter school in the state. Language options available at the Charter School of Wilmington include French, Latin, Spanish, Chinese, and Italian. This includes upper level language courses in French, Latin and Spanish.

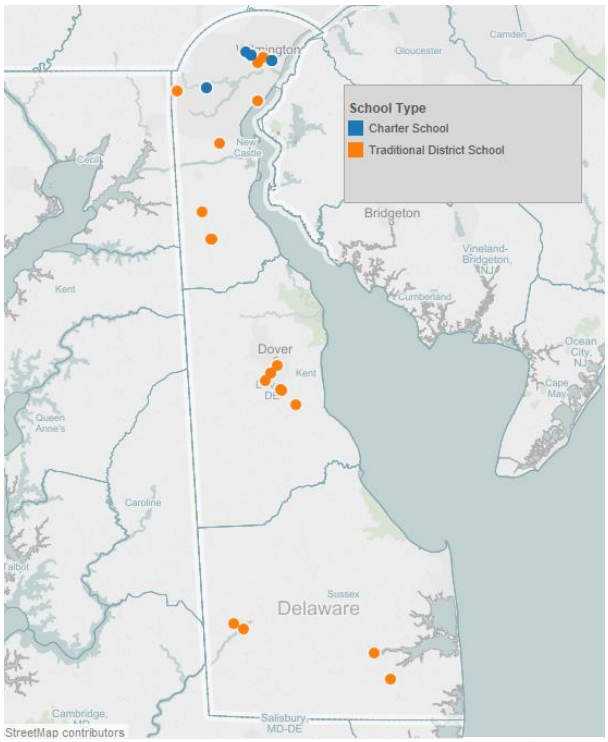


Figure 2.13

DUAL LANGUAUGE IMMERSION SCHOOLS

In addition to world language courses offered at the high school level, there are 21 traditional elementary and charter schools offering dual language immersion programs in Spanish, Mandarin, or Greek. Sixteen of these programs are Spanish immersion, five are Mandarin immersion, and one is Greek immersion. This includes one early childhood center offering both Spanish and Mandarin immersion. Among schools offering dual language immersion, three are charter schools and 18 are traditional public schools. Grades served by dual language immersion programs vary by school. Some schools offer dual language immersion in only one grade, while others, such as Academia Antonia Alonso and Las Americas Aspira Academy have a whole school instructional focus of dual language immersion. Although the majority of dual language immersion programs operate in elementary schools, there are two early childhood centers and one middle school offering this program. Although dual language programs are available in each county, the majority of dual language immersion programs are offered in New Castle County.

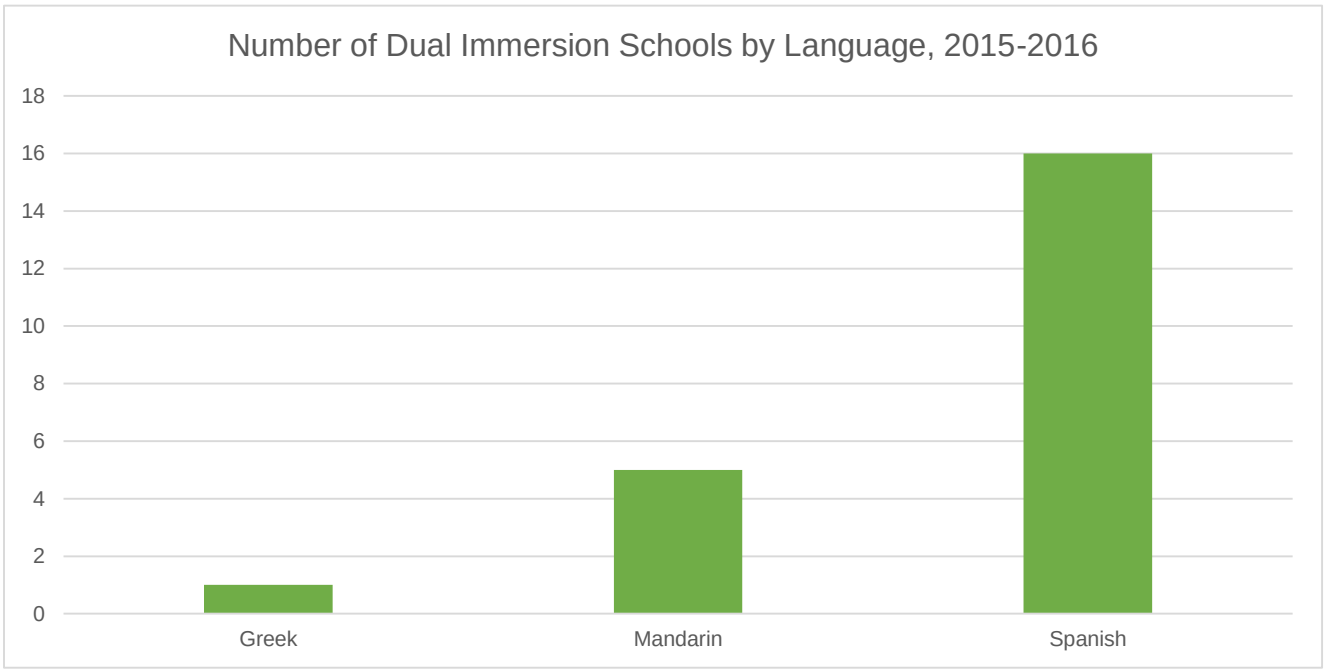


Figure 2.14

Science, Technology, Engineering, and Math (STEM)

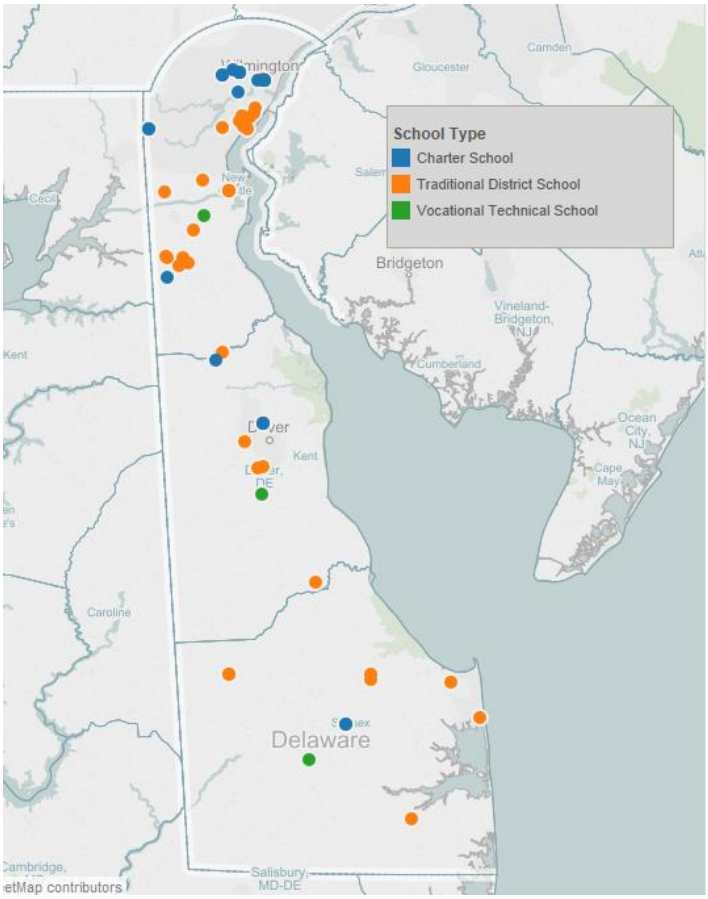


Figure 2.15

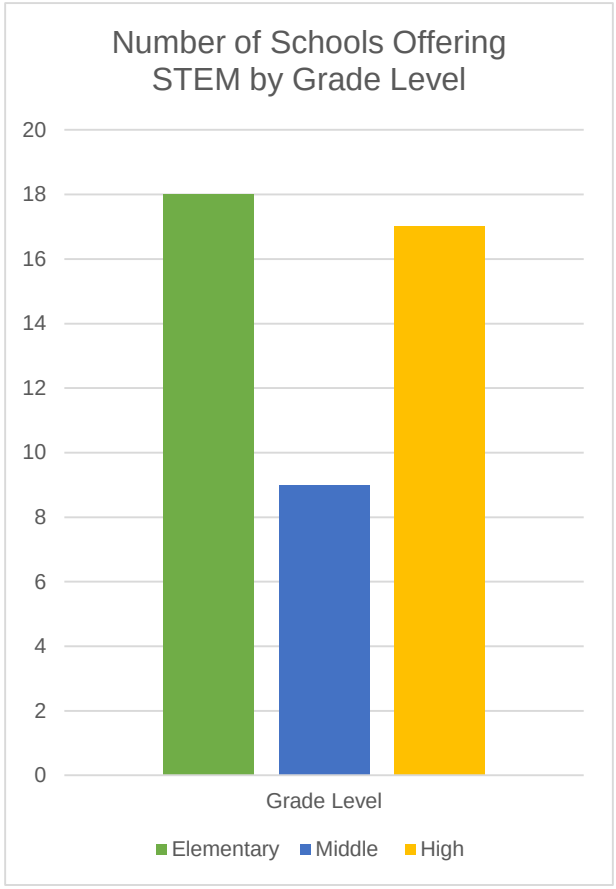


Figure 2.16

TRADITIONAL PUBLIC SCHOOLS

STEM programs are offered on 31 traditional public schools, representing 14 elementary, eight middle and nine high schools within ten unique traditional school districts. Colonial School District offers STEM programs in the greatest number of schools (12), followed by Appoquinimink School District (7), and Cape Henlopen School District (4). Of the 31 schools offering STEM, 20 are located in New Castle County, seven are located in Sussex County, and four are located in Kent County.

CHARTER SCHOOLS

STEM programs are available in 11 charter schools, including five charter high schools, one charter middle school, one charter K-8 school, and four charter elementary schools. Among charter schools offering STEM programs, eight are located in New Castle County, two are located in Kent County, and one is located in Sussex County. Three charter schools in Delaware have a STEM-related instructional focus. This includes Delaware Academy of Public Safety and Security, with an instructional focus on technology, Delaware Design Lab High School, with a focus on STEM + Media & Design, and MOT Charter School with a focus on STEM/STEAM.

VOCATIONAL TECHNICAL SCHOOLS

STEM programs are available in all three vocational technical districts. New Castle County Vocational Technical District, the only vocational technical district with more than one school, offers a STEM program in one high school.

Visual and Performing Arts

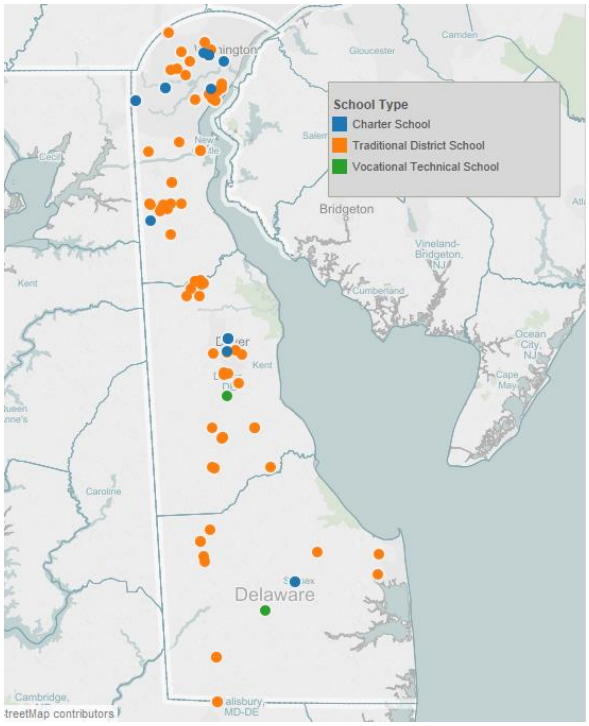


Figure 2.17

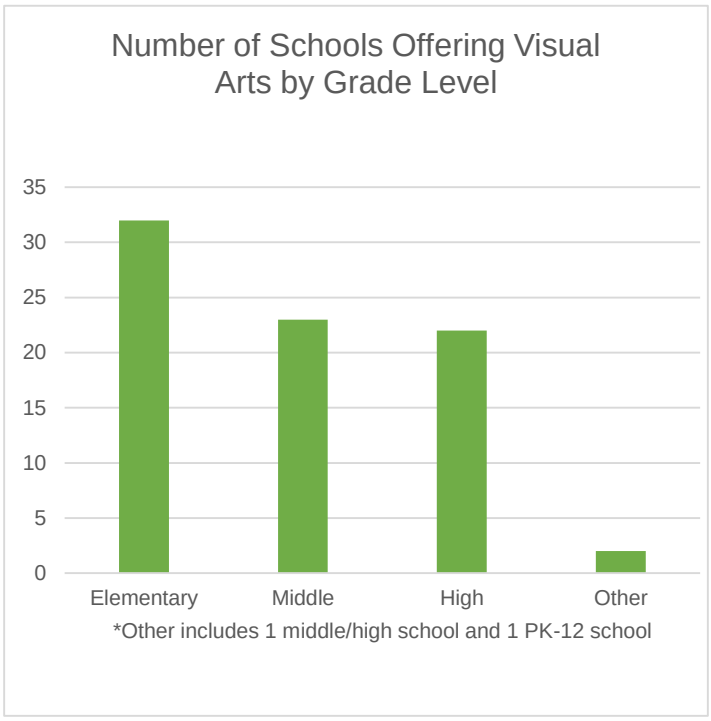


Figure 2.18

TRADITIONAL PUBLIC SCHOOLS

Sixty-eight traditional public schools in 12 unique districts offer visual and performing arts programs. This figure includes 27 elementary schools, 23 middle schools, 15 high schools, 1 K-12 school, and one middle/high school. Districts with the largest number of schools offering visual and performing arts include Colonial School District (13 schools), Appoquinimink School District (12 schools), and Red Clay Consolidated School District (9 schools). Of the schools offering visual and performing arts, 34 are located in New Castle County, 22 are located in Kent County, and 12 are located in Sussex County.

CHARTER SCHOOLS

Visual and performing arts programs are available in 11 charter schools, including five charter high schools, one charter K-8 school, and five charter elementary schools. Among charter schools offering visual and performing arts programs, seven are located in New Castle County, three are located in Kent County, and one is located in Sussex County.

VOCATIONAL TECHNICAL SCHOOLS

Visual and performing arts programs are available in POLYTECH School District and Sussex Technical School District. Visual and performing arts programs are not available in New Castle County Vocational Technical School District.

Programs Designed for Specific Student Populations

CREDIT RECOVERY/DROPOUT REENGAGEMENT

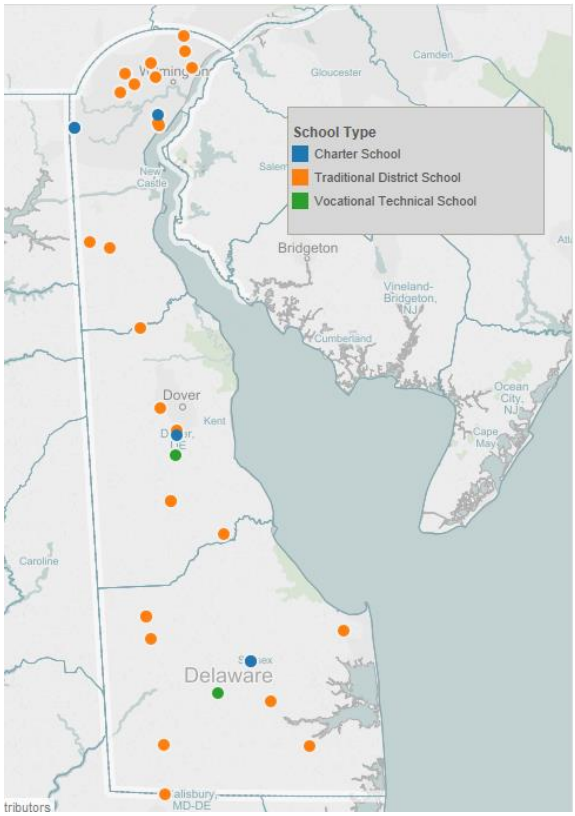


Figure 2.19

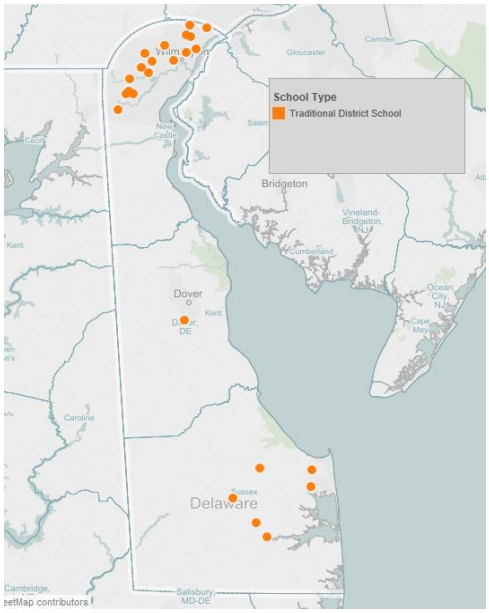
In 2015-2016, 24 traditional public schools located in 14 unique schools districts offer credit recovery/dropout reengagement programs. Twenty of these programs are located in high schools, two are located in middle/high schools, and two are located in middle schools. Most districts offer credit recovery/dropout reengagement programs in one school, with the exception of Appoquinimink School District (2 schools), Brandywine School District (3 schools), Colonial School District (2 schools), Indian River School District (2 schools), Red Clay Consolidated School District (5 schools), and Woodbridge School District (2 schools). Twelve schools offering credit recovery/dropout reengagement are located in New Castle County, eight are located in Sussex County, and four are located in Kent County. Four charter schools, three of which serve students grades 9-12 and one which serves students grades K-9, offer credit recovery and dropout reengagement programs. Two of these schools are located in New Castle County (Delaware Academy of Public Safety and Security, Newark Charter School), one is located in Kent County (Positive Outcomes Charter School), and one is located in Sussex County (Sussex Academy).

Credit recovery/dropout reengagement programs are available in two technical vocational districts: POLYTECH School District and Sussex Technical School District. Credit recovery/dropout reengagement programs are not available in New Castle County Vocational Technical School District.

INDIVIDUALIZED INSTRUCTION FOR AT RISK STUDENTS

Two Delaware charter schools, Gateway Lab School and Positive Outcomes Charter School, have an instructional mission designed to provide individualized learning opportunities for struggling students and those with mental health challenges. Gateway Lab School is located in New Castle County and serves students grades 3-8, while Positive Outcomes Charter School is located in Kent County and serves students grades 7-12.

AVID



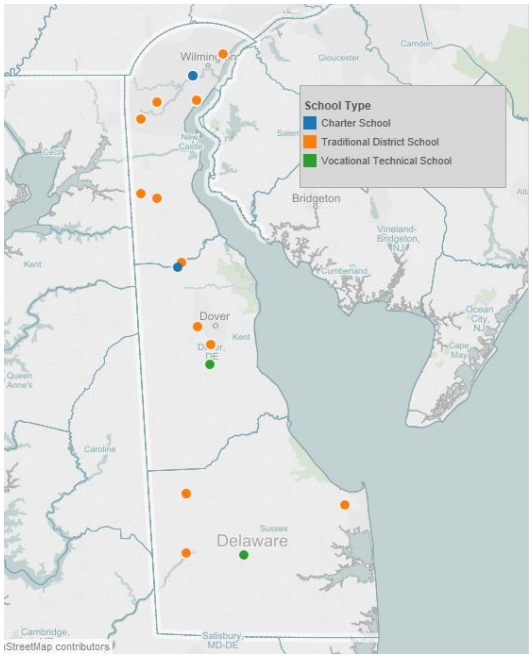
The Advancement via Individual Determination (AVID) program, which is available in six traditional districts and 24 traditional public schools, provides students with educational strategies designed to shrink the achievement gap and prepare students for postsecondary success. While the program is open to any student, its mission focuses specifically on students who are underrepresented in higher education institutions. Of the 24 schools offering AVID, 13 are middle schools and 11 are high schools. Seventeen of these schools are located in New Castle County, six are located in Sussex County, and one is located in Kent County. The districts with the largest number of schools offering AVID programs are among the largest districts in the state, including Brandywine School District (six schools), Christina School District (six schools), and Red Clay Consolidated School District (five schools).

Figure 2.20

Other Specialized Learning Opportunities

The following programs and courses enroll a small number of students across the state, but are described here to provide the fullest picture of the courses Delaware's students may choose.

JROTC



Eleven traditional public high schools, located in nine unique districts, offer Junior Reserve Officer Training Corps (JROTC) programs. The program, which is taught by military personnel, provides leadership and character education to high school students. Of the schools offering JROTC, six are located in New Castle County, three are located in Kent County, and two are located in Sussex County.

Two charter high schools, Delaware Military Academy and First State Military Academy, offer JROTC programs. Delaware Military Academy is located in New Castle Country and offers both Army and Navy JROTC programs. First State Military Academy is located in Kent County and offers an Army JROTC program. Additionally, two vocational technical school districts, POLYTECH School District and Sussex Technical School District, offer JROTC programs.

Figure 2.21

EXPERIENTIAL AND SERVICE LEARNING

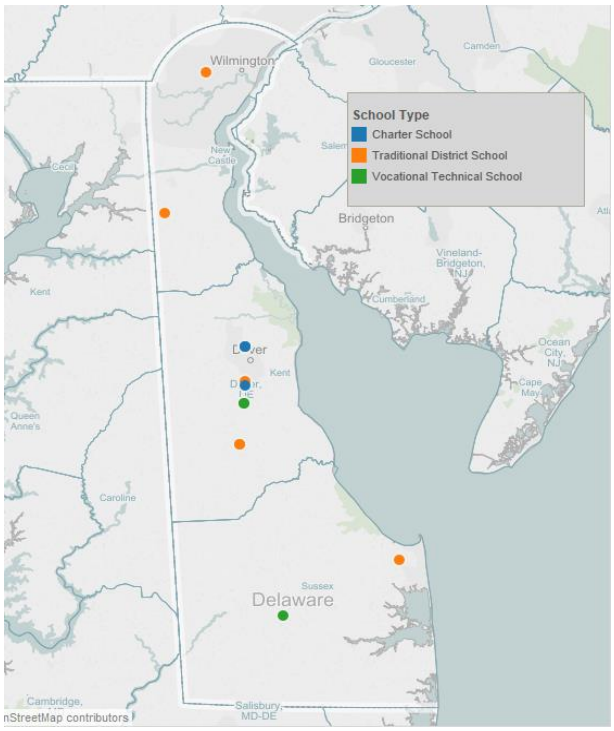


Figure 2.22

Experiential learning/formal internship programs are available in five traditional public schools, located in five unique school districts. Of the schools offering this program, two are located in New Castle County, two are located in Kent County, and one is located in Sussex County. Four of these schools are high schools while one is a middle school.

Experiential learning/formal internship programs are available in two charter schools and two vocational technical schools. Both charter schools are located in Kent County, while the vocational technical schools are located in Kent County and Sussex County.

DISTANCE LEARNING

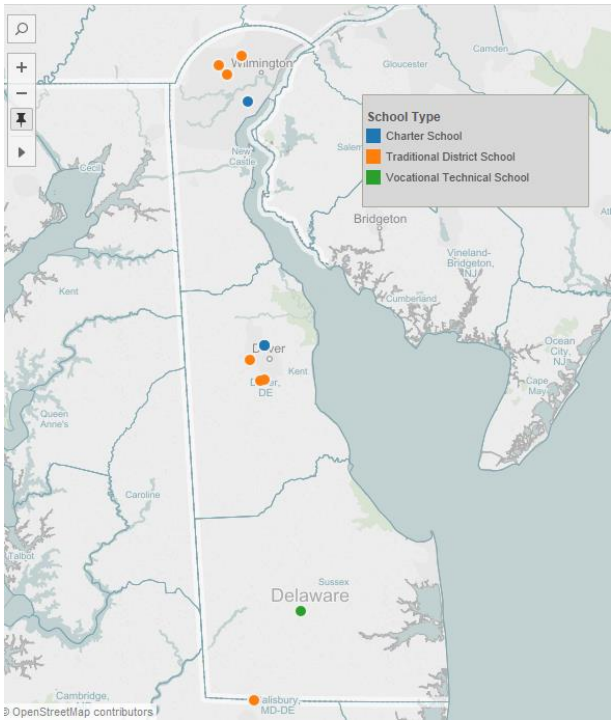


Figure 2.23

Seven traditional public schools located in four unique districts offer distance learning programs in which students have the opportunity to participate in classes online. Of these schools, five are high schools and two are middle schools. Three of these schools are located in New Castle County, three are located in Kent County, and one is located in Sussex County.

Two charter high schools, Delaware Academy of Public Safety and Security and Early College High School at Delaware State University, offer distance learning. One of these programs is located in Kent County while the other is located in New Castle County. In addition, Sussex Technical School District in Sussex County offers a distance learning program.

GIFTED AND TALENTED

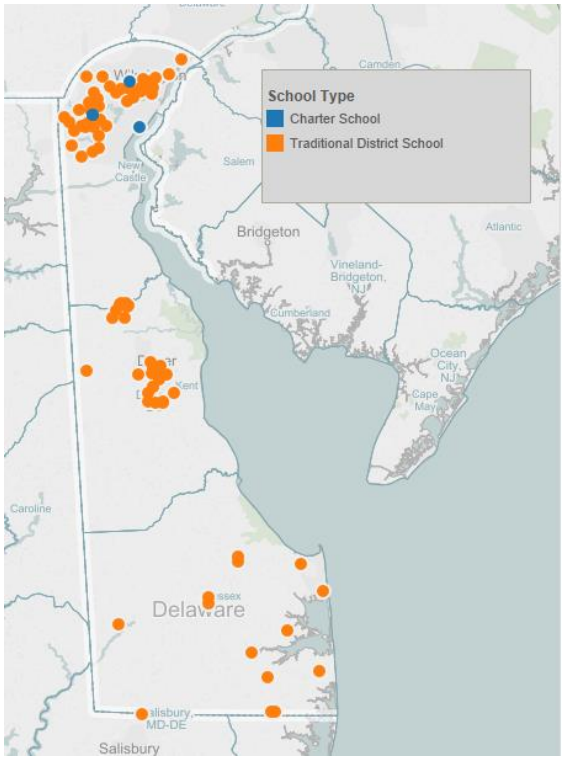


Figure 2.24

Seventy-nine traditional public schools located in nine unique districts offer Gifted and Talented programs, in which students who qualify as academically gifted have the opportunity to participate in advanced level work. Of these schools, 63 are elementary schools, two are elementary/middle schools, 10 are middle schools, and three are high schools. Forty-one of these schools are located in New Castle County, 25 are located in Kent County, and 13 are located in Sussex County. Among the seven traditional districts not offering Gifted and Talented programs, four are located in Sussex County.

Three charter schools serving an elementary school population offer gifted and talented programs. All three charter schools (Family Foundations, Las Americas Aspira Academy, and Odyssey Charter School) are located in New Castle County.

SUMMER SCHOOL

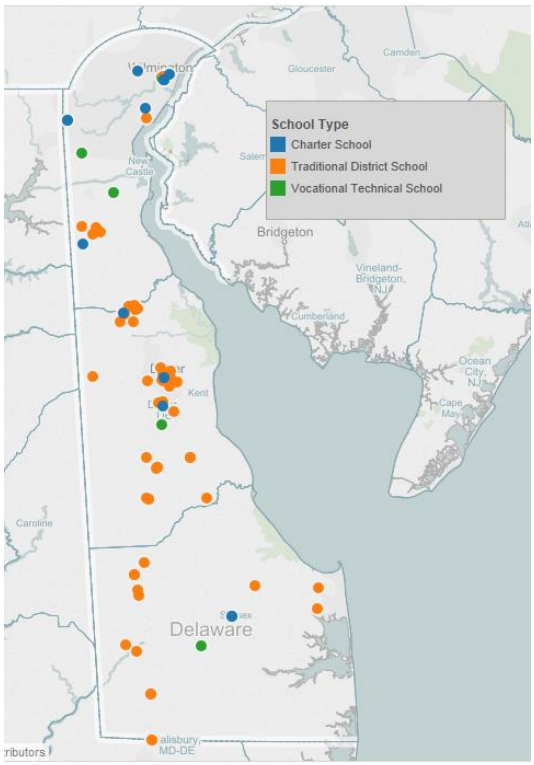


Figure 2.25

Summer school programs are offered in 46 traditional public schools within 12 unique school districts. The four traditional school districts that do not offer summer school programs (Brandywine School District, Christina School District, Indian River School District, and Red Clay Consolidated School District) are among the largest districts in the state. Capital School District has the largest number of schools offering summer school (10), followed by Smyrna School District (8), and Lake Forest School District (6). Twenty of these programs are offered in elementary schools, 13 are offered in middle schools, and 12 are offered in high schools. Although New Castle County has the largest total number of schools, it has the smallest number of schools offering summer school programs (5). Kent County houses 27 schools offering these programs, while Sussex County has 14 schools offering summer school programs.

Summer school programs are offered in all three vocational technical districts and 10 charter schools across Delaware, including six schools in New Castle County, three schools in Kent County, and one school in Sussex County. Seven of these charter schools serve an elementary or middle school population, while three serve a high school population.

Summary

Program availability is greatest in Delaware's most highly populated areas, which are located in New Castle County. With the exception of gifted and talented programs, which serve students of all grade levels, advanced level programming is concentrated at the high school level. While most programming is available across all school types, there are certain programs, such as AVID and credit recovery, where the vast majority of programs are operating in traditional public schools. With the exception of dual language immersion, which is most heavily concentrated at the elementary level, the majority of specialized educational programs are operating in upper grade levels.

CHAPTER III: SCHOOL CHOICE: GEOGRAPHIC AND DISTRICT ENROLLMENT PATTERNS

Overview

This chapter provides an overview of Delaware's choice student population, focusing on the distribution of school choice options across the state and analyzing school choice participation patterns by district of residence. All analyses in this chapter use state-provided data from the 2014-2015 school year.

Intradistrict Choice Participation by District

In addition to school choice opportunities available to students outside their home district, Delaware students have the opportunity to participate in intradistrict choice. The program allows students to apply for enrollment in any public school within their district outside of their home school.[8] The chart below shows the percentage of students in each district who participate in intradistrict choice.

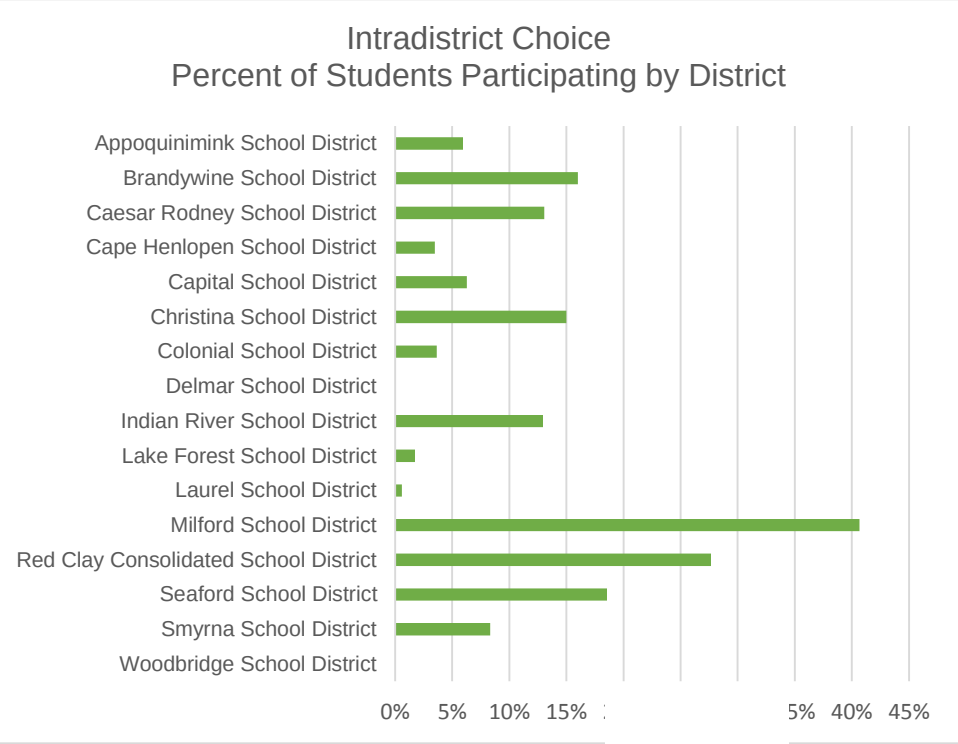


Figure 3.1

Please note: Milford School District, Red Clay Consolidated School District, and Indian River School District each have at least one school with no feeder pattern in which 100% of students are considered intradistrict choice.

[8] The State of Delaware, *Title 14,* http://www.delcode.delaware.gov/title14/c004/index.shtml

Interdistrict Choice Participation by School Type

Among the nearly 135,000 public school students in Delaware in 2014-15, 26,000 (20%) participate in school choice outside their home district. Students enrolled in charter schools represent 9% of Delaware's entire student population, students enrolled in vocational technical schools represent 6% of the entire student population, and students enrolled in traditional public schools outside their home district represent 5% of the entire student population.

Of the 26,266 students who participate in school choice:

- 6,379 (24%) are enrolled in traditional public schools outside their home district.
- 7,366 (28%) are enrolled in vocational technical schools.
- 12,521 (48%) are enrolled in charter schools.

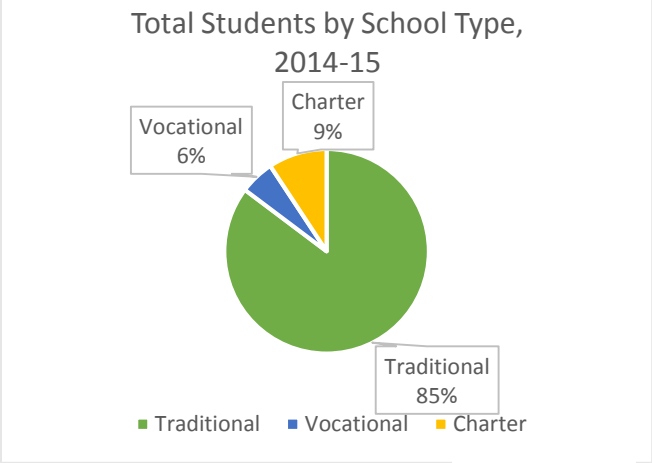


Figure 3.2

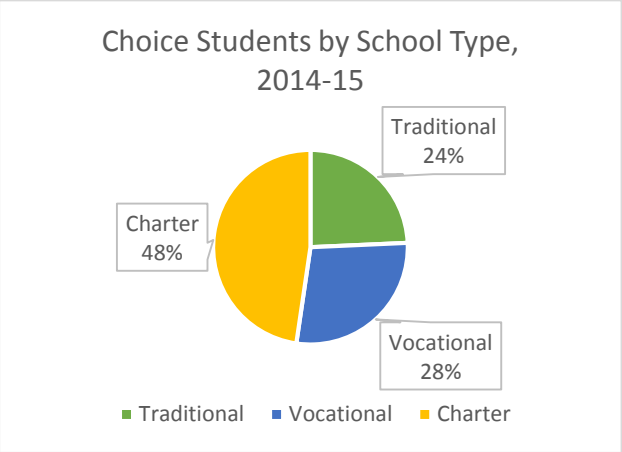


Figure 3.3

Students enrolled in charter schools represent nearly half of all school choice participants in Delaware (48%, Figure 3.3). Students in vocational technical high schools and those enrolled in traditional public schools outside of their home district represent 28% and 24% of school choice students, respectively.

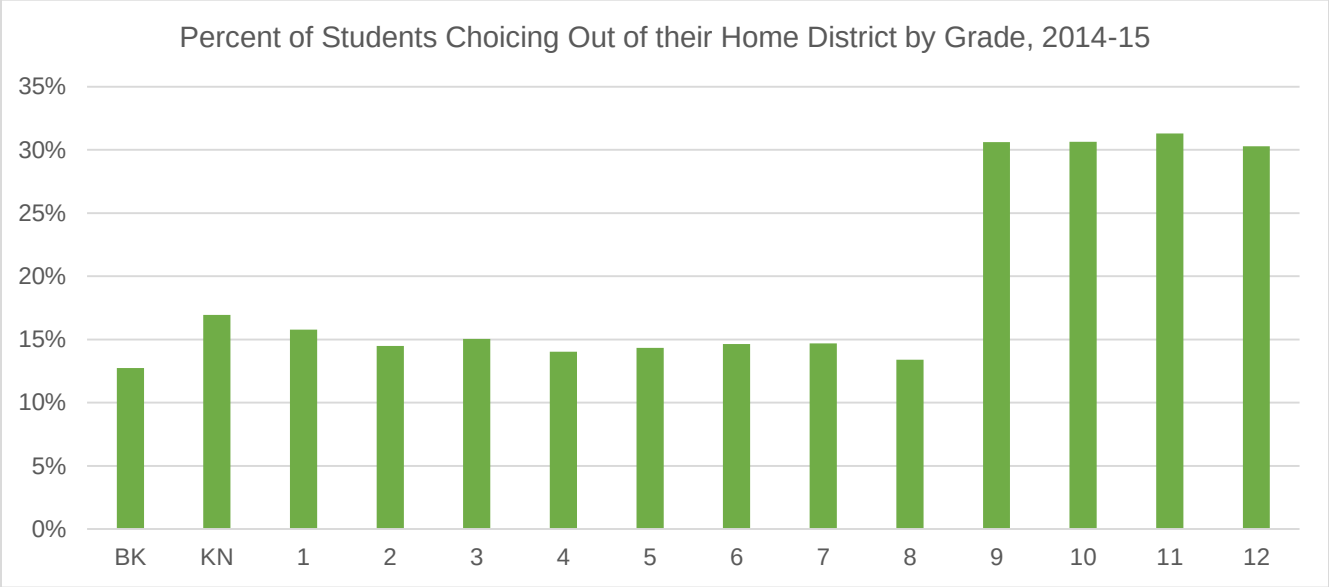


Figure 3.4

Participation rates may be impacted by the choice options available at each grade level. Traditional public schools and charter schools serve students in grades Pre-K to 12, while vocational technical schools serve those in grades 9-12. Students can access the traditional choice program beginning in kindergarten and the charter school choice program beginning in pre-kindergarten in schools where this option is provided.

School Choice by Home District

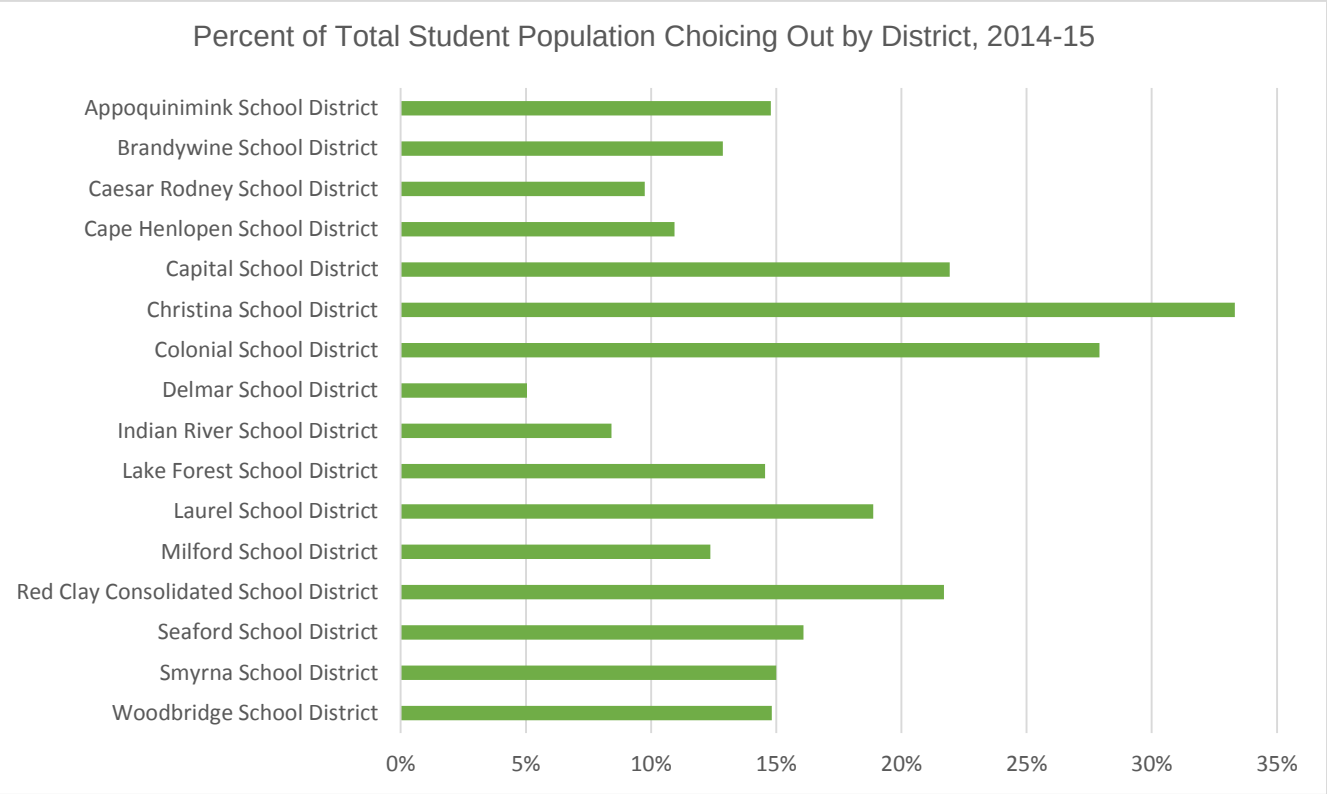


Figure 3.5

The percentage of students who leave their home district for choice options varies across Delaware. Students in the most densely populated areas of the state pursue choice options outside their home district at higher rates than their peers, with the highest choice participation rates in Christina School District (33%), Colonial School District (28%), Red Clay Consolidated School District (22%) and Capital School District (22%). The lowest rates of choice participation occur in Sussex County, with Indian River School District and Delmar School District both sending less than 10% of their student population to choice schools. The figures below offer a comparison of choice participation rates and population density.

POPULATION DENSITY BY DISTRICT 2014-2015

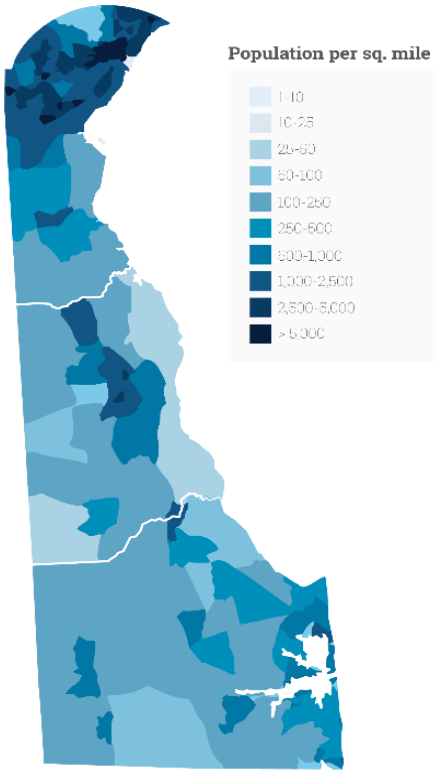


Figure 3.6

CHOICE PARTICIPATION RATES BY DISTRICT 2014-2015

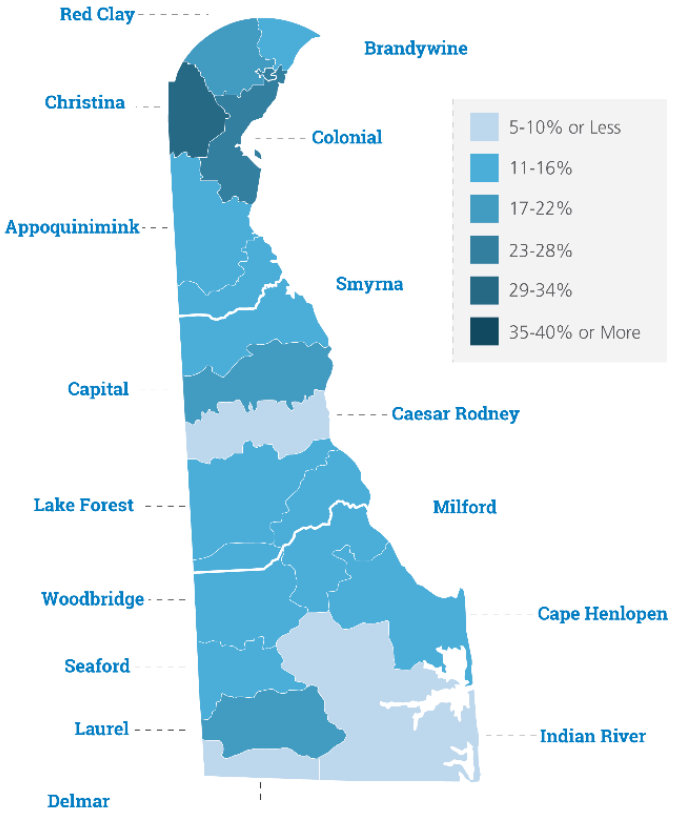


Figure 3.7

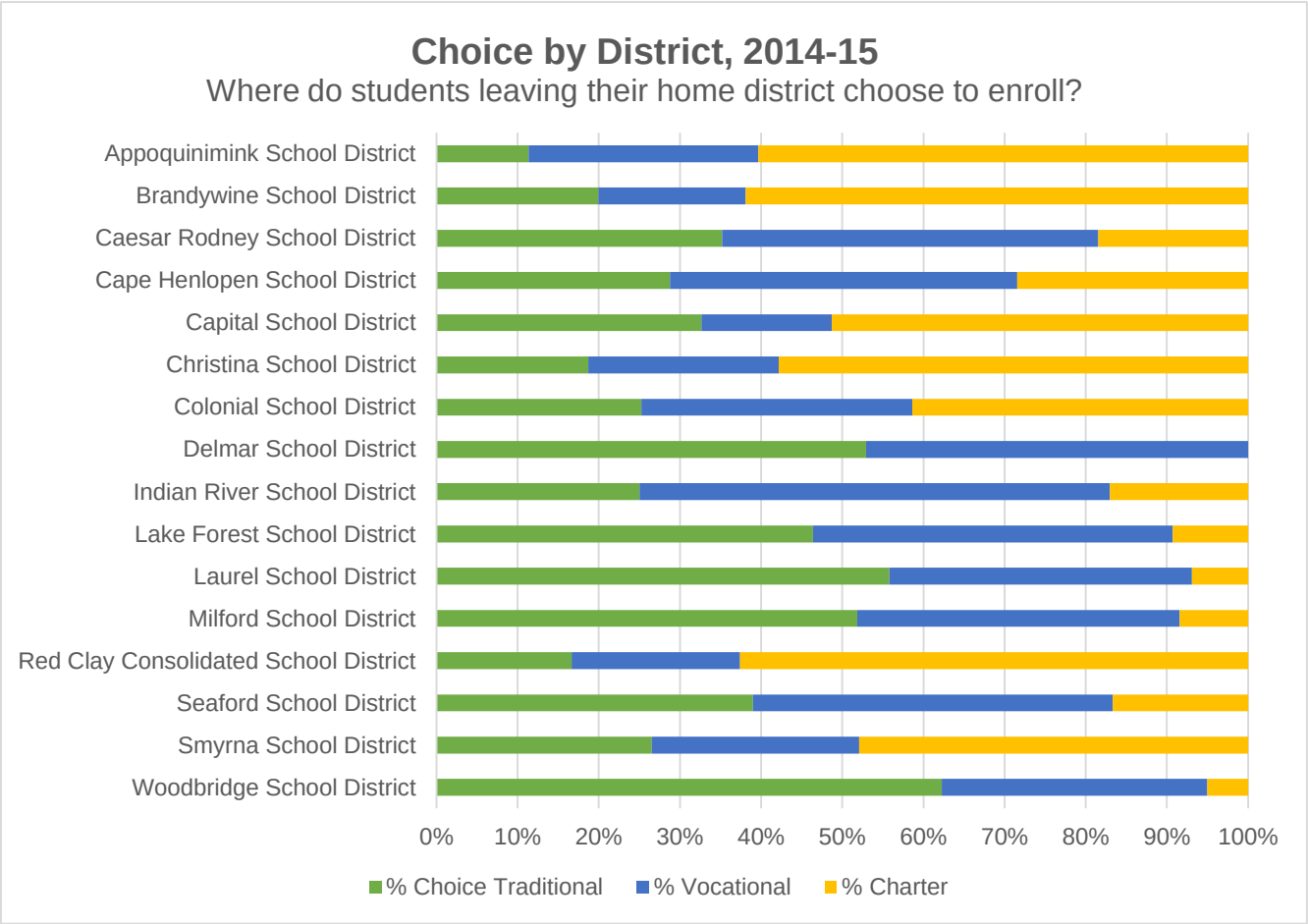


Figure 3.8

The percentage of students pursuing any particular choice option varies significantly across districts. Students attending charter schools constitute a small percentage of the overall choice population in the state's smallest districts, including none of Delmar School District's choice population, 7% of Laurel School District's choice population, and 5% of Woodbridge School District's choice population. Although students in these districts have the option to apply for charter school seats, low charter enrollment is likely due to limited charter options in their region of the state. In the state's smallest districts, the majority of choice students are attending traditional public schools outside of their home district. However, in districts in the most densely populated areas of Delaware, which have the highest concentration of charter schools, charter students represent the majority of the overall choice population. The percentage of choice students attending vocational technical schools ranges from 16% in Capital School District to 58% in Indian River School District.

Summary

Choice options and choice participation vary across Delaware's three counties. Students from New Castle County have numerous choice options at all grade levels, including a high concentration of charter schools. Sussex County residents have a limited number of choice options across grade levels, resulting in lower choice participation rates and a higher proportion of the choice population participating in traditional school interdistrict choice.

CHAPTER IV: SCHOOL CHOICE: STUDENT CHARACTERISTICS

Within and across school types, participation rates in school choice options vary by student demographic characteristics. *Chapter IV: School Choice: Student Characteristics* will provide an analysis of the demographic characteristics of those pursuing educational options in traditional, charter, and vocational technical schools. Specifically, this chapter will analyze participation patterns by race, gender, special education status, low income status, and English Language Learner status. All demographic analyses in this chapter use state provided data from the 2014-2015 school year. In charts that include specific school names, only schools open during the 2015-16 school year are included.

School Choice Participation: Gender

The percentage of male and female students participating in each school choice option are nearly equal. In vocational technical schools, the percentage of female students is 1% higher than the percentage of male students. In Delaware's overall student population, the percentage of male students is 1% higher than the percentage of female students.

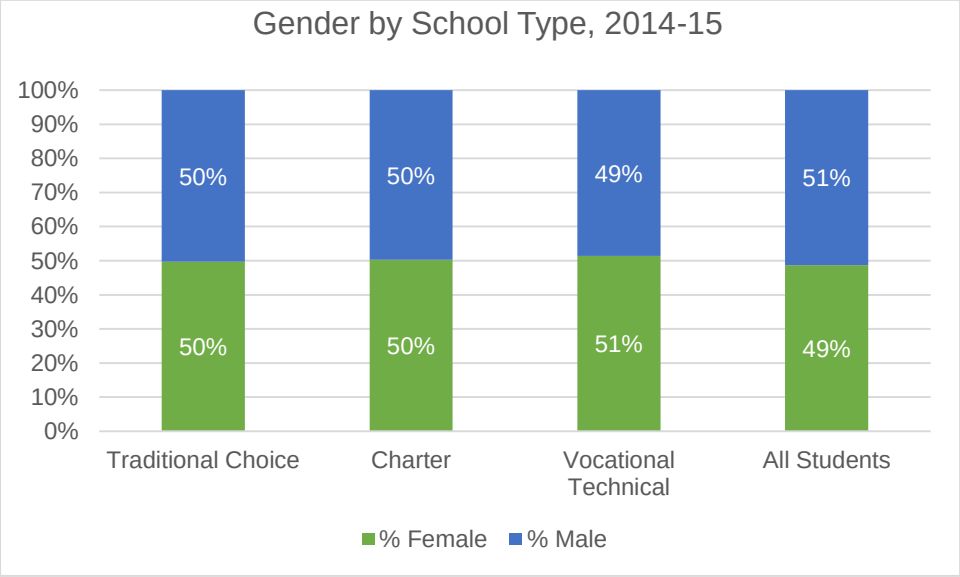


Figure 4.1

School Choice Participation: Race and Ethnicity

While the racial composition of Delaware's choice schools largely mirrors Delaware's overall student population, there are instances in which students of a certain racial group are over- or underrepresented in choice schools.

Race	Number of Students Participating in School Choice	Percent of Total Student Population Participating in Choice
Asian	1,063	22%
Black	10,108	23%
White	14,204	18%
Other (American Indian, Hawaiian, Multiple Races)	891	21%

WHAT IS THE PERCENTAGE OF STUDENTS BY RACE IN EACH TYPE OF CHOICE SCHOOL?

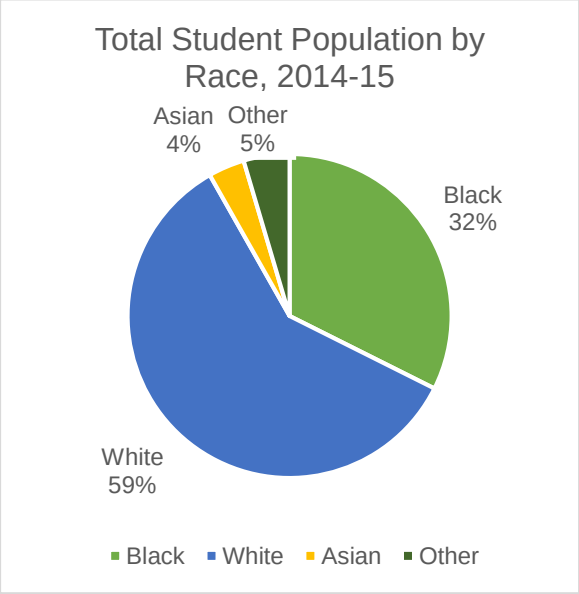


Figure 4.2

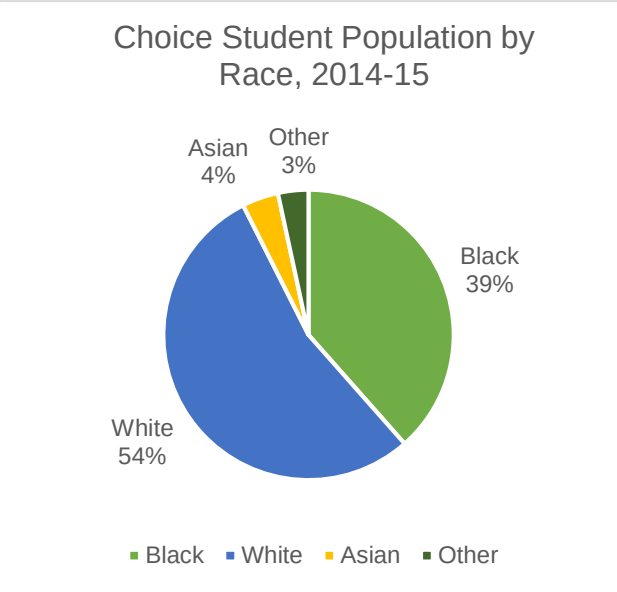
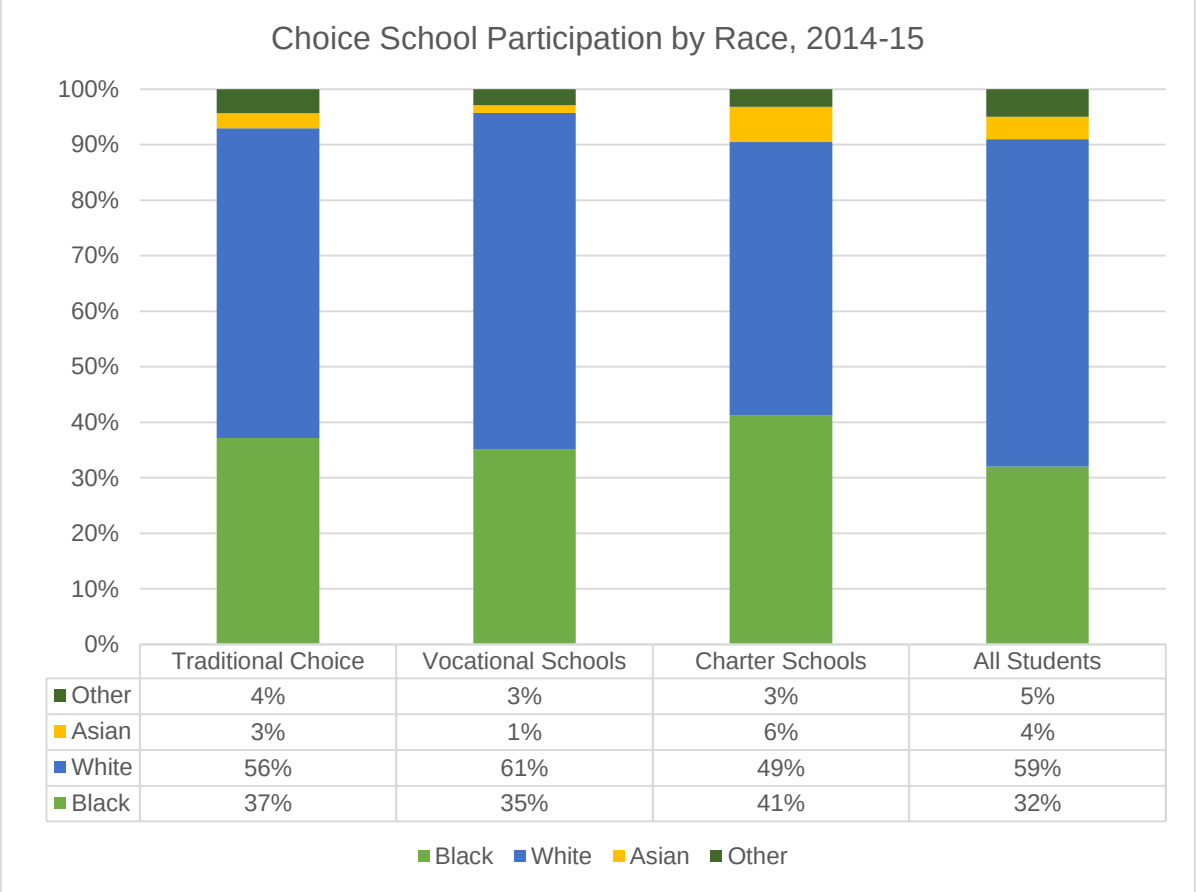


Figure 4.3

Differences between the state's overall student population and the choice student population are most notable in charter schools. Key differences include:

- Black students have a higher rate of choice school attendance than students of other racial groups. While black students constitute 32% of the overall student population (Figure 4.2), they make up 39% of the overall choice population (Figure 4.3). 41% of the charter school population is black.
- Black students represent a larger percentage of the student population in districts with the highest rates of school choice participation, compared to the percentage of black students in the state's overall student population. In the four districts where over 20% of the student population participates in choice, black students represent an average of 41% of the student population in the district.
- White students enroll in choice schools at lower rates than students of other racial groups. White students constitute 59% of the entire student population, but only 49% of the charter school population and 54% of the overall choice population.
- In the three districts where over 90% of students remain in their home school, an average of 71% of the student population is white.
- Asian students constitute 4% of the choice population, 6% of the charter school population and 4% of the total student population.



	Traditional Choice	Vocational Schools	Charter Schools	All Students
Other	4%	3%	3%	5%
Asian	3%	1%	6%	4%
White	56%	61%	49%	59%
Black	37%	35%	41%	32%

Figure 4.4

HOW DOES THE PERCENTAGE OF STUDENTS OF HISPANIC ETHNICITY VARY ACROSS CHOICE SCHOOLS?

2,894 of students who are of Hispanic ethnicity participate in school choice. This is 14% of the overall Hispanic population.

The percentage of Hispanic students of any race participating in choice options is lower than the overall percentage of Hispanic students in the state. Students of Hispanic ethnicity represent 15% of the overall student population, but only 11% of students in choice schools. Hispanic student participation is particularly low in charter schools, where they constitute 10% of the student population.

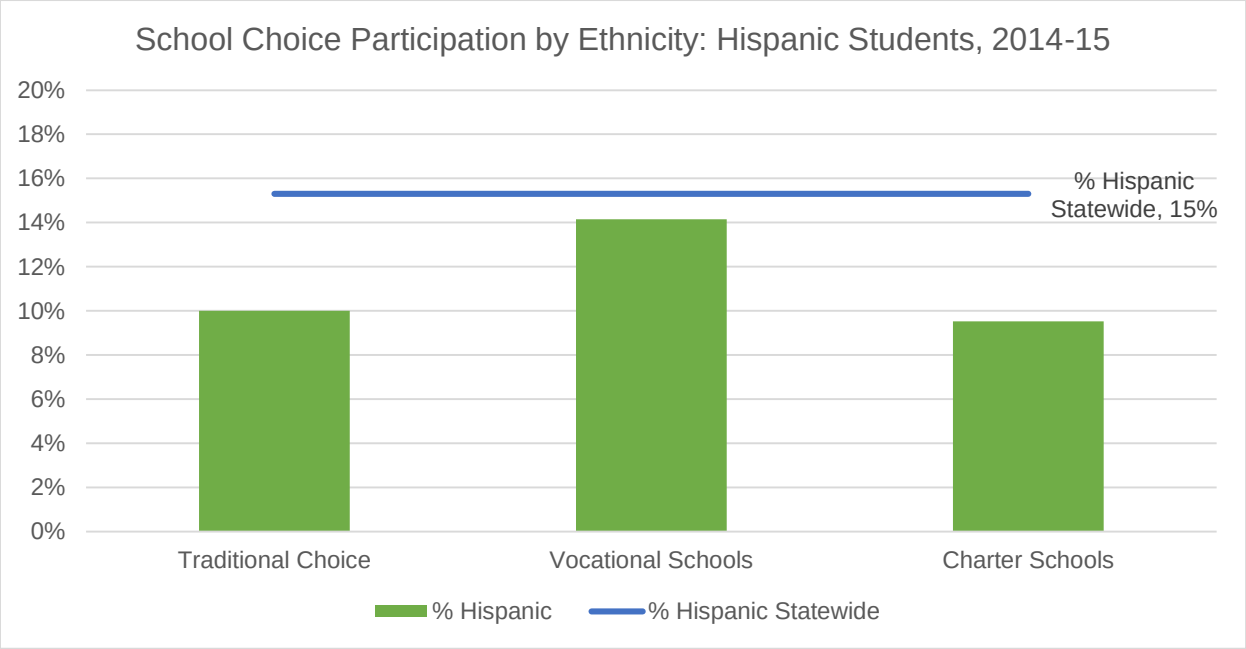
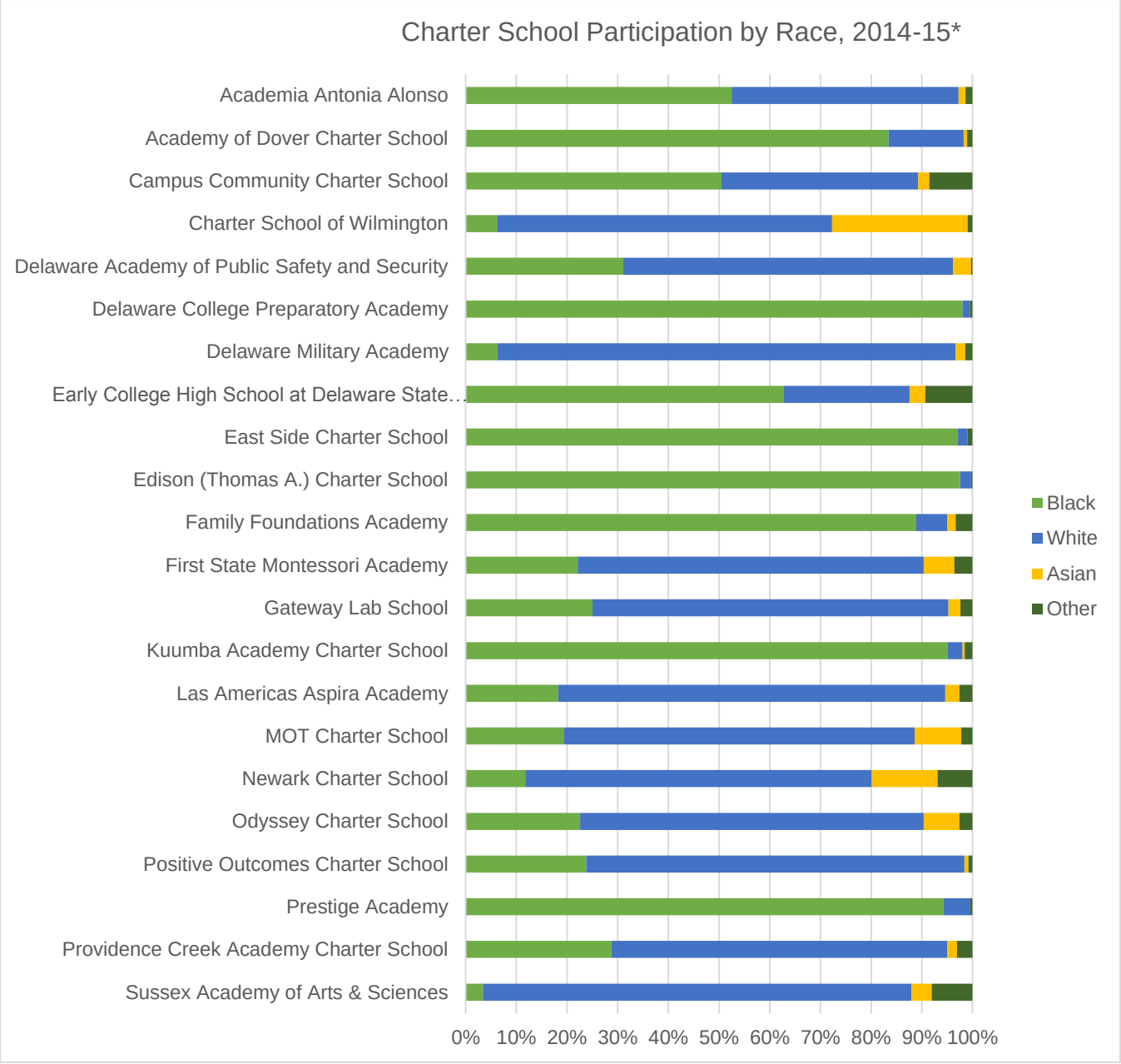


Figure 4.5

WHAT IS THE PERCENTAGE OF STUDENTS BY RACE IN EACH CHARTER SCHOOL?



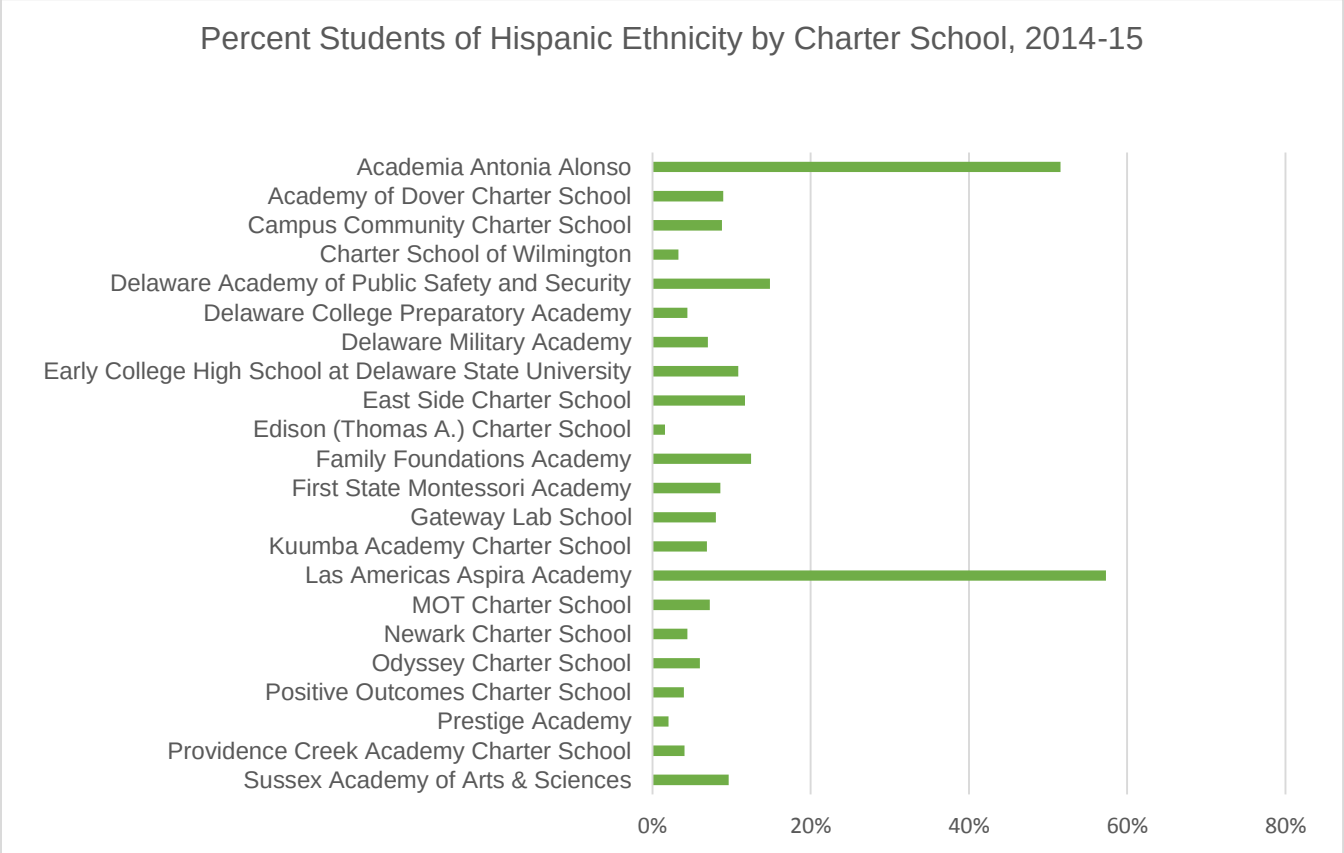
*Only schools open in 2014-15 and 2015-16 are included in this analysis

Figure 4.6

The racial and ethnic composition of the student body varies across charter schools. Key differences between Delaware's overall charter school population and the population within specific schools include:

- Black students (41% of the total charter population) represent over 95% of students at Kuumba Academy, Edison Charter School, East Side Charter School, and Delaware College Preparatory Academy. Black students represent less than 7% of students at the Sussex Academy of Arts & Sciences, Delaware Military Academy, and the Charter School of Wilmington.

- White students (49% of the total charter population) represent over 80% of students at Delaware Military Academy and Sussex Academy of Arts & Sciences. White students represent less than 3% of the student population at Edison Charter School, East Side Charter School, and Delaware College Preparatory Academy.
- Asian students (6% of the total charter population) represent 27% of the student population at the Charter School of Wilmington.



*Only schools open in 2014-15 and 2015-16 are included in this analysis

Students of Hispanic ethnicity represent 9% of the total charter population. Within charter schools, this percentage ranges from 2% at Prestige Academy and Edison Charter School to 57% at Las Americas Aspira Academy. The percentage of students of Hispanic ethnicity exceeds 50% in two schools, Academia Antonia Alonso and Las Americas Aspira Academy. Both of these schools have an instructional focus of dual language immersion, providing instruction to all students in both Spanish and English. When these two schools are removed from the analysis, students of Hispanic ethnicity represent 7% of the state's charter school population.

WHAT IS THE PERCENTAGE OF STUDENTS BY RACE AND ETHNICITY IN EACH VOCATIONAL TECHNICAL SCHOOL?

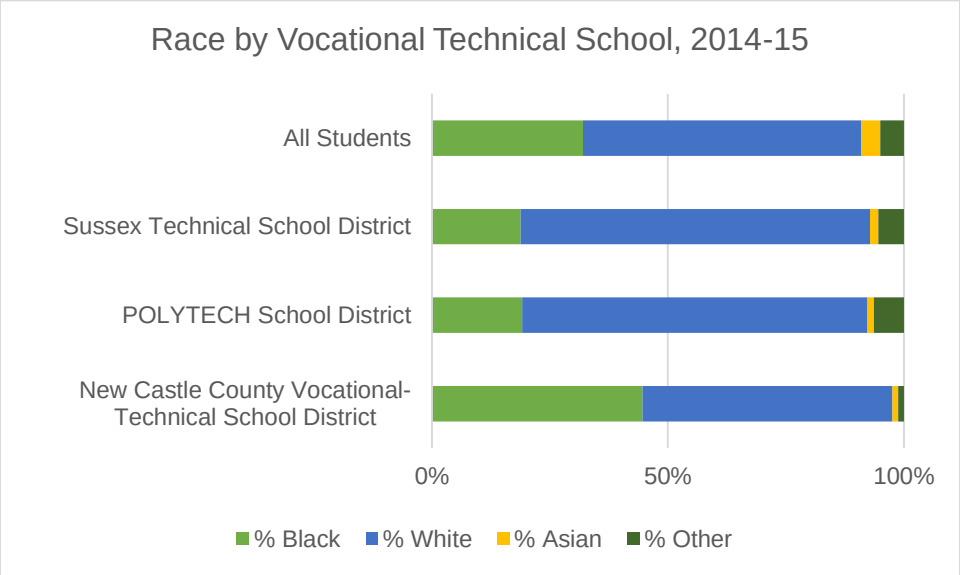


Figure 4.8

Overall, vocational technical schools serve a smaller percentage of students of color than traditional and charter schools. In both Sussex Technical School District and POLYTECH School District, white students represent over 70% of the student population. New Castle County Vocational-Technical School District, which is located in a more densely populated and racially diverse area of the state, serves a more racially diverse student population.

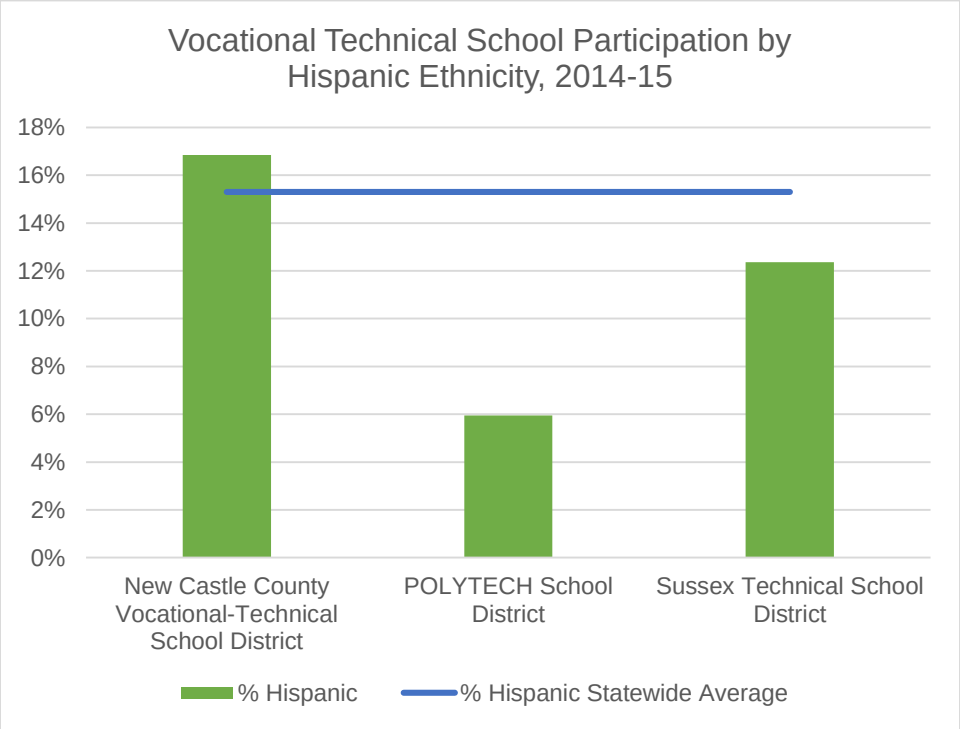
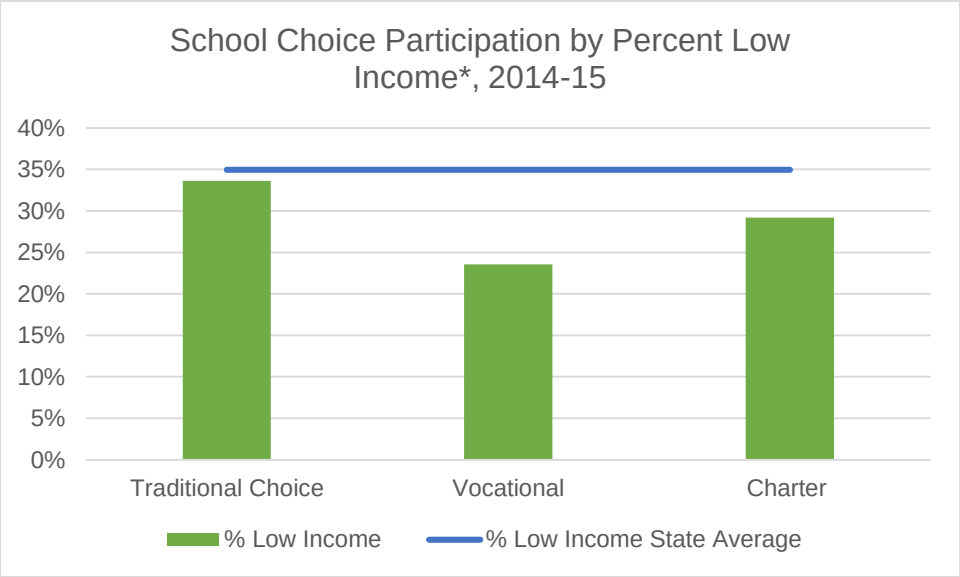


Figure 4.9

In both POLYTECH School District and Sussex Technical School District, the percentage of students of Hispanic ethnicity is below the percentage of students of Hispanic ethnicity in the county's traditional public schools. The percentage of students of Hispanic ethnicity in POLYTECH School District (located in Kent County) is slightly lower (6%) than the percentage of students of Hispanic ethnicity in Kent County's traditional public schools (8%). In Sussex County, students of Hispanic ethnicity represent 20% of the traditional public school population, while they represent 12% of students in Sussex Technical School District. In New Castle County Vocational Technical School District, the percentage of students of Hispanic ethnicity (17%) is equal to the percentage of students of Hispanic ethnicity in New Castle County's traditional public schools.

School Choice Participation: Students from Low Income Families



*Low income is based on students directly certified for SNAP and TANF

Figure 4.10

Students from low income families represent 35% of Delaware's overall student population and only 29% of those pursuing choice options. The proportion of students from low income families is noticeably lower than the state average in vocational technical schools, where they represent 24% of students.

HOW DOES THE PERCENTAGE OF STUDENTS FROM LOW INCOME FAMLIES CHOICING IN COMPARE TO THE TOTAL DISTRICT POPULATION?

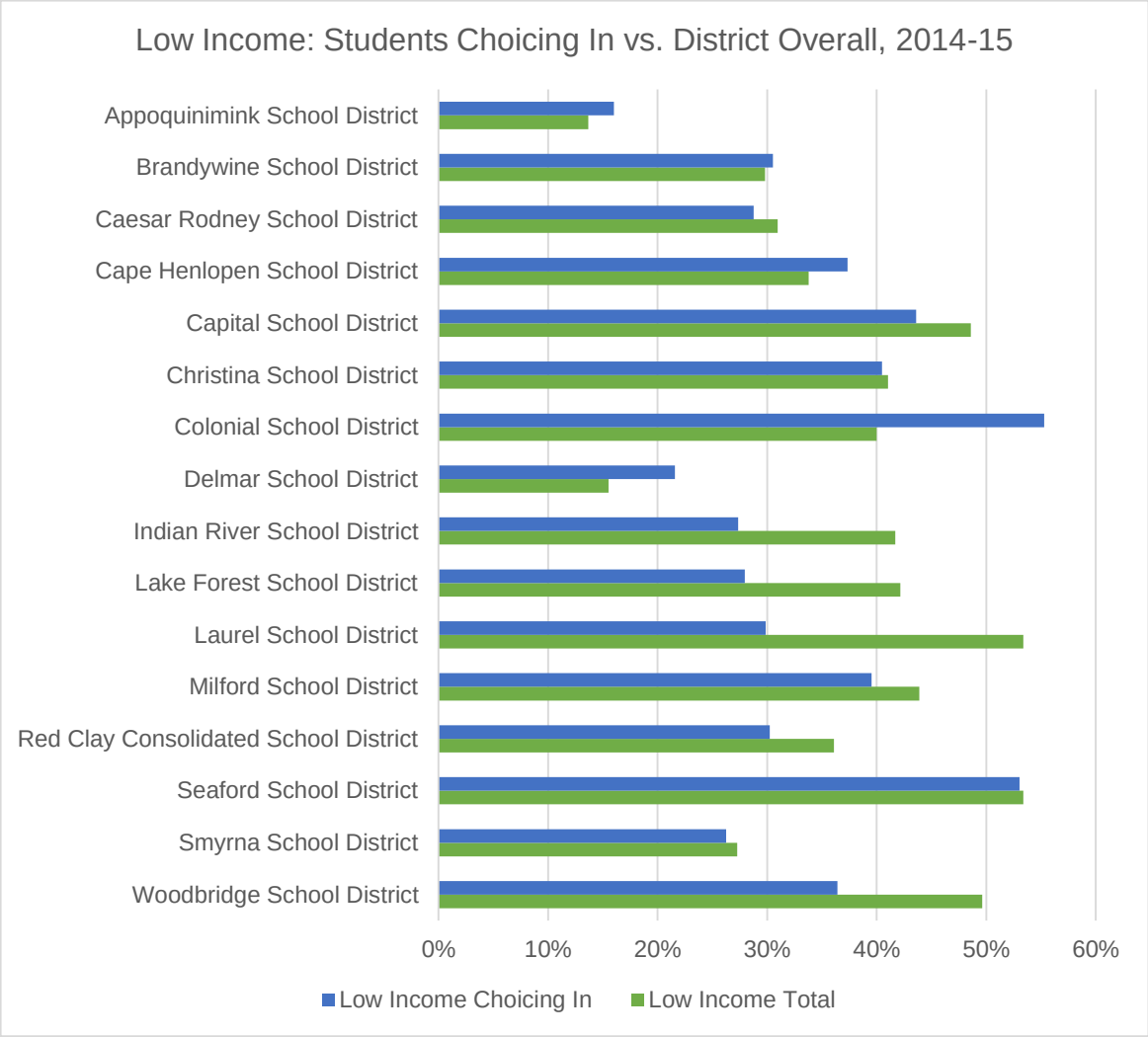


Figure 4.11

In the majority of school districts, the proportion of low income students in the choice population is comparable (within ten percentage points) to the proportion of low income students in the total student population. In five districts (Colonial School District, Indian River School District, Lake Forest School District, Laurel School District, Woodbridge School District), the low income percentage differs by more than 10 percentage points between the overall student population and the choice student population. In four of these districts there is a smaller percentage of low income students in the choice population than the overall student population.

HOW DOES THE PERCENTAGE OF STUDENTS FROM LOW INCOME FAMILIES CHOICING OUT COMPARE TO THE PERCENTAGE OF STUDENTS FROM LOW INCOME FAMILIES IN THE HOME DISTRICT?

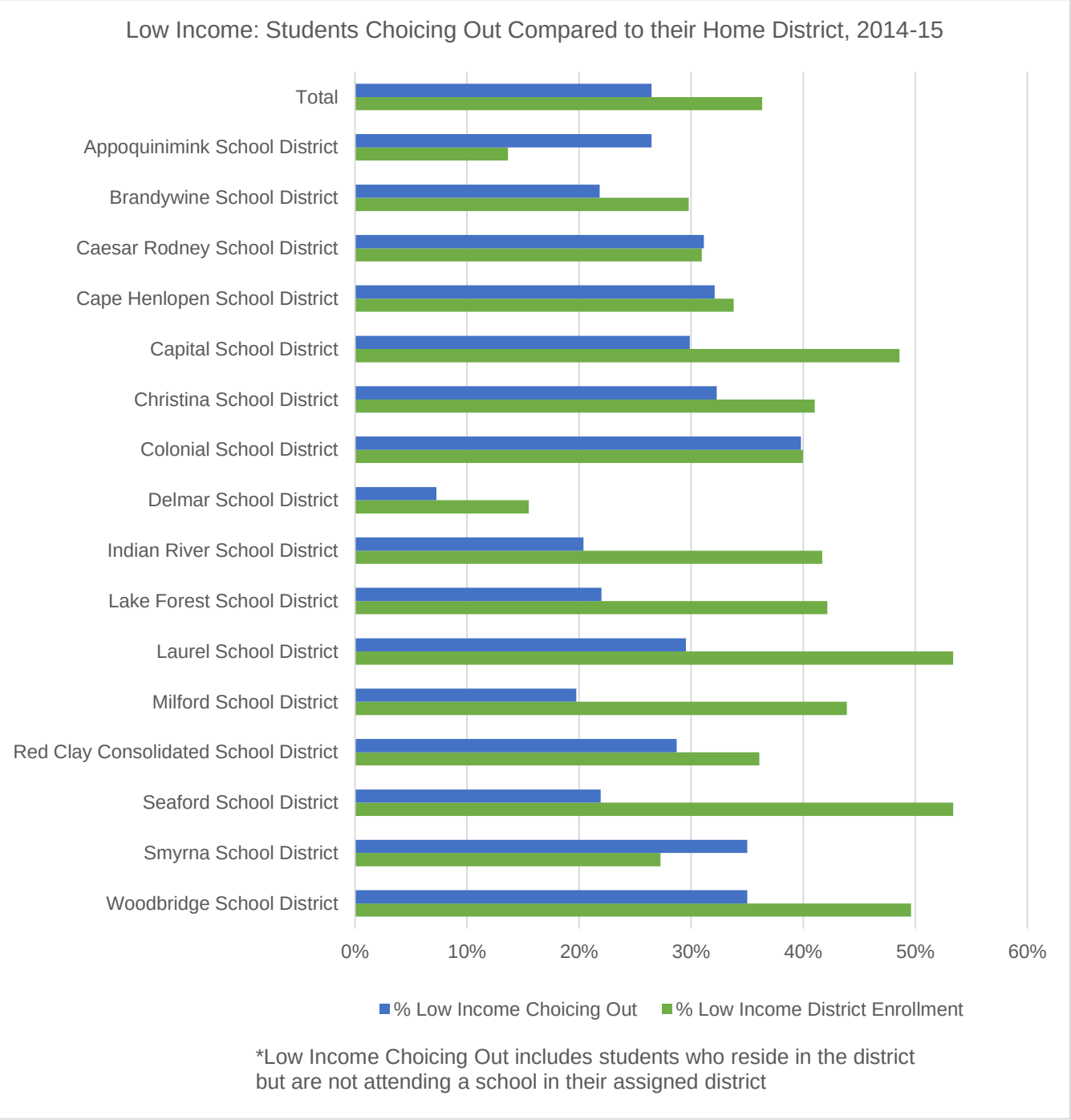


Figure 4.12

The chart above compares the population of low income students choicing out of their home district (top bar) to the population of low income students who remain in their home district (bottom bar). As demonstrated in the chart above, students choicing out of their home district are less frequently from low income families than those who remain. The differences between these two populations is greatest in districts with the highest overall percentages

of low income students, including Laurel School District, Seaford School District, and Woodbridge School District. In all but three districts the percentage of low income students in the choice population is smaller than the percentage of low income students in the district as whole.

HOW DOES THE PERCENTAGE OF STUDENTS FROM LOW INCOME FAMILIES VARY ACROSS CHARTER SCHOOLS?

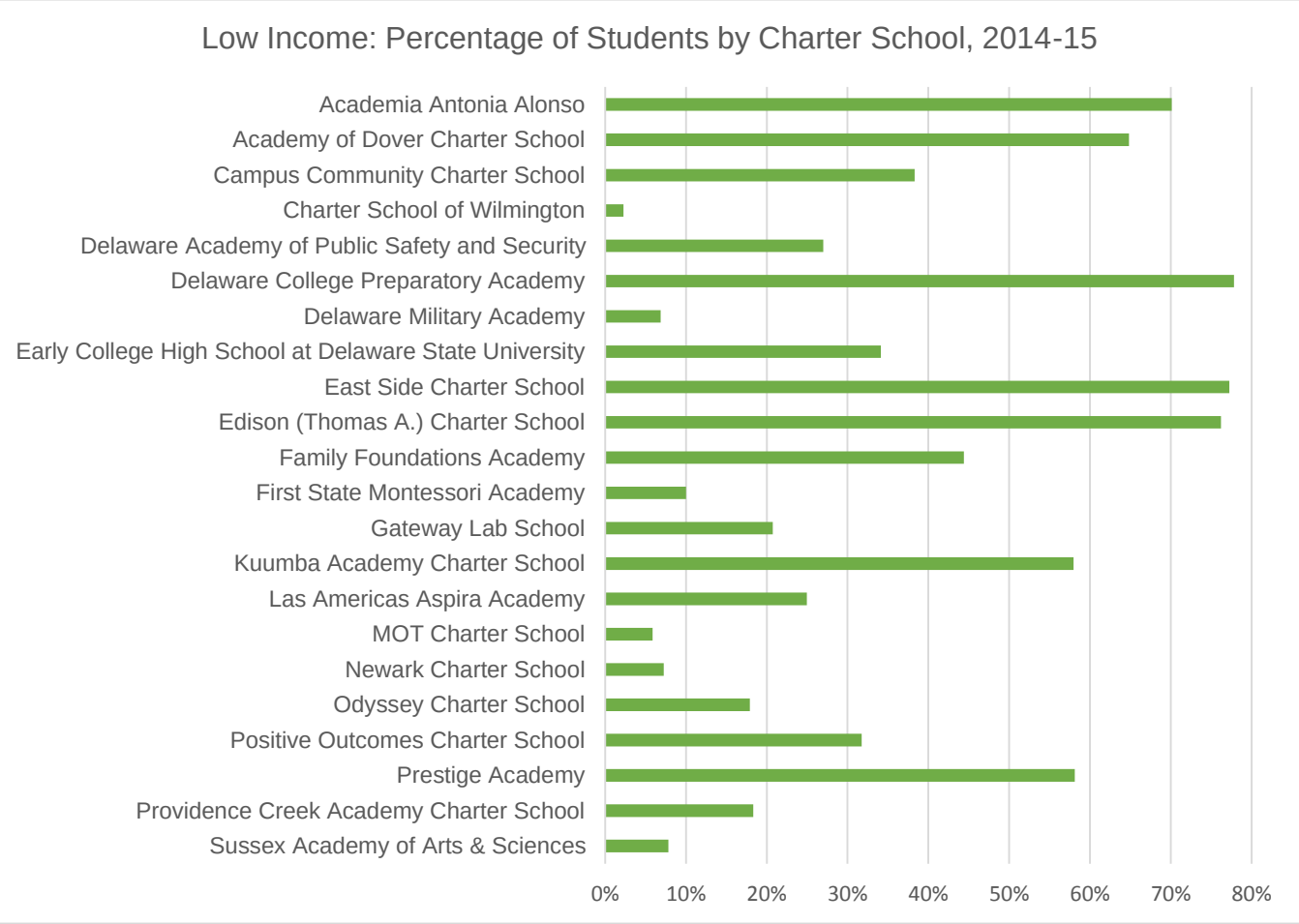


Figure 4.13

The percentage of students from low income families in each charter school's population ranges from 2% in the Charter School of Wilmington to 78% at Delaware College Preparatory Academy. There are four charter schools whose population of students from low income families exceeded 70% of the entire student population in 2014-15. All four of these schools are located in Wilmington.

HOW DOES THE PERCENTAGE OF STUDENTS FROM LOW INCOME FAMILIES VARY ACROSS VOCATIONAL TECHNICAL DISTRICTS?

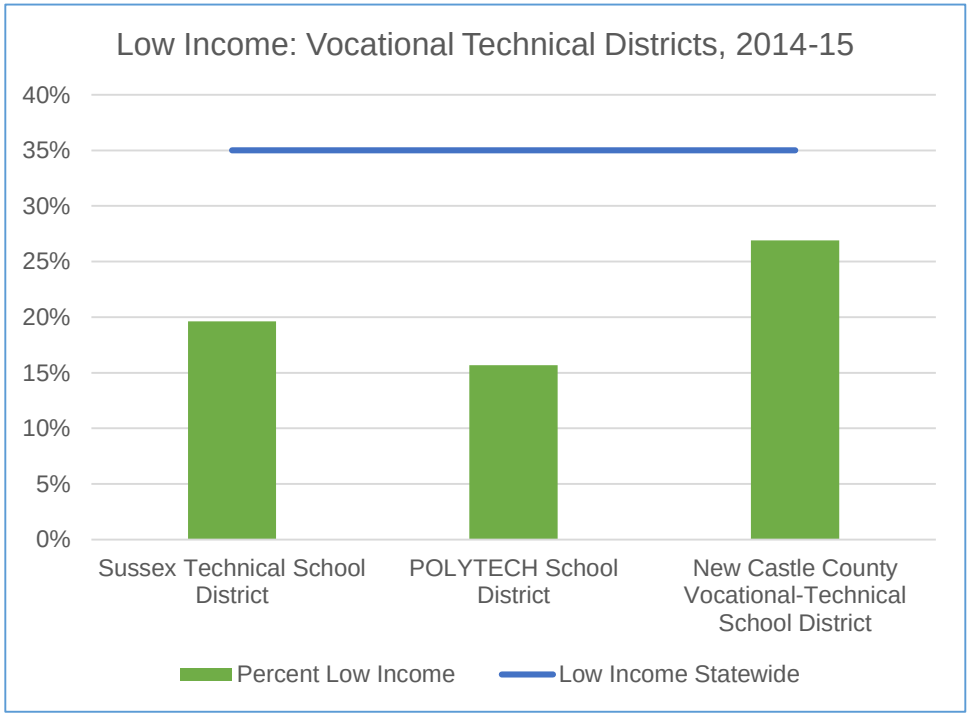


Figure 4.14

The percentage of students from low income families in the vocational technical district population ranges from 16% at POLYTECH School District to 27% at New Castle County Vocational Technical School District (NCCVT). NCCVT is located in a more densely populated area of the state and has a student population that is significantly larger than the other two vocational technical districts. In each vocational technical district, the percentage of students from low income families in the district population is lower than the percentage of students from low income families in the state's entire student population (35%). In addition, the percentage of low income students in each vocational technical school district is lower than the percentage of students from low income families in each county's traditional public schools. Low income students represent 34% of traditional public school students in New Castle County, 32% of traditional public school students in Kent County, and 36% of traditional public school students in Sussex County.

School Choice Participation: Students with Disabilities

3,123 students with Individualized Education Programs (IEPs) participate in school choice. This number represents 16% of all students with disabilities in the state. In this chapter, students with disabilities attending special schools are considered to be enrolled in the district in which the school they attend is housed. However, the enrollment process for these schools does not follow the school choice application process. Placements are determined by student need and students do not need to apply for seats at these schools.

The overall percentage of students with disabilities in the choice population (12%) is only slightly smaller than the percentage of students with disabilities in Delaware's overall student population (14%).

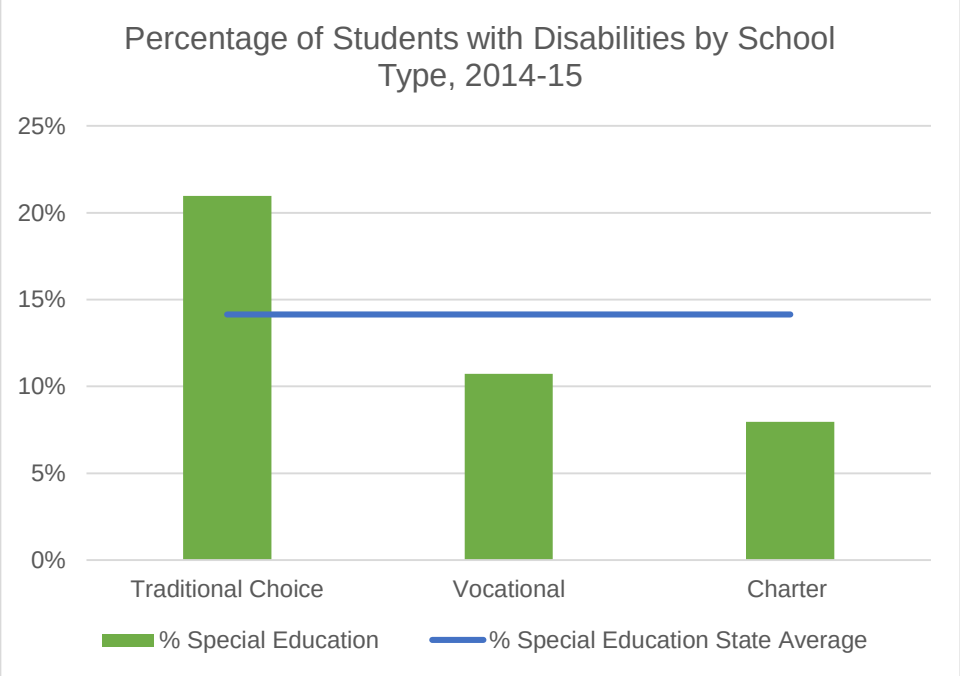


Figure 4.15

There is a high percentage of students with disabilities in the traditional choice population (21%) and a lower percentage of students with disabilities in the charter and vocational technical population. Compared to their percentage in the overall population, students with disabilities have lower rates of enrollment in charter and vocational technical schools where they represent 8% and 11% percent of students respectively.

HOW DOES THE PERCENTAGE OF STUDENTS WITH DISABILITIES CHOICING INTO TRADITIONAL SCHOOLS COMPARE TO THE STATE AVERAGE?

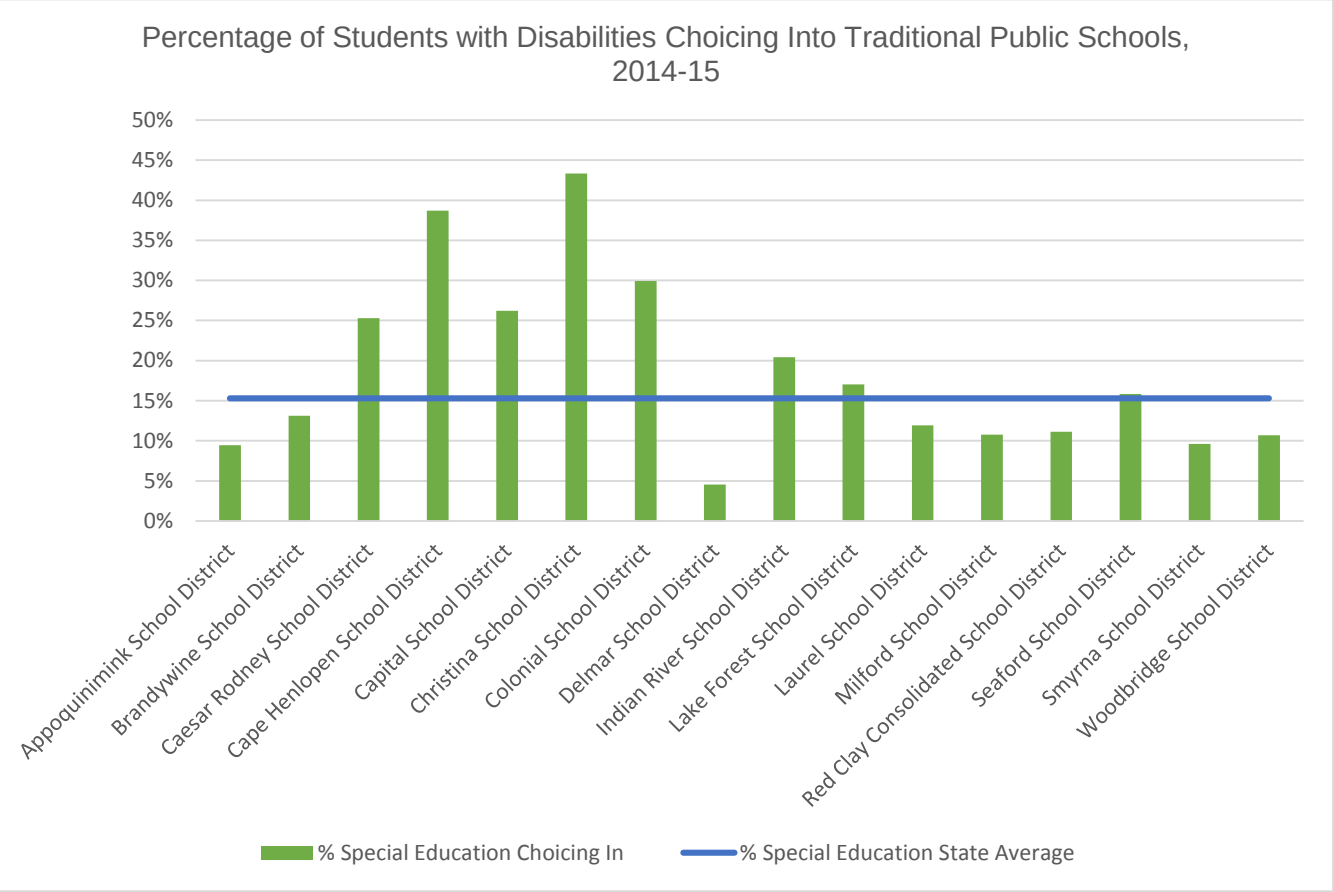


Figure 4.16

In five school districts, students with disabilities represent more than 25% of the district's overall choice student population (Caesar Rodney School District, Capital School District, Cape Henlopen School District, Christina School District, and Colonial School District). This percentage is the highest in Christina School District (43%) which houses statewide specialized programs for students with disabilities including the Delaware School for the Deaf and the Delaware Autism Program.[9]

[9] Christina School District, *Schools and Programs, http://www.christinak12.org/apps/pages/index.jsp?uREC_ID=181296&type=d*

HOW DOES THE PERCENTAGE OF STUDENTS WITH DISABILITIES CHOICING OUT COMPARE TO THOSE IN THEIR HOME DISTRICT?

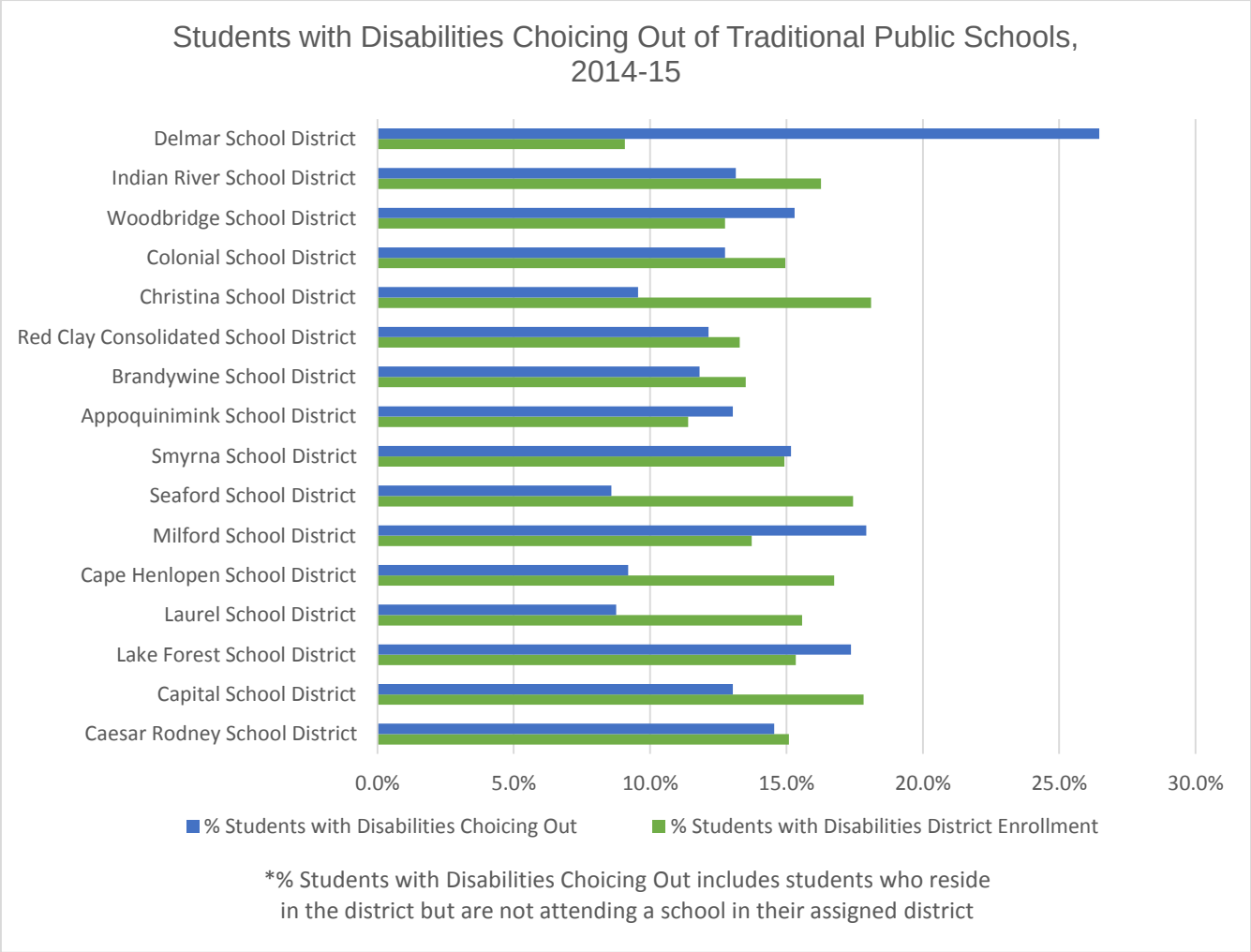


Figure 4.17

The chart above compares the population of students with disabilities choicing out of their home district (top bar) to the population of students with disabilities who remain in their home district (bottom bar). With the exception of five districts (Appoquinimink School District, Delmar School District, Lake Forest School District, Milford School District, Woodbridge School District), the percentage of students with disabilities remaining in their home school is higher than the percentage opting out for choice programs. The difference between these two groups is under 10 percentage points in all districts except Delmar School District, where students with disabilities represent 27% of those pursuing choice opportunities and 9% of the total student population.

HOW DOES THE PERCENTAGE OF STUDENTS WITH DISABILITIES VARY ACROSS CHARTER SCHOOLS?

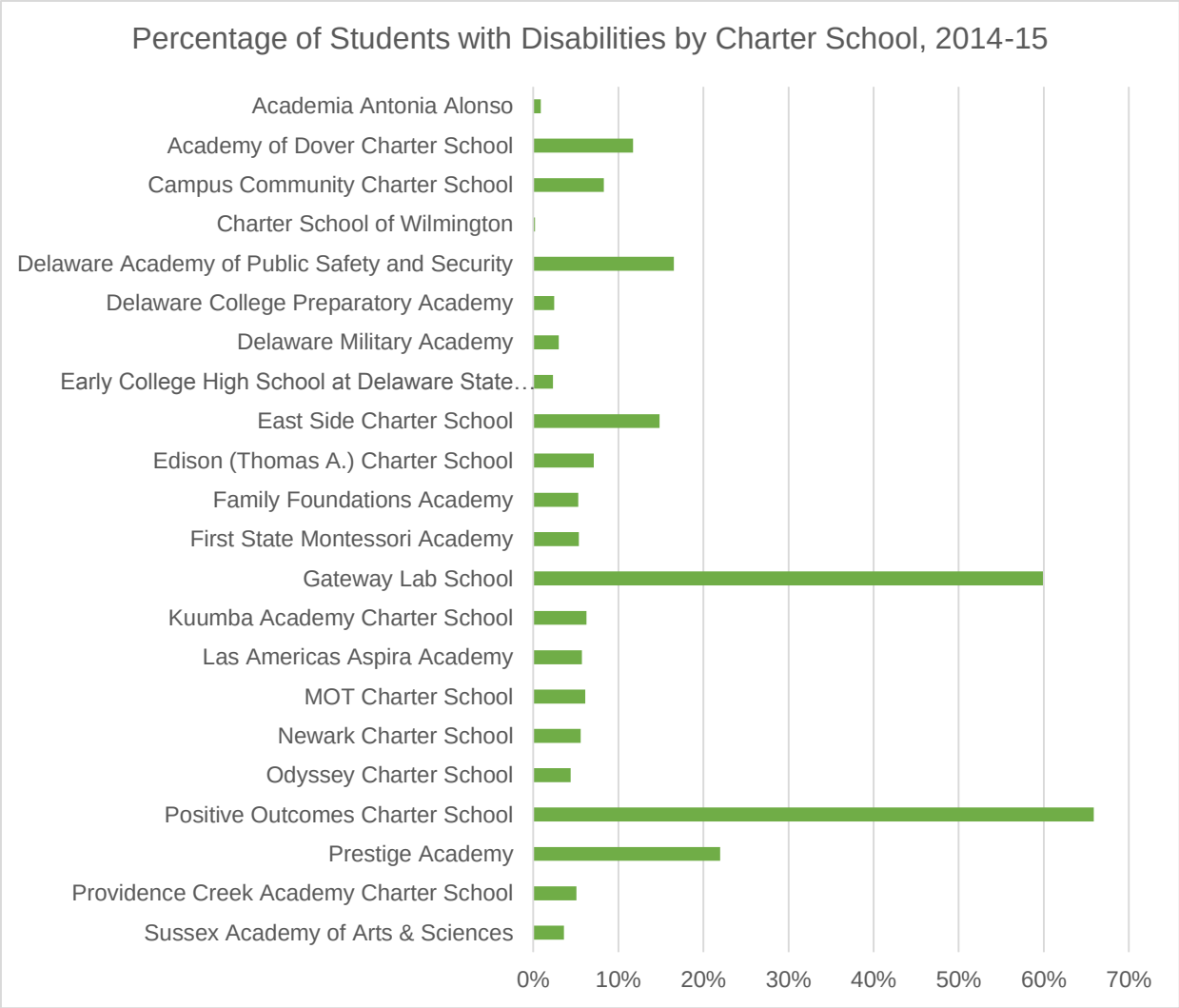


Figure 4.18

There is a smaller percentage of students with disabilities enrolled in charter schools (8%) than traditional public schools (14%). However, there are two schools, Gateway Lab School and Positive Outcomes Charter School, where students with disabilities represent over 60% of the student population. Both of these schools have a charter mission that is based on the provision of individualized instruction to academically struggling students or those with mental health challenges. When these two charter schools are excluded, students with disabilities represent 6% of the state's charter school population. There are four charter schools for whom students with disabilities represent 2% or less of the entire student population.

HOW DOES THE PERCENTAGE OF STUDENTS WITH DISABILITIES VARY ACROSS VOCATIONAL TECHNICAL SCHOOLS?

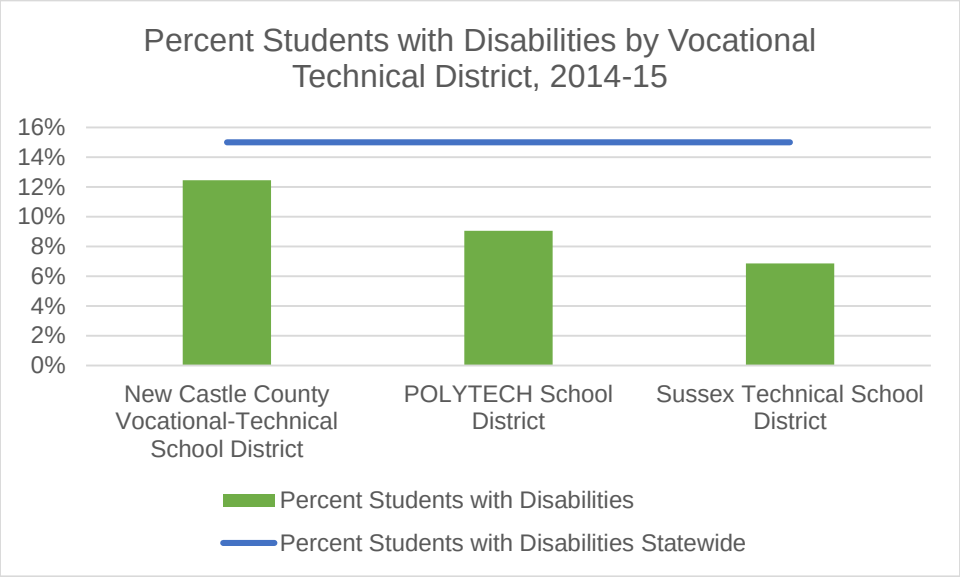


Figure 4.19

The percentage of students with disabilities within each vocational technical district ranges from 7% in Sussex Technical School District to 12% in New Castle County Vocational-Technical School District. Within each vocational technical district, the percentage of students with disabilities is smaller than the percentage of students with disabilities in the traditional districts within the county where the vocational technical school operates.

School Choice Participation: English Language Learners

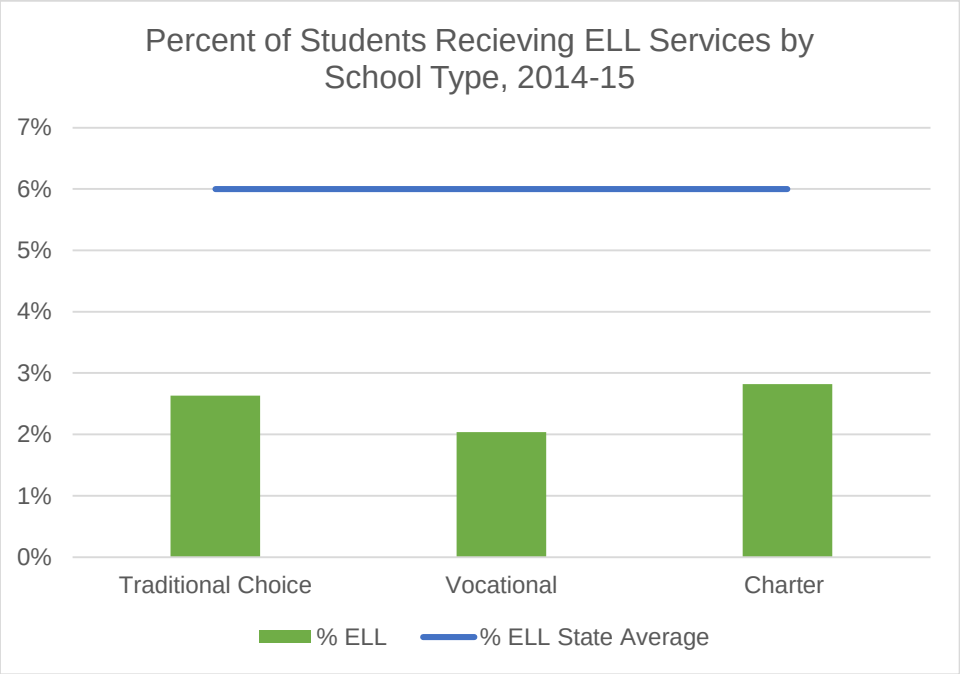


Figure 4.20

671 students receiving ELL services participate in choice programs, representing 8% of all ELLs in the state. Students receiving ELL services represent 6% of the state's entire student population, but less than 3% of the state's choice population. Students receiving ELL services represent only 2% of the student population in vocational technical schools.

ELL STUDENTS CHOICING INTO TRADTIONAL PUBLIC SCHOOLS

In all but one district, there is a higher percentage of students receiving ELL services in the overall student population than there is in the choice student population. There are two traditional school districts, Lake Forest School District and Smyrna School District, which do not have any ELL choice students.

- Appoquinimink has a comparable number of ELL students in the overall district population and in the choice population.
- In districts with the highest percentages of students receiving ELL services (Indian River School District, Seaford School District, and Red Clay Consolidated School District), the percentage of choice students receiving ELL services is less than half the percentage of students receiving ELL services in the district overall.

ELL STUDENTS CHOICING OUT OF TRADITIONAL PUBLIC SCHOOLS

Every traditional public school district in Delaware has a higher proportion of students receiving ELL services remaining in the district than pursuing choice opportunities. Across the state, students receiving ELL services represent 6% of total traditional district enrollment and 3% of students choicing out of their home school for other traditional, charter, or vocational technical programs.

HOW DOES THE PERCENTAGE OF STUDENTS WHO ARE ENGLISH LANGUAGE LEARNERS VARY ACROSS CHARTER SCHOOLS?

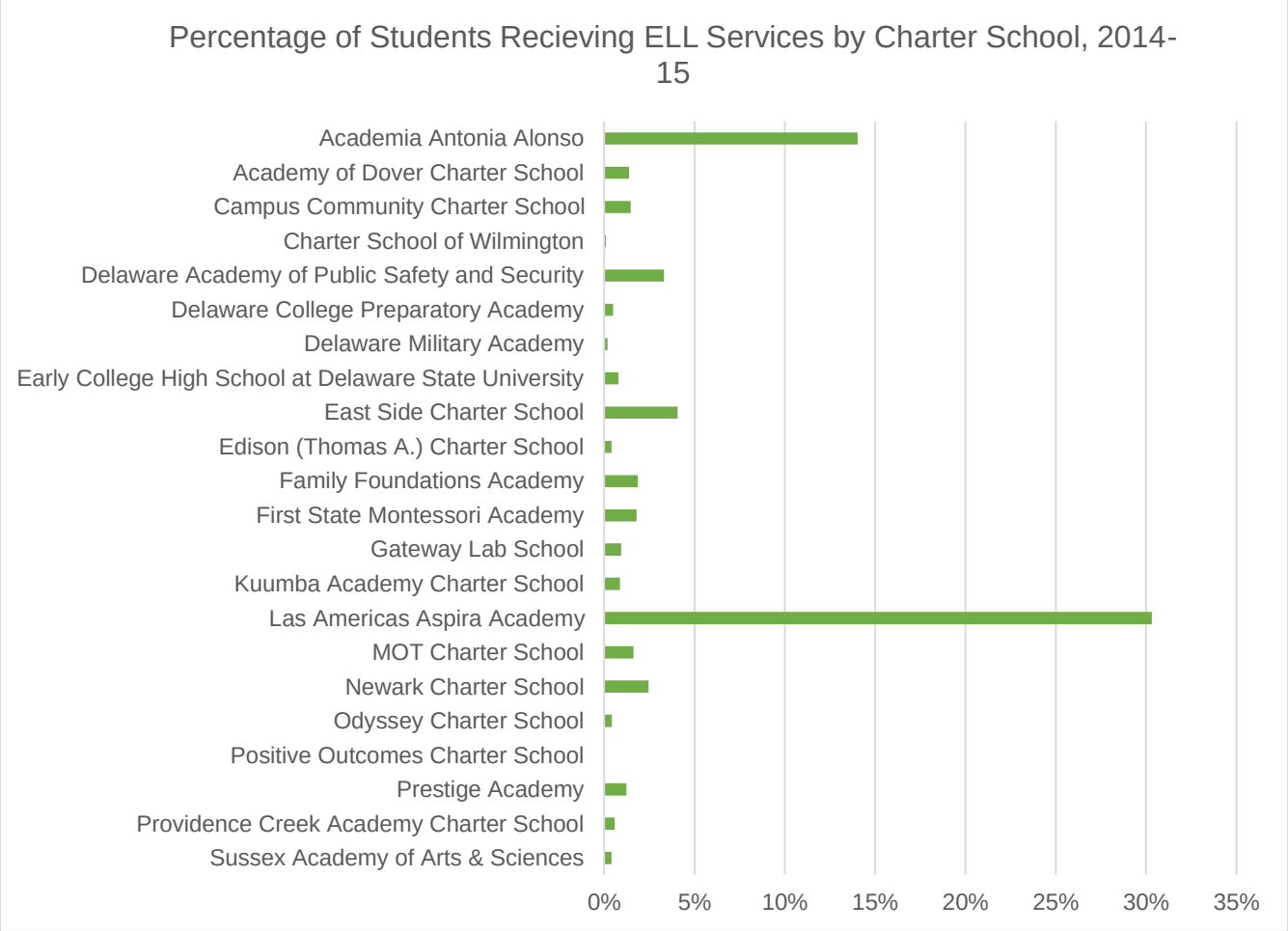


Figure 4.21

Fewer students who have been identified as English Language Learners attend charter schools (3%) than traditional public schools (6%). However, there are two dual language immersion charter schools, Academia Antonia Alonso and Las Americas Aspira Academy, where ELL students make up 14% or more of the student population. When these two dual language schools are removed from the analysis, the average Delaware charter school has a population in which 1% of students receive ELL services.

HOW DOES THE PERCENTAGE OF STUDENTS WHO ARE ENGLISH LANGUAGE LEARNERS VARY ACROSS VOCATIONAL TECHNICAL SCHOOLS?

Students receiving ELL services represent 2% of students at vocational technical schools. Most vocational technical students receiving ELL services attend New Castle County Vocational-Technical School District. At POLYTECH School District and Sussex Technical School District, students receiving ELL services represent less than 1% of the student body.

Summary

Although Delaware has a wide range of public school options available to students, there are many instances in which the schools students attend do not serve a population that is representative of the total student population in the county in which the school operates. Students from low income families, students with disabilities, and students receiving ELL services attend schools that are not their school of residence at lower rates than their peers. There is demographic variability across charter and vocational technical schools, with some schools serving a student population whose demographic characteristics largely mirror their traditional school neighbors, and others serving a student population whose demographic characteristics differ significantly from neighboring traditional public schools.

CHAPTER V: STUDENT DEMAND FOR EDUCATION OPTIONS

How are Delaware's public schools meeting the demand for specialized education program offerings?

Given information on the types of program offerings currently available to Delaware students, student choice enrollment patterns in relation to education options, and the demographic and geographic characteristics of students pursing these options, Delaware's educational stakeholders posed the following question: **how well does the current supply of education options meet the existing demand, and how will it do so in the future?**

We examine this question from several perspectives based on enrollment trends and long-term projections, current school capacity compared to enrollment, and by examining choice school admissions processes including applications and waitlists.

Data for this chapter are drawn from a range of sources including state-provided enrollment and program data, a forthcoming study of enrollment projections conducted by the University of Delaware, and the survey administered by PCG to all traditional school districts, vocational-technical districts, and charter schools.

Enrollment Trends and Projections

One way to understand the demand on the education system overall and on particular education program options is to review past changes in enrollment and enrollment projections. [10]

TRENDS IN SCHOOL CHOICE PARTICIPATION, 2010-2015

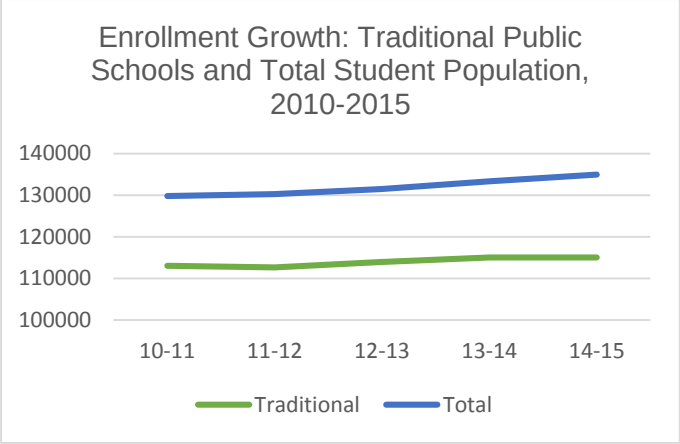


Figure 5.1

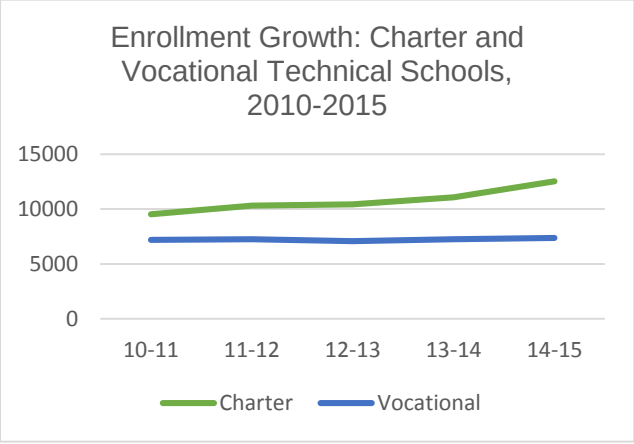


Figure 5.2

Between the 2010-2011 school year and the 2014-2015 school year, Delaware's public school student population grew by 5,164 students (4%). In this five year span, enrollment increased across all school types: traditional, charter, and vocational technical schools. The rate of change was highest among charter schools, where enrollment increased by 31% from 2010-2015, representing an additional 3,000 students. The increase in enrollment was smaller at vocational technical and traditional public schools, where the increase was only 2%.[11]

[10] Ratledge, Edward. University of Delaware: Center for Applied Demography& Survey Research, *Enrollment Projection Study* (Draft 2015).

[11] Five year trend data on choice students in traditional public schools was not available

ENROLLMENT PROJECTIONS THROUGH 2024-2025

	2014-2015	2019-2021 (5 year)	2024-2025 (10 year)	10-year change
Total Public School Enrollment	134,883	136,065	137,912	+2.2%
White	62,902	61,489	63,202	+.5%
Black	42,075	42,706	44,123	+4.9%
Hispanic	20,591	22,634	22,666	+10.1%
Students with Disabilities	19,040	19,240	19,589	+2.9%
Low income	63,482	64,766	65,689	+3.5%

Source*: Enrollment Projection Study, Preliminary Analysis*, University of Delaware Center for Applied Demography & Survey Research, 2015

Enrollment projections for the state indicate continued growth along a similar trajectory. The predicted growth in the number of public school students through 2025 is 2.2%. Predicted growth is higher among some subgroups. For example, the predicted enrollment of Hispanic students increases 10.1% for the same period. Black student enrollment is predicted to grow 4.9%, and the number of white students will increase .5%.

In ten years, the number of students with disabilities is projected to increase 2.9%, though they will remain near 14% of the student population. The number of students from low income families is projected to increase by 3.5% though they will remain a similar percentage of the total student population. It is worth noting these projections indicate slower growth in certain populations than their growth rates over the past decade.

ENROLLMENT PROJECTIONS THROUGH 2025 BY SCHOOL TYPE

School type	2014-2015	2019-2021	2024-2025	10-year change
All public schools	134,883	136,065	137,912	+2.2%
Charter Schools	12,541	12,738	12,892	+2.8%

The University of Delaware *School Enrollment Projection Study* also determined enrollment projections for charter schools.[12] The projected growth of charter school enrollment follows the overall trend of incremental growth in the statewide figures. This projection, however, may not take into account the potential for additional charter seats to be added through expansion or opening of new schools.

[12] Projection data do not include projected enrollment figures for vocational technical schools.

Projections by Industry Sector

According to a Delaware Department of Labor report of occupation and industry projections through 2022, the industry sectors with the greatest expected growth in Delaware include Health Care and Social Assistance, Construction, and Finance and Insurance.[13] A list of the top ten sectors based on net job growth is included in the table below.

PROJECTED NET JOB GROWTH BY INDUSTRY SECTOR, 2022[14]

Industry Sector	Net Job Growth
Health Care and Social Assistance	9,980
Construction	5,070
Finance and Insurance	4,440
Professional and Technical Services	3,790
Accommodation and Food Services	3,210
Retail Trade	2,670
Administrative and Waste Services	2,330
Educational Services	1,950
Other Services, except Public Administration	1,800
Government	1,250

The table below indicates student enrollment in CTE pathways in Delaware schools. In 2014-15, human services and health science pathways were among the most popular for Delaware students, aligning with state-level job growth projections. Additionally, career clusters related to construction, finance, and business management had a large number of students enrolled, similarly aligning with projected state job growth. Further analysis of areas of expected growth within each industry sector, and the pathways that best align to these sectors, is needed for a complete gap analysis regarding CTE programs.

CAREER CLUSTERS WITH HIGHEST STUDENT ENROLLMENT, 2014-15

Career Cluster	Kent	New Castle	Sussex	Total
Human Services	631	1302	563	2496
Science, Technology, Engineering & Math	385	1013	543	1941
Health Science	328	1131	369	1828
Agriculture, Food & Natural Resources	492	490	686	1668
Business Management & Administration	370	620	83	1073
Architecture and Construction	195	717	94	1006
Finance	138	365	150	653
Transportation, Distribution & Logistics	130	378	58	566
Marketing	187	302	68	557
Arts, A/V Technology & Communications	48	133	60	241

[13] http://dcrn.delawareworks.com/docs/Delaware-Occupation-and-Industry-Projections.pdf
[14] http://dcrn.delawareworks.com/docs/Delaware-Occupation-and-Industry-Projections.pdf, Page 36

Building Capacity, Enrollment and Student Choice

PCG received building capacity data for 199 schools for the 2015-16 school year.[15][16]

Across the state of Delaware there are schools that are both below and above capacity. Overall, there are more seats available in Delaware schools than students to fill them. Analysis of data reported by school districts, charter schools and DDOE suggests there are roughly 15,369 open seats across 138 schools statewide. New Castle County has the largest available capacity among the counties with 13,000 seats available in 71 of its 89 traditional schools and 11of its 20 charter schools[17]. Schools that are at or above capacity have a slightly overall higher rate of both inter- and intra- district choice students (6% and 16%) than the overall state participation rates (6% and 19%).

Based on the data provided through the SREO survey and state databases, 2014-15 enrollment numbers and 2015-16 building capacity are used throughout this section to approximate available seats. Building capacity for charter schools is calculated using their 2015-16 charter authorization. Year to year changes in enrollment, choice, and school configurations may affect the below estimates. It is understood that districts are responsible for determining their building capacity and providing school assignments for each student who resides in the district. The estimates in this section are used to provide a general landscape for the available seats throughout Delaware and do not account for specific considerations at the district or school level.

BUILDING CAPACITY BY COUNTY, 2014-15

	At or Above Capacity (≥100%)		Below Capacity (< 100%)		
	Number of schools at or over capacity	Number of Seats over capacity	Number of schools with excess capacity	Number of available seats	**Number of open seats**
Kent	18	1,312	23	2,404	1,092
New Castle	23	1,539	86	13,001	11,462
Sussex	14	712	29	3,527	2,815
Total	**55**	**3,563**	**138**	**18,932**	**15,369**

BUILDING CAPACITY BY SCHOOL TYPE, 2014-15[18]

	At or Above Capacity (≥100%)		Below Capacity (< 100%)		
	Number of schools at or over capacity	Number of Seats over capacity	Number of schools with excess capacity	Number of available seats	**Number of open seats**
Charter	8	437	14	1,966	1,529
Vocational	1	100	4	166	66
Traditional	46	3,026	120	16,800	13,774
Total	**55**	**3,563**	**138**	**18,932**	**15,369**

[15]Building capacity was reported in the SREO survey for 15-16 school year. Building capacity for charter schools is their charter authorization.
[16] 6 of the 199 schools did not have 2014-15 enrollment numbers and therefore were not included in the capacity calculations
[17] The 20 charter schools includes the four new charter schools that opened for the 15-16 school year. However, available seats was not evaluated for these schools.
[18] Available seats at charter schools is, at best, an estimate due to charter authorizations changing annually. Over recent years the number of active charters and grades served has also fluctuated. The number of charter schools with a waitlist suggests the approximation of open seats is likely too high.

BUILDING CAPACITY BY SCHOOL LEVEL, 2014-15[19]

	At or Above Capacity (≥100%)		Below Capacity (< 100%)		
	Number of schools at or over capacity	Number of Seats over capacity	Number of schools with excess capacity	Number of available seats	**Number of open seats**
Elementary	34	2,220	90	8,924	6,704
Middle	9	614	23	3,907	3,293
High	12	729	25	6,101	5,372
Total	**55**	**3,563**	**138**	**18,932**	**15,369**

72% of traditional schools, 64% of charter schools, and 80% of vocational technical schools appear to be under-enrolled based on reported building capacity. Of these schools, 85 (62%) had an enrollment of less than 90% of their building capacity (i.e. excess capacity greater than 10%), all of which were either traditional or charter schools. No vocational technical schools had excess capacity greater than 10%. Of the nine charter schools that had enrollment of less than 90% capacity, two thirds also indicated having a waitlist. Changing charter authorizations and grades served by individual charter schools was not accounted for in this analysis and may be over-estimating the perceived number of open seats.

Among the 55 schools that were at or above capacity, 46 were traditional public schools, 8 were charter schools, and 1 was a vocational technical school.[20] Twenty (37%) of the schools that were at or above capacity had enrollment that exceeded 110% of indicated building capacity. While over-enrolled schools were dispersed across the state, the majority represented elementary grades. Only two over-enrolled schools served students in grades 9-12.

Admissions and Waitlists

Another way to measure student demand for particular educational opportunities is to examine the ratio of applications to the number of students accepted into particular programs or schools and to examine waitlists. The survey administered as part of this study contained a series of questions related to applications and waitlists. Responses to the survey indicated that these data are not consistently collected. Districts and individual schools maintain different policies about whether to keep a waitlist at all, or to only maintain a waitlist for a specific period of time. Due to the uneven responses across school districts and school types, and the variability in the collection of these data by schools and districts, few broad conclusions can be drawn at the state level.

While waitlists can serve as a proxy for school capacity, these indicators are not completely aligned measurements of demand or actual capacity of a particular school. This is important to note since many schools indicated having a waitlist even though their school capacity was less than 100% of building capacity. In addition to the individual school policies and circumstances surrounding admissions and waitlists, traditional district schools are only mandated to accept choice students if the capacity of their resident students is below 85%.

[19] Schools with grade spans outside these parameters were added to each category as deemed appropriate to prevent double counting schools. For example, K-8 schools were counted as elementary and 6-12 were counted as high schools.
[20] Four of these charter schools had enrollment in 14-15 significantly higher than the 15-16 charter cap.

The section below presents the limited information we were able to collect regarding admissions and waitlists.

School Type	Schools with a Waitlist		Schools without a Waitlist		Unknown or not reported waitlist*		Total Schools
	#	%	#	%	#	%	
Charter School	18	67%	5	19%	4	15%	27
Vocational Technical School	5	100%	0	0%	0	0%	5
Traditional District School	54	32%	53	32%	60	36%	167
All Schools	**77**	**39%**	**58**	**75%**	**64**	**83%**	**199**

**Unknown: Includes five schools not open to choice*

Among traditional public schools in districts accepting choice students, 54 traditional district schools (32%) indicated that they had more applicants than available seats. Among schools that had a waitlist, most served the elementary grades (77%). Eleven schools that reported a waitlist served high school grades, but only three of these were traditional district schools. The number of reported students on the waitlist for programs offered in traditional public schools ranged from one to over 400 students. At the traditional district level, there were 1.6 applicants for every one accepted student.[21]

All five vocational technical schools indicated having a waitlist. Three of these schools are part of the New Castle County Vocational Technical School District, which holds a district-wide waitlist rather than individual school waitlists. Once admitted into the school, students are guaranteed admission to a CTE pathway based on preference. Students generally gain admission to their first or second choice pathway.

Eighteen charter schools indicated that they maintain a waitlist (78%).The number on the waitlist varied from five to 3,287 students. Across charter schools that provided waitlist data, there were 3.6 applicants for every one accepted student.

Summary

The student population in Delaware has increased by 2+% since 2010-11 and will continue to grow at this pace through 2025 according to recent projections, although growth among subgroups will vary. A comparison of industry projections with CTE pathway enrollment indicate some alignment with the sectors with the highest projected growth. Across the state, Delaware has schools that are both over and under capacity. Each county had both over and under enrolled schools. Overall, there are more seats available statewide than there are students. There is high demand for some education options in Delaware, in particular for seats in choice only schools (vocational technical and charter schools) where the number of applicants exceeds available seats. In many cases these schools maintain long waitlists. This was also true in traditional public schools which reported more applicants than available seats, particularly at the elementary level. The collection of choice application and waitlist data is uneven across and within school types. The lack of data across all schools limit conclusions that can be drawn about supply and demand for particular programs.

..

[21] This figure is based on responses from 80% of traditional districts who responded to this question on the survey.

CHAPTER VI: SUMMARY AND RECOMMENDATIONS

This study, a *Statewide Review of Educational Opportunities for Delaware Students (SREO),* was commissioned by the Delaware State Board of Education (SBE) and the Delaware Department of Education (DOE) to document the educational opportunities available to Delaware's school age children. The goal of the review is to provide an up-to-date view of educational opportunities and an analysis of student choice. This study provides information to stakeholders in the form of a written report as well as an interactive statewide geographical map detailing each school's data and information.

The study focused on three questions:

1. What is the current landscape of specialized educational offerings?
2. What are student choice patterns across the state?
3. Are schools/districts and the state meeting the known demand? If not, where and in what ways?

Below we provide observations from the analysis related to these questions as well as recommendations to strengthen tracking of these important data going forward to inform education polices and decision-making.

Summary

1. What is the current landscape of specialized educational offerings?

   Across Delaware's traditional public schools, charter schools, and vocational technical schools, students have the opportunity to participate in a variety of specialized learning opportunities including advanced coursework, programs designed to provide research-based strategies to struggling learners, and programs that cater to specific student interests, such as visual and performing arts. Specialized educational programs are available in all three counties, however, there is greater variation and concentration of options in the most populated districts in the state. This includes the availability of Advanced Placement (AP) and International Baccalaureate (IB) courses, world language offerings in terms of the number of languages and advanced courses, Career and Technical Education (CTE) courses, and Science, Technology, Engineering and Math (STEM) courses.

   School type was also related to the availability of educational programs. Many charter schools and all vocational technical schools offered opportunities for programs focused on particular themes or pathways, but the range of specialized program opportunities overall was more limited in these types of schools.

2. What are student choice patterns across the state?

   Across the state, 20% of students participate in school choice options outside of their own district and nearly half of these students attend charter schools. However, the percentage of students opting for any particular choice option varies significantly across districts and counties. For example, students attending charter schools constitute a small percentage of the overall choice population in the state's smallest districts where the majority of choice students attend traditional public schools outside of their home district. In contrast, charter students represent the majority of the overall choice population in the most densely populated areas of the state. These differences may be related to the availability of choice options which vary by county and region. Students from New Castle County have numerous choice options at all grade levels, including a high concentration of charter schools. Sussex County residents have a limited number of choice options across grade levels and have lower choice participation rates.

   In relation to student characteristics, we see differences in choice enrollment patterns that are not representative of the state's total population. While the racial composition of Delaware's choice schools

largely mirrors Delaware's overall student population, there are instances in which students of a certain racial group are over- or underrepresented in choice schools. Black students participate in choice schools at a higher rate than students of other racial groups, while white students enroll in choice schools at lower rates. The percentage of Hispanic students of any race participating in choice options is lower than the overall percentage of Hispanic students in the state. Finally, students from low income families, students with disabilities, and students receiving ELL services attend choice schools at lower rates than their peers.

3. Are schools/districts and the state meeting the known demand? If not, where and in what ways?

   The student population in Delaware is projected to increase only 2% from 2015 through 2025 after a period of more rapid growth in the proceeding ten years, with some variation in growth among subgroups. A comparison of industry projections with CTE pathway enrollment indicate some alignment with the sectors with the highest projected growth. Delaware has schools that are both over and under capacity within and across counties. Overall, there are more seats available than there are students statewide. However, there is high demand for some education options, in particular for seats in choice only schools (vocational technical and charter schools) where the number of applicants exceeds available spots. In many cases these schools maintain long waiting lists. This was also true in traditional public schools which reported more applicants than available seats, particularly at the elementary level. The collection of choice application and waitlist data is uneven across and within school types. The lack of data across all schools limit conclusions that can be drawn about supply and demand for particular programs.

Recommendations

Our analysis of the existing data to understand school choice statewide surfaced two primary recommendations related to data collection, program availability, and student participation rates.

The first relates to the collection of data on student choice and school level programs. In order to reliably assess the supply and demand for specialized education programs, **DDOE must have access to stronger, more reliable and consistently collected data related to choice applications, admissions, and waitlists.**

Feedback provided by districts and schools that responded to the survey revealed that this information is not uniformly collected or stored over time by districts or schools. Some schools and systems were able to provide detailed information about each data element, but others did not have systems in place to collect and retrieve these data.

The state revised the choice code to include a standard application used by all choice applicants. However, this application is not mandated to be completed online or sent to a central location and is still often done at the school or district level. If this process was centralized online and made mandatory, it could provide more reliable information and would allow DDOE to collect additional data and conduct deeper analysis around choice patterns in the state. Specific data points of interest will be application rates for all choice seats, acceptance, and waitlist numbers.

With respect to program information, Delaware may consider more unified definitions of programs within schools and districts so that districts can provide streamlined enrollment data in relation to these offerings. Additionally, DDOE should consider conducting a more in-depth review of labor demands and the ways in which Delaware's current and proposed programmatic and course offerings align to projections. In addition, DDOE may wish to maintain the interactive map of specialized educational options developed through this project with current data.

These data will strengthen the possible analyses statewide and within regions to identify enrollment patterns among subgroups and access to specialized programs. These analyses would support identification of strategies necessary to address any limitations of the choice program and would facilitate program planning.

The second recommendation relates to the differences in student participation rates in school choice opportunities. As noted in the summary, students participate in choice at rates that are not representative of the state's total

population. With stronger data, DDOE will be able to better understand the source of the differences in participation and address greater access to specialized educational opportunities for all students in the state. Regular monitoring and reporting of data will promote early identification of gaps. PCG recommends DDOE collaboratively review practices and procedures of those schools and districts with the greatest differences to identify possible barriers to student enrollment.



www.publicconsultinggroup.com