



## Preparing Pinellas Students for the Future: College and Career Readiness Insights

Indicators of High School Success and Associated Factors

Prepared by the Pinellas Education Foundation

*Supported by the Foundation for a Healthy St. Petersburg*

**RESEARCH  
AND DATA**  
FOR HEALTH EQUITY



Foundation for a  
Healthy St. Petersburg

April 2019

# Table of Contents

---

What is College and Career Readiness?.....	3
What Works in College and Career Readiness.....	3
Pathways to Graduation .....	5
College Prep Coursework Completed .....	7
Academy Participation.....	10
Industry Certifications Earned .....	12
Indicators of College and Career Readiness .....	14
Next Steps.....	19
About the Report Partners.....	20
Appendix A: Description of College and Career Readiness Strategies.....	21
Appendix B: Methodology .....	23
Appendix C: Pathways to Graduation Program Details .....	24
Appendix D: List of Certifications Earned in High School.....	25
Endnotes .....	29

## What is College and Career Readiness?

---

The Foundation for a Healthy St. Petersburg and Pinellas Education Foundation have formed a strategic partnership to advance equitable educational outcomes and boost education quality for all students in Pinellas County. The strategic partnership between the two foundations launched with a series of research reports on key education topics, entitled *Focus on Education*. The first report, released in July 2018, covered postsecondary education attainment, available at [pinellaseducation.org/research/](http://pinellaseducation.org/research/). This report is the second in the series and focuses on college and career readiness.

For this report, *college and career ready* is defined as a high school student who – ***in addition to receiving a standard diploma*** – earns an industry certification and/or completes college prep coursework such as Advanced Placement classes, dual enrollment classes, the International Baccalaureate (IB) program, or the Advanced International Certificate of Education (AICE) program. College and career ready means more than just completing college prep coursework or obtaining an industry certification. David Conley, an expert in the field, identifies four facets of college readiness: key cognitive strategies, key context, academic behaviors, and contextual skills and awareness<sup>1</sup>. This means that students need to be academically prepared for college, have high academic and career expectations, and have college and career knowledge such as career planning and how to access college<sup>2</sup>.

Why do students need more than a diploma? By 2020, nearly two-thirds of jobs will require postsecondary education or training<sup>3</sup> and nearly 60% of employers reported that high schools are not preparing students for college or careers<sup>4</sup>. Nationally, only 54.8% of students who started in any type of college or university in fall 2010 completed a degree or certificate within six years<sup>5</sup>. Employers also report that high school graduates are not prepared even for jobs that don't require a college degree<sup>6</sup>.

## What Works in College and Career Readiness

---

This section lists research-based strategies that impact college and career readiness identified by reputable organizations and individuals who are recognized experts in the field. Strategies include encouraging aspirations, setting college-ready expectations, matching students with college and careers, monitoring students, having highly qualified staff, ensuring rigorous courses, and providing options for learning. Specific suggestions are also listed. Some strategies are already being implemented by the district – for example, Pathways to Graduation and offering dual enrollment courses, Advanced Placement courses, AICE, IB, academies, and the opportunity to earn industry certifications.

Pinellas County Schools is the eighth largest school district in Florida and the 28th largest in the nation. Approximately 100,000 students attend the district’s public schools. Forty five percent of the district’s students are minority (18.9% African American and 17.0% Hispanic) and 66.1% qualify for free or reduced lunch. Figure 1 provides an overview of research recommended strategies and some examples of the strategies offered by Pinellas County Schools and the Pinellas Education Foundation to increase college and career readiness; please note this is not a comprehensive list. See Appendix A for a description of each example. Please note that many strategies address multiple research recommendations; however, each is placed in the category best aligned with its overall goal. For example, AICE offers rigorous coursework but also opportunities for college credit, as well as setting college-ready expectations.

**Figure 1: Recommended strategies for College and Career Readiness and programming offered**

<b>What the research recommends</b>	<b>Examples of strategies implemented by Pinellas County Schools and Pinellas Education Foundation*</b>
<b>Encourage aspirations and contextual skills and awareness and promote academic behaviors</b>	
Promote a college-going culture <sup>7</sup> , expose students to programs that build attitudes and behaviors needed, engage students with adults and peers that support their aspirations <sup>8</sup> , and help students learn the information necessary to understand college culture and context <sup>9</sup> .	<ul style="list-style-type: none"> <li>- AVID schoolwide</li> <li>- FAFSA completion campaign</li> <li>- School counseling model</li> <li>- Take Stock in Children</li> </ul>
<b>Set college-ready expectations</b>	
Before students even enter high school, communicate to students and their families what constitutes a college-ready curriculum <sup>10, 11</sup> and align standards, curricula, and assessments to college-ready expectations <sup>12</sup> .	-Pathways to Graduation
<b>Match</b>	
Encourage efforts to “fit and match” students with college and careers <sup>13</sup> .	<ul style="list-style-type: none"> <li>- Career and Technical Education Master Plan</li> <li>- Elevating Excellence</li> <li>- Future Plans®</li> </ul>
<b>Monitor</b>	
Monitor whether students are completing their required core classes <sup>14</sup> , assess and monitor student learning and use data to implement interventions <sup>15</sup> , and use assessment data to track progress <sup>16</sup> .	<ul style="list-style-type: none"> <li>- Graduation cohort process</li> <li>- Mentors (Bridging the Gap plan)</li> </ul>
<b>Staff and professional development</b>	
Ensure highly qualified and prepared teachers are teaching at schools with high concentrations of underrepresented students <sup>17</sup> and ensure strong principals and teachers with effective professional development <sup>18</sup> .	<ul style="list-style-type: none"> <li>- Culturally relevant teaching (Bridging the Gap plan)</li> <li>- Differentiated hiring</li> </ul>

<b>What the research recommends</b>	<b>Examples of strategies implemented by Pinellas County Schools and Pinellas Education Foundation*</b>
	- Recruitment and retention plan
<b>Ensuring rigorous coursework and cultivating key cognitive strategies and key context</b>	
Provide challenging academic programs, programs that encourage a growth mindset <sup>19</sup> , provide clear learning objectives for each grade and subject <sup>20</sup> , and provide instructional tools that support academic rigor for all students <sup>21</sup> .	- AICE - IB - Dual enrollment - Advanced Placement
<b>Offer different learning structures</b>	
Allow students to earn college credit while in high school to engage minority student populations who are typically underrepresented <sup>22</sup> , provide academies where students learn basic skills within the context of particular academic and vocational disciplines may engage them in their field of interest <sup>23</sup> , and divide traditional semester-long courses into modules so that students can advance at their own pace and not get discouraged <sup>24</sup> .	- Academies - Industry certifications - AVID elective

\* Other organizations in the community also offer effective career and college readiness strategies, but a complete inventory was outside the scope of this report.

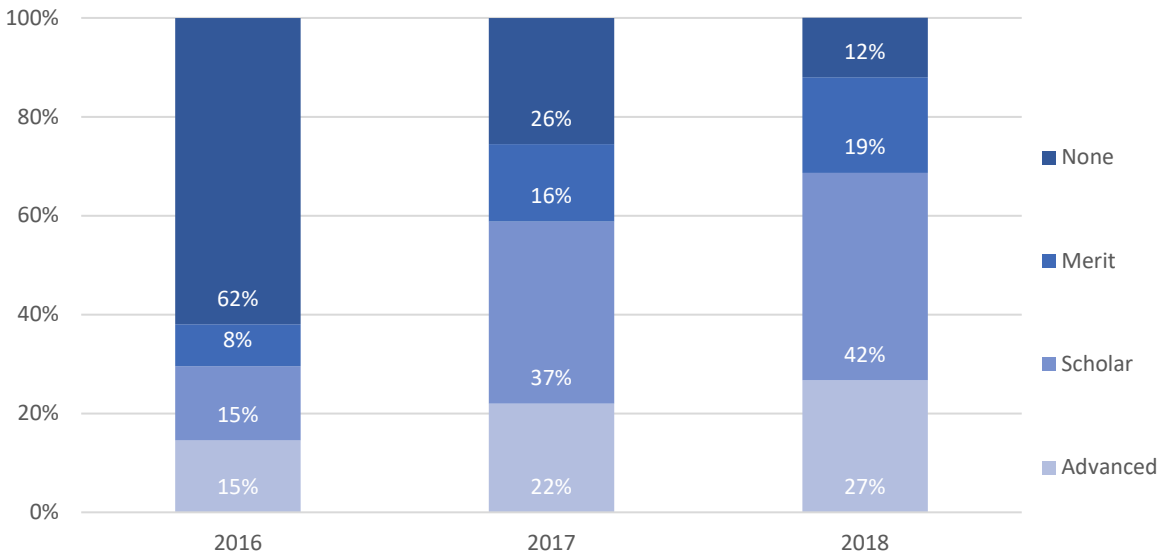
The remainder of this report provides details on student participation in these strategies and the measures of college and career readiness for the three most recent Pinellas County graduating classes: 2016, 2017, and 2018. See Appendix B for the methodology.

## Pathways to Graduation

---

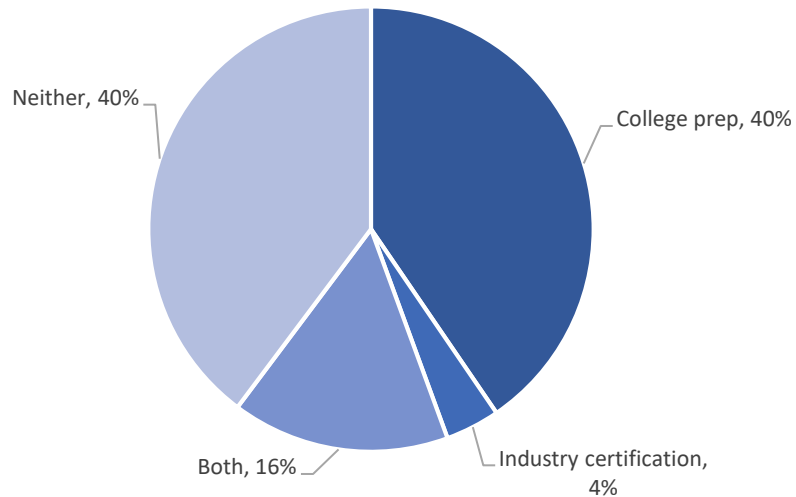
In order to promote college and career readiness, the State of Florida offers two diploma seals on standard diplomas: the Merit seal, focusing on industry certification, and the Scholar seal, focusing on college prep coursework. Pinellas County offers a third option, the Advanced Scholar seal which includes additional academic requirements. Locally, this expanded program is called Pathways to Graduation. See Appendix C for a detailed listing of the requirements. As shown in Figure 2, the percentage of Pinellas County students meeting the requirements and graduating with one of the three diploma seals has grown from 38% to 88%; the greatest growth has occurred in the Scholar seal.

**Figure 2: Percentage of students earning each diploma seal, by graduating class**



The Pathways to Graduation requirements are different from the report’s definition of college and career readiness. Figure 3 provides data using the report’s definition: the percentage of students who complete college prep coursework, earn an industry certification, do both, or do neither. College prep coursework data include students who completed at least one AP course, earned dual enrollment credit, and/or participated in at least one year of AICE or IB. For example, a student may take an AP class but not pass the test or take a class and attempt an industry certification and not pass. Those students are included in the indicator and benefit from participation. As shown, across the three graduating classes, 60% of students have at least one indicator of college and career readiness: 40% complete college prep coursework, 4% earn an industry certification, and 16% do both.

**Figure 3: Percentage of students in the three graduating classes meeting the indicator**



## College Prep Coursework Completed

---

AICE, IB, dual enrollment, and Advanced Placement are collectively referred to as college prep coursework and are both an indicator of college and career readiness and a research-based strategy. This section provides information on students who completed college prep coursework such as completing an Advanced Placement class, passing a dual enrollment class, or participating in the IB program or the AICE program. The next section provides information on industry certifications. As noted, there is overlap with those that earned an industry certification.

Figure 4 shows the percentage of students completing one or more advanced placement courses, passing one of more dual enrollment courses, or completing at least one year of IB or AICE classes. As shown in Figure 4, the percentage has grown from 52% of the 2016 graduating class to 60% of the 2018 graduating class.

**Figure 4: The percentage of students who completed college prep coursework, by graduating class**

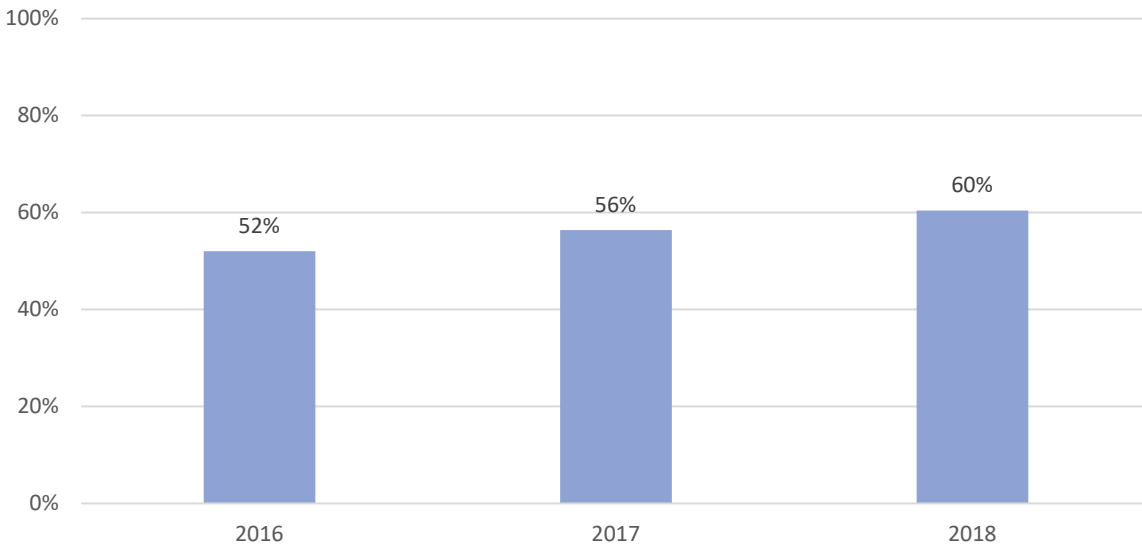
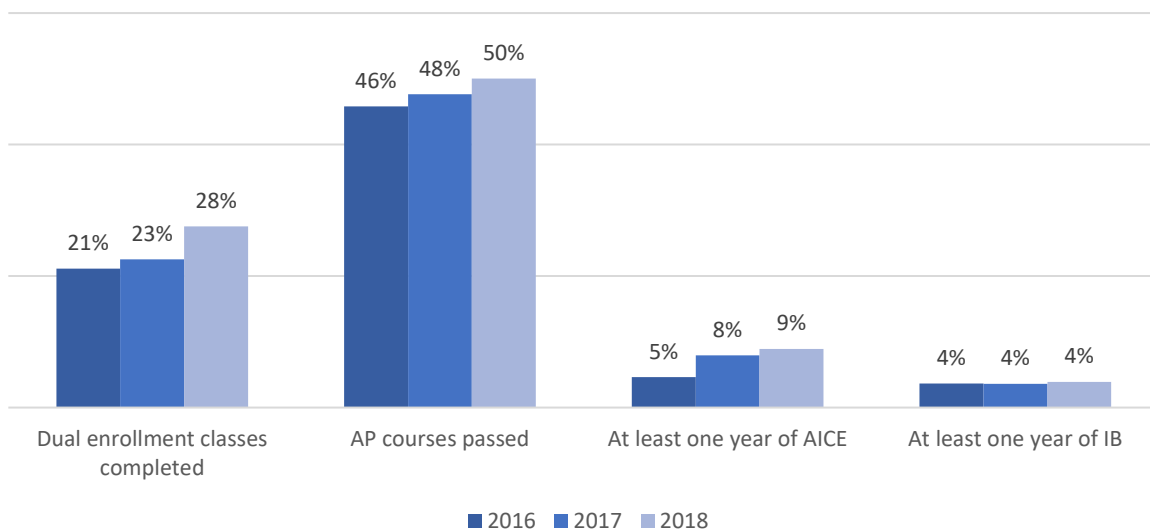


Figure 5 provides the percentage of students completing each type of college prep. Students have a variety of options for participation in one of these programs. For example, every high school offers at least 17 advanced placement classes and at least seven dual enrollment classes; this access is reflected in the higher percentages for these two programs. AICE and IB programs are available at six high schools and transportation is available for students who live more than two miles from their school. Please note that students may participate in more than one type of college prep program and so the same student may be included twice. As shown, completion increased over the three graduating classes.

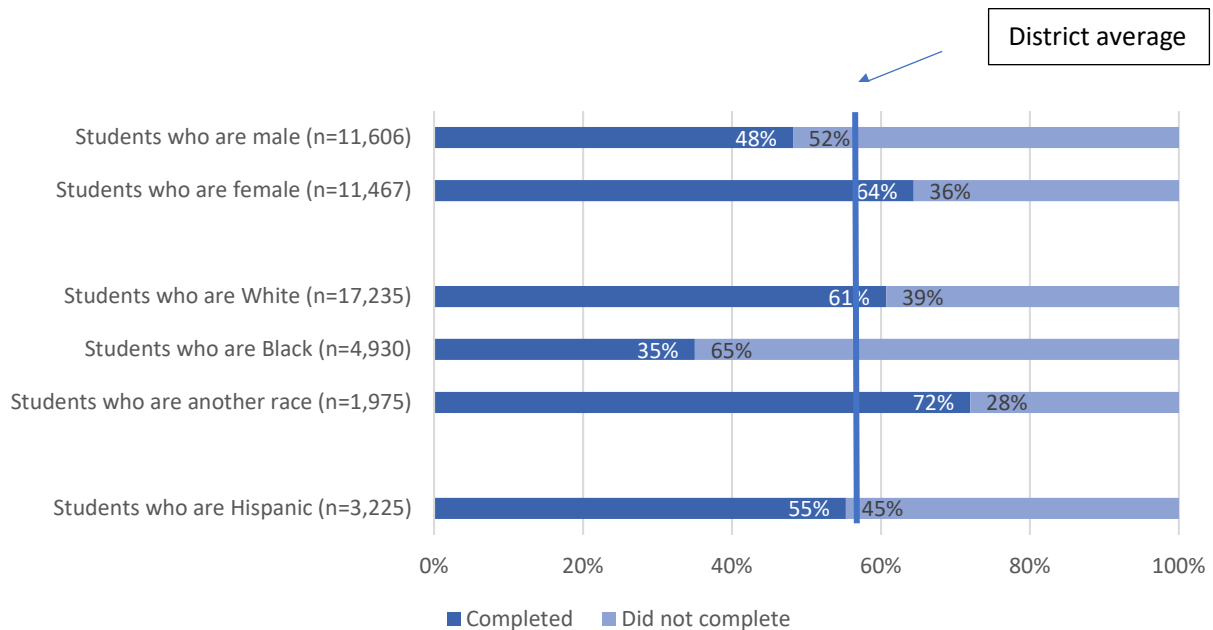
**Figure 5: The percentage of students completing each type of program, by graduating class**





Races identified by Pinellas County Schools include White, Black, Asian, Hawaiian or Pacific Islander, and American Indian or Alaskan. Ethnicities include Hispanic. Race is different than ethnicity: A student may be both White and Hispanic or both Black and Hispanic. Therefore, data are provided for both race and ethnicity. Figure 6 provides the data for those completing college prep coursework. For example, 48% of males in the three graduating classes completed their coursework and 52% did not; the district average is shown as a vertical line (56%). The number of students in the study is provided in parentheses.

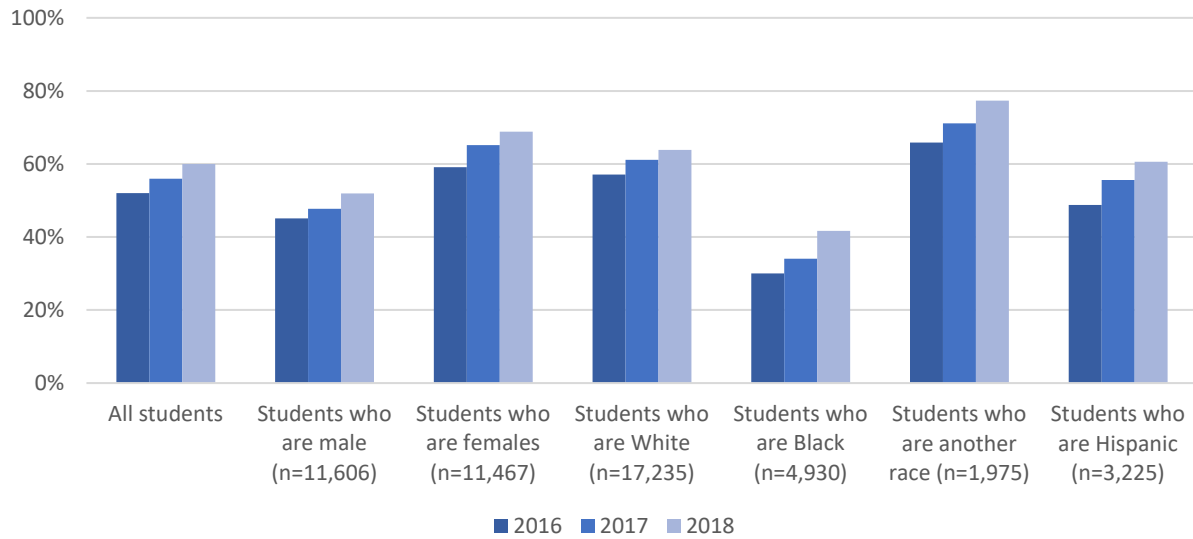
**Figure 6: Students in the study completing college prep coursework by gender, race, and ethnicity**



Although college and career readiness constitutes more than a high school diploma, a high school diploma is a necessary component. In 2016, the district finalized the Bridging the Gap plan to address the gap in high school graduation rates between Black students and their peers. Since that time, the district has seen the gap narrow, feeding the pipeline for Black students to complete college prep coursework and earn industry certifications.

Figure 7 provides the data by graduating class to show the trends. As shown, the percentage of students completing college course coursework has increased each year overall and for each of the subgroups (e.g., race, ethnicity, and gender).

**Figure 7: Percentage of students completing college prep coursework, by year**



One indication of whether students were college ready when they left high school is whether they persist in college or leave before beginning their second year. Students in the study who completed college prep coursework were six times more likely than those that did not complete any college prep coursework to finish their first year of college and enroll in a second year.

## Academy Participation

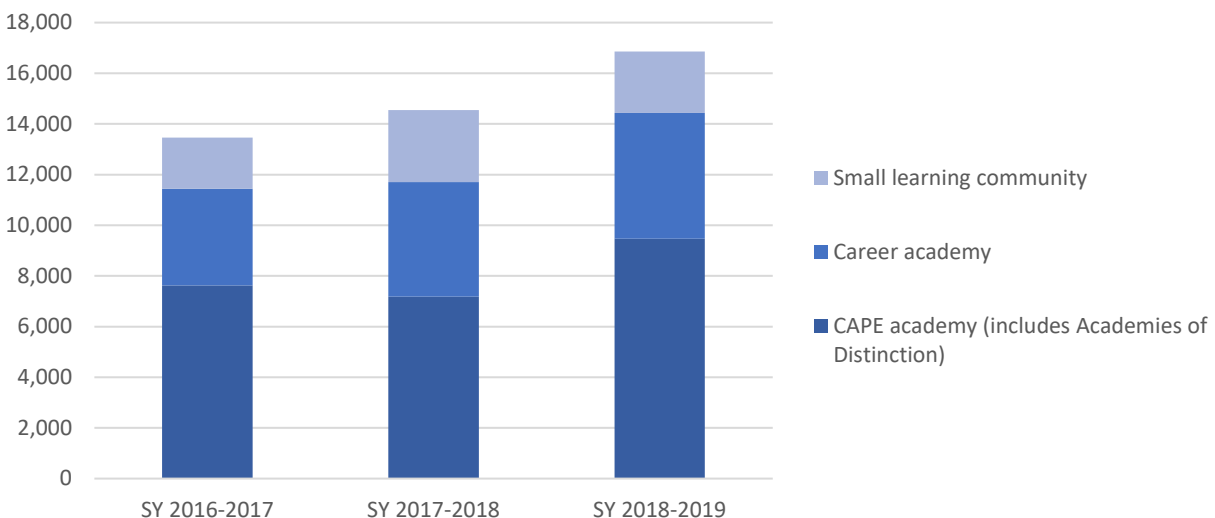
---

As described earlier in this report, another strategy for promoting college and career readiness are academies. In addition, students typically earn industry certifications while in an academy. Pinellas County Schools offers four types of career and technical academies. Academies teach students basic skills within the context of particular academic and vocational discipline to engage them in their field of interest.

- Career academies are designed as four-year programs that blend a student’s required academic courses with the career technical program of the academy. Career academies follow a rigorous curriculum organized around a theme, offering industry certifications and preparing students for careers and postsecondary education (e.g., college).
- CAPE academies are career academies that meet all rigorous characteristics established by the Florida Career and Professional Education Act.
- Academies of Distinction are exemplary CAPE academies that have achieved the highest ratings in all categories of the Stavros Career Education Board Rubric.
- A themed program is not yet organized in an academy structure but operates in a small learning community and may include some elements of a career academy. Some of these themed programs are working towards CAPE certification.

Figure 8 provides the number of high school students participating in each type of academy for the last three school years; this includes ninth, 10th, 11th, and 12th graders. As shown, the number of students participating in an academy has grown by 25% since the 2016-2017 school year. For more information on academy participation, please see the supplemental report, *Career and Technical Education* available at [www.pinellaseducation.org](http://www.pinellaseducation.org).

**Figure 8: Number of high school students participating in an academy, by school year**



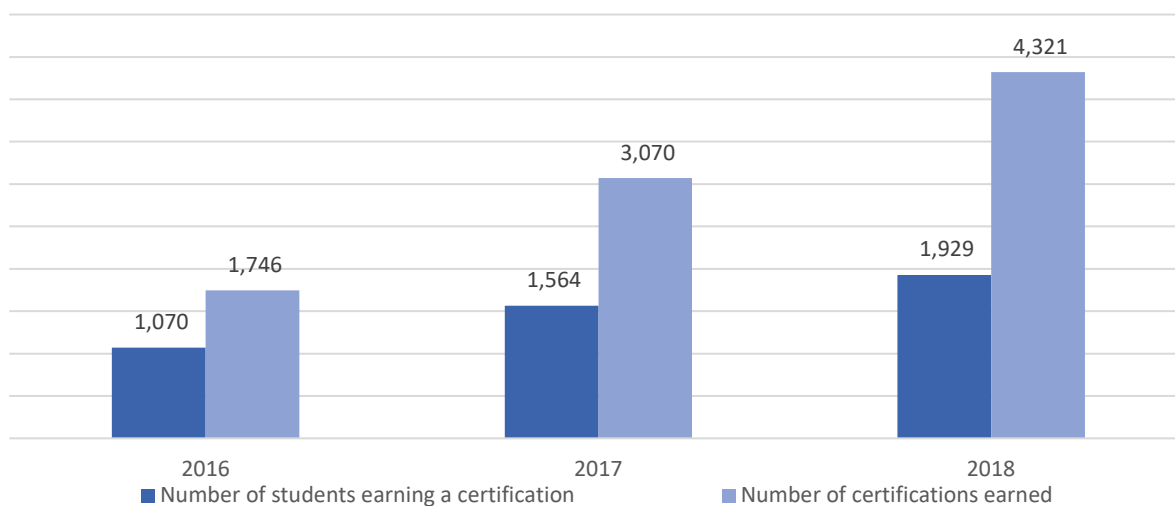
## Industry Certifications Earned

---

A second indicator of college and career readiness is whether a student earns an industry certification. In this report, *certification* may refer to three types of certifications. Some certifications offered by Pinellas County Schools are universally required as part of a professional license to engage in a specific occupation (e.g., Certified EKG technician), often referred to as credentials. Others, however, are industry standards required by employers (e.g., CPR for lifeguards, A+ for computer techs, Adobe Visual C for web developers). Finally, a third group is not required by license or industry standard but are often listed as preferred in job postings.

Figure 9 provides the number of students earning certification in high school and the number of certifications earned. (Students can also earn certifications in elementary and middle school). As shown, both have increased as have the average number of certifications earned – from 1.6 to 2.2 per student. This represents a 37% increase in the number earned per student. Across all three graduating classes, 20% of students earned an industry certification; that percentage rose from 14% of the 2016 graduating class to 25% of the 2018 graduating class – almost doubling during the last three years.

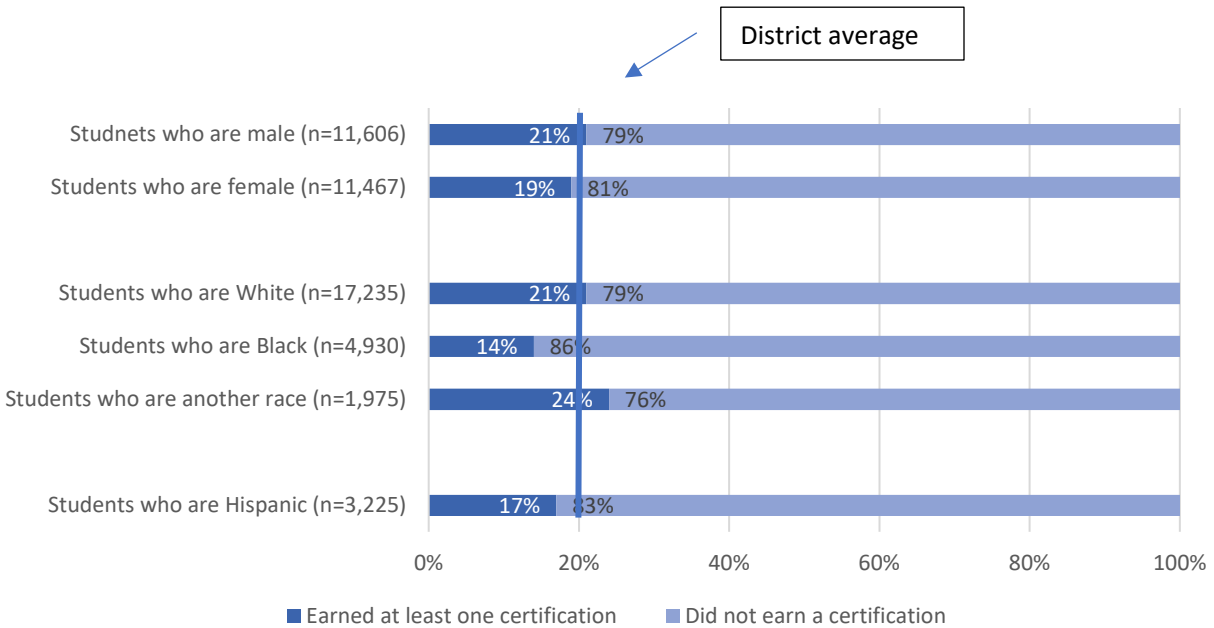
**Figure 9: Number of students earning a certification in high school and number of certifications earned, all programs, by graduating class**



Races identified by Pinellas County Schools include White, Black, Asian, Hawaiian or Pacific Islander, and American Indian or Alaskan. (Asian, Hawaiian or Pacific Islander, American Indian or Alaskan are grouped together in the “other” category.) Ethnicities include Hispanic. Race is different than ethnicity: A student may be both White and Hispanic or both Black and Hispanic. Therefore, data are provided for both race and ethnicity.

Figure 10 presents the percentage of students who earn at least one industry certification, by demographic categories. Because the data are shown by three distinct categories – race, ethnicity, and gender – data are shown by what percentage did and did not earn at least one certification in high school. The district average is 20%, shown as a vertical line. For example, 19% of all female students earned at least one certification while 81% did not, compared to the district average of 20% who did and 80% who did not. Figure 11 provides the trend data.

**Figure 10: Percentage of students earning at least one certification in high school, all programs**



**Figure 11: Percentage of students earning at least one certification in high school, by year**

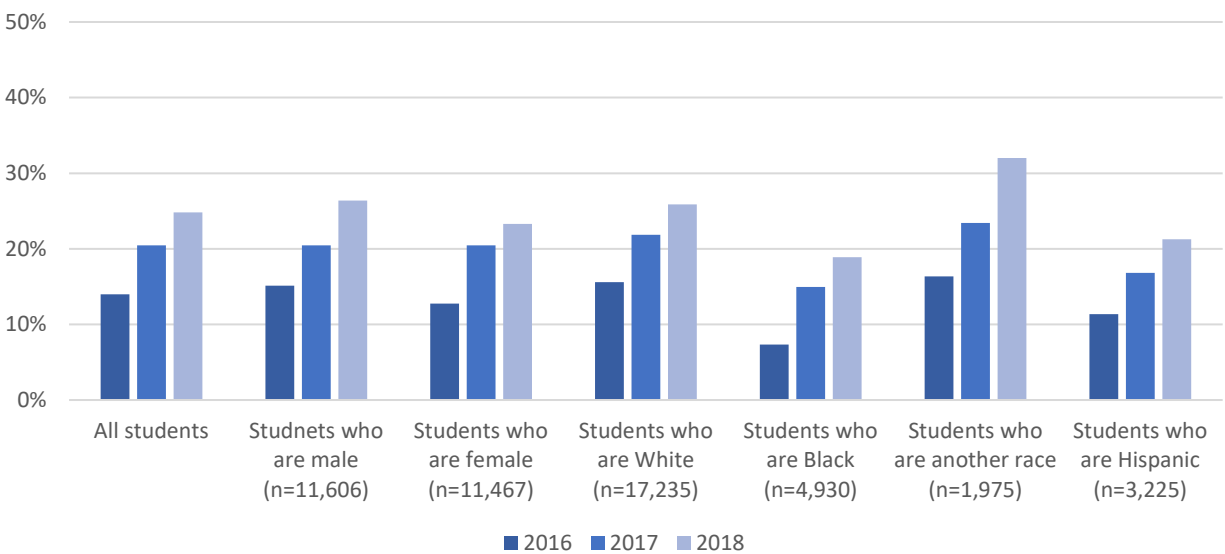
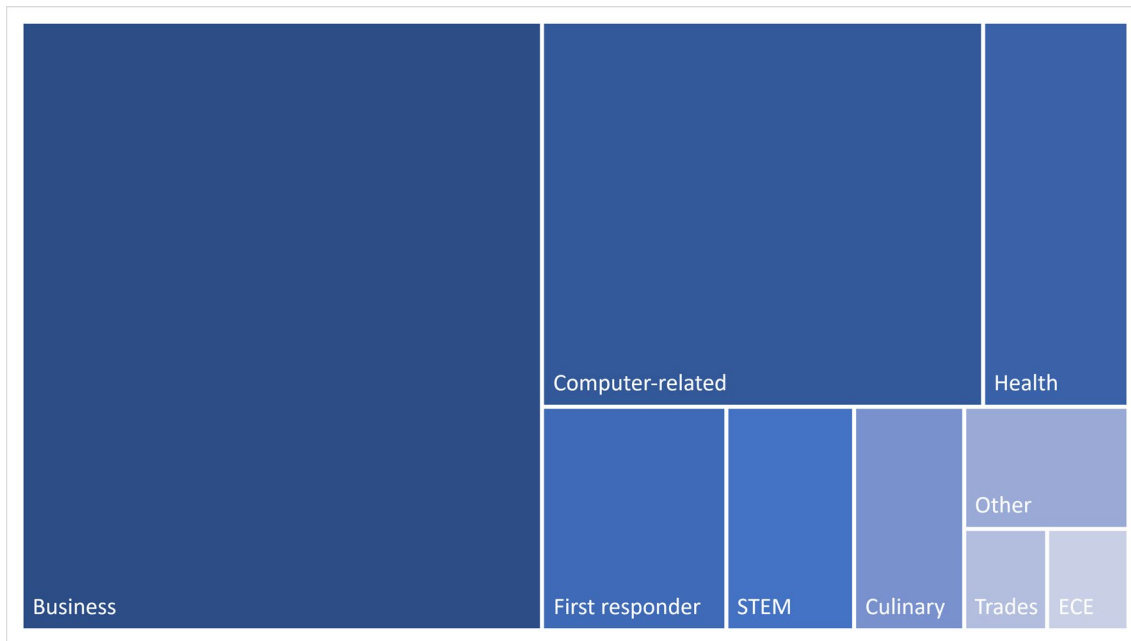


Figure 12 provides the type of certifications earned. Certifications related to business (such as Microsoft Office programs, entrepreneurship, financial planning) are the most prevalent, followed by computer-related (Adobe, Microsoft Technology, Autodesk), and then health (including Certified EKG technician, Certified Nursing Assistant, and Certified Medical Administrative Assistant). ECE stands for Early Childhood Education. See Appendix C for a complete list of certifications. For more information on industry certifications, see the *Career and Technical Education* supplemental report, available at [www.pinellaseducation.org](http://www.pinellaseducation.org).

**Figure 12: Most common certifications across graduating classes, by type, all programs**



## Indicators of College and Career Readiness

---

Prior sections focused on the individual components of college and career readiness. This section provides data on students who earn an industry certification and/or complete college prep coursework. As shown in Figure 13, the percentage of students with an indicator has grown from 54% to 66%.

**Figure 13: Percentage of students with an indicator, by graduating class**

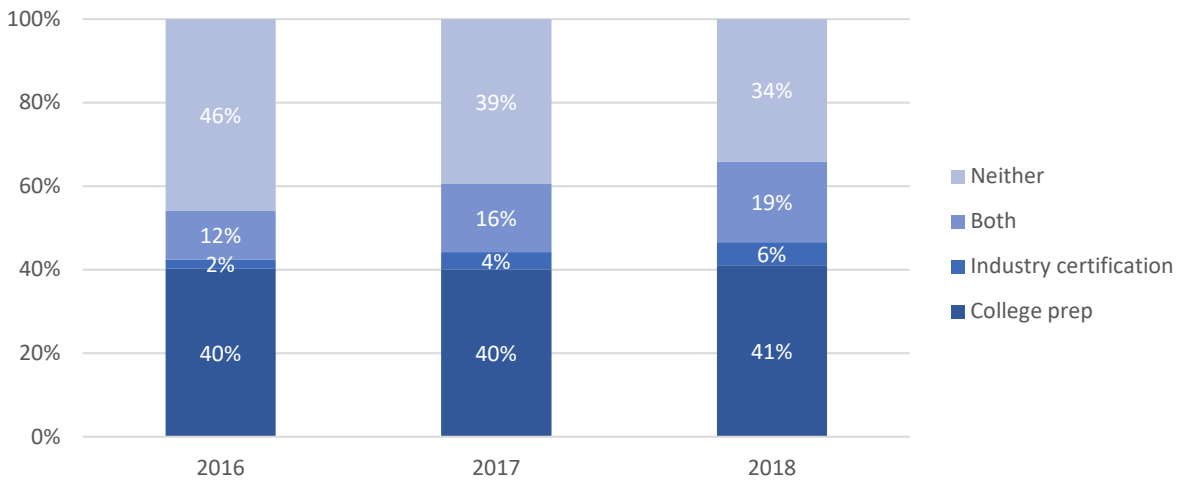


Figure 14 provides data on students in the study with an indicator by race and ethnicity. Races identified by Pinellas County Schools include White, Black, Asian, Hawaiian or Pacific Islander, and American Indian or Alaskan. Ethnicities include Hispanic. Race is different than ethnicity: A student may be both White and Hispanic or both Black and Hispanic. Therefore, data are provided for both race and ethnicity.

For example, 60% of all students in the study had an indicator of college and career readiness (shown as a vertical line), while 67% of all females had an indicator and 33% did not. Students who are another race include Asian, Hawaiian or Pacific Islander, and American Indian or Alaskan. As noted earlier, the district has implemented the Bridging the Gap plan to reduce the achievement gap between Black students and their peers. See <https://www.pcsb.org/btg> for the plan and progress made. Figure 15 provides the trend data.

**Figure 14: Students with an indicator of college and career readiness, by demographic variables**

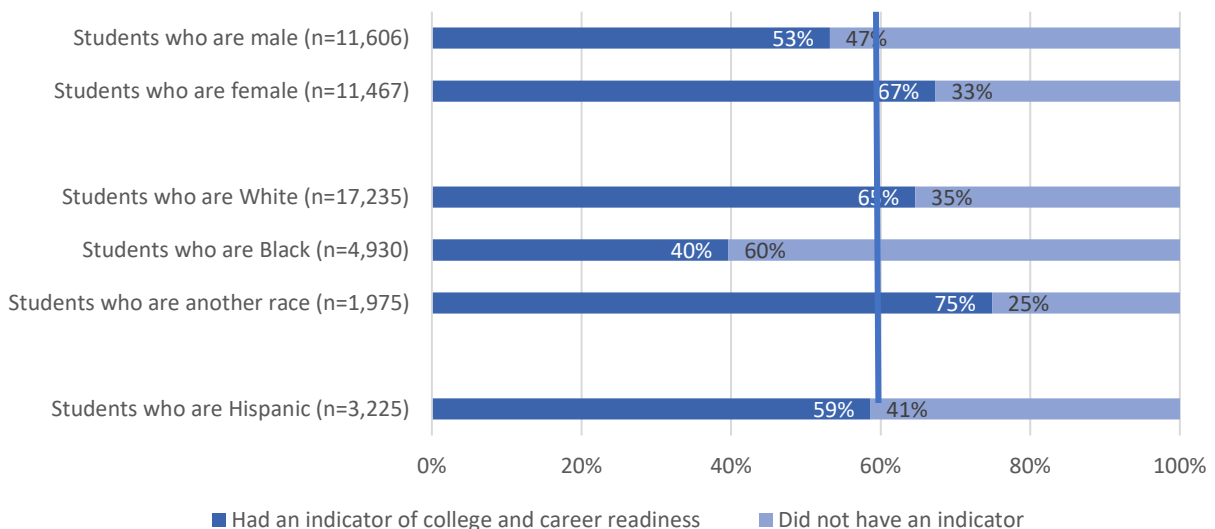
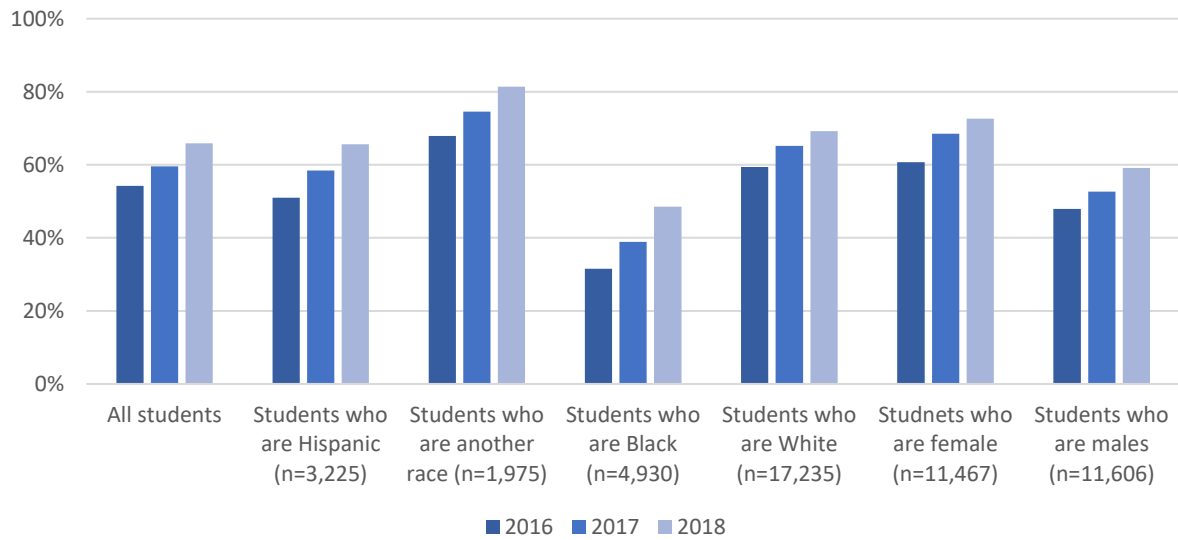


Figure 15: Students with an indicator of college and career readiness, by year



Finally, Figure 16 provides the data by zip code; please note that zip code data were missing for 14% of the students. The district average for the three graduating classes, 60%, is shown by a dark blue line. Figure 17 provides the data as a map, with the darker colors representing the higher percentages.

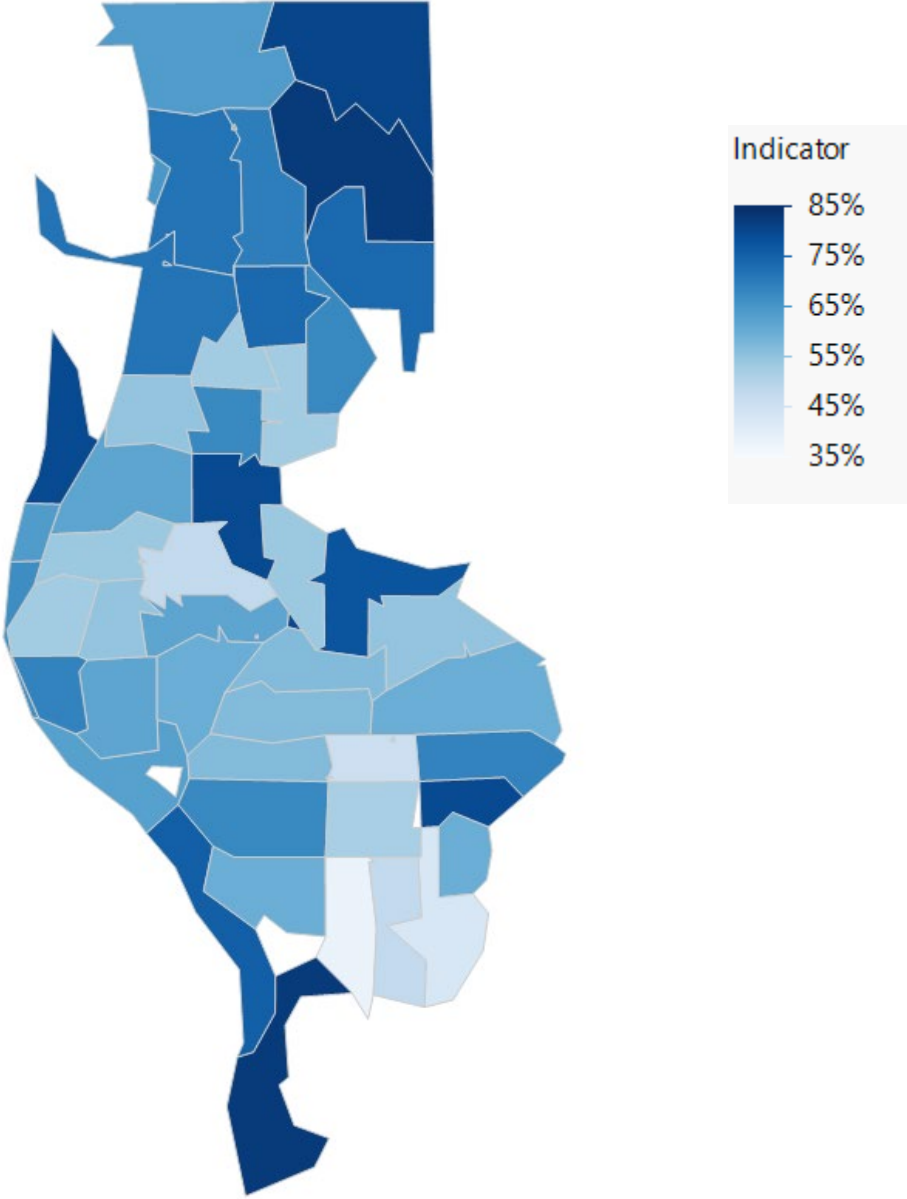
Figure 16: Number and percentage of students with an indicator, by zip code

Zip Code	Number of students from the zip code	Students with an indicator
33715	42	83%
34685	582	83%
34688	220	81%
33704	316	80%
33764	515	80%
33767	41	80%
33762	59	78%
33706	146	76%
33761	344	74%
34677	563	74%
34683	969	72%
34698	657	72%
34684	564	70%
33703	437	69%
33776	367	69%
33710	783	68%
33765	319	68%
34695	436	68%
33785	49	67%
34681	40	65%



<b>Zip Code</b>	<b>Number of students from the zip code</b>	<b>Students with an indicator</b>
33786	14	64%
34689	669	64%
33708	199	63%
33756	675	62%
33772	535	62%
33773	400	62%
33701	141	60%
33702	649	60%
33707	343	60%
33777	423	60%
33709	501	57%
33781	635	57%
33782	430	57%
33716	152	55%
33755	653	55%
33778	336	55%
33760	362	54%
33770	430	54%
33759	436	53%
33763	278	53%
33774	399	53%
33713	744	52%
34660	2	50%
33712	766	48%
33771	431	48%
33714	395	46%
33705	798	43%
33711	575	38%
Missing	3253	52%

Figure 17: Percentage with an indicator, by zip code



## Next Steps

---

### **Give your input**

This report began with a brief summary of what works in college and career readiness and examples of what the district is doing to positively influence college and career readiness outcomes. Over the last several years, Pinellas County School has utilized data to develop programs and initiatives that impact the outcomes of students for college and career readiness. The district expanded existing initiatives (e.g. AVID and AP courses), added new initiatives (e.g. Summer Career Exploration, Boot Camp, and the Personalized Learning Pathway), and is planning to grow others to reach more students, such as Elevating Excellence. As Pinellas County Schools implements these efforts, your input on these programs – and your ideas on what else can positively impact student outcomes – will be valuable to their success.

### **Think about the why and what you can do**

Think of this report as a resource for conversations about how people in Pinellas County can work together improve college and career outcomes for students. Use the report to talk through the needs of Pinellas County students together. Talking through the “whys” behind the data can especially help lead to the sort of “Aha!” moments that can result in fresh ideas.

### **Identify who in the community is already working to ensure student success**

In addition to the report partners, there are many people and organizations working to ensure student success. Think about who is helping meet the needs and who – and what – are missing. For example, is there a way to work with community organizations or faith-based organizations to reach parents and students an increase participation in certifications?

### **Join the movement!**

Around Florida and the country, communities are working to ensure every student has the access and support to achieve an education that will lead to a successful life. For more information about how you can be a part of creating change, please visit [www.leaptampabay.org](http://www.leaptampabay.org).

## About the Report Partners

---

### **Pinellas Education Foundation**

The Pinellas Education Foundation is dedicated to accelerating achievement for all students through the mobilization of innovation, relationships and resources. By focusing on improving academic achievement and preparing students for multiple pathways after high school, the foundation ensures that students are prepared for life after high school whether that path is college, career technical education, work, or the military.



### **LEAP**

LEAP Tampa Bay is a cross-sector network of partners representing business, education, philanthropy and government who have established a community-wide commitment to college access and attainment in Hillsborough and Pinellas Counties, with a goal to reach 60% of working age adults (age 25-64) holding a degree or high-quality certificate by 2025. By working together with a collective impact approach, LEAP partners are helping more people earn such credentials, thus improving their family's earning potential, building the talent available for job opportunities in Tampa Bay's thriving economy, and achieving large-scale social impact.



### **Foundation for a Healthy St. Petersburg**

The Foundation for a Healthy St. Petersburg is a private foundation formed in 2013 following the sale of the nonprofit Bayfront Health St. Petersburg. It is the steward of more almost \$180 million in assets to serve the residents of Pinellas County, particularly those in greatest need. The foundation's mission is to end differences in health due to social or structural disadvantages, and to improve population health by inspiring and empowering people, ideas, organizations, and relationships.



**Foundation for a  
Healthy St. Petersburg**

The report partners would like to thank Pinellas County Schools for providing the data for the study, answering the questions about the data, and sharing information on their efforts to help students be college and career ready.

## Appendix A: Description of College and Career Readiness Strategies

---

**Advanced International Certificate of Education (AICE):** The Cambridge Advanced International Certificate of Education (AICE) Diploma is a curriculum and assessment system that emphasizes broad and balanced study as well as providing students the college and career readiness skills.

**Advanced Placement Classes (AP):** AP courses are rigorous, college-level classes in a variety of subjects that allow students to earn college credit while in high school. To earn college credit, students must earn a score of 3, 4, or 5 on standardized exam.

**AVID:** AVID is a college readiness system that takes students with the potential and determination to go to college and supports their academic success in the rigorous courses required to get into those four-year universities. In the AVID elective course, students are taught the skill sets (purposeful note-taking, organization, public speaking, responsibility, etc.) necessary to be successful in those rigorous courses.

**Bridging the Gap Plan:** Pinellas County Schools created the Bridging the Gap Plan to close the achievement gap between Black students and their peers. The plan's six key goals address graduation rates, grade level proficiency, participation and performance in accelerated courses, disciplinary infractions, eligibility for Exceptional Student Education (ESE) programs, and minority hiring.

**Career and Technical Education Master Plan:** Pinellas Education Foundation partners with Pinellas County Schools to promote Career and Technical Education. The foundation was instrumental in creating the Career Education Master Plan that called for greater participation in career academies and in earning industry certifications.

**Differentiated Hiring:** Pinellas County Schools employs a standardized hiring process across the school district including timelines for new hires, a transfer process, and agreements with the bargaining unit (Pinellas Classroom Teachers Association). For schools in most need as identified by school grades and other metrics, there are additional hiring practices that provide greater flexibility and more guarantees to attract and retain quality teachers. These differentiated practices include recruitment and retention bonuses, open hiring at any time (not bound by the bargaining contract transfer rules), and other protections.

**Dual Enrollment:** Dual enrollment classes enable high school students to take classes at a local college to earn credit toward a postsecondary diploma, certificate, or degree and toward a high school diploma.

**Elevating Excellence:** A Pinellas County Schools initiative to provide high achieving students and their families with a personalized path to college success. The program includes support for students in six areas: Pathway Course Progression, Parent and Student Engagement, Academic Counseling and Targeted Support, Peer Collaboration Experiences, College Entrance Test Preparation, and College and Scholarship Planning.

**FAFSA:** Free Application for Federal Student Aid (FAFSAs). Students must complete this form to receive financial aid; many districts have campaigns to increase the number of students who complete the form.

**Future Plans:** Future Plans® is a continuum of services that includes a self-administered program aimed at helping high school students and young adults discover their aptitudes, interests and values so that they can choose the educational pathway that will lead them to their best in-demand careers choices.

**Graduation Cohort Process:** Schools have a number of tools available to them to track the progress of students in a given cohort (graduation) year. These on demand tools provide real time measurement of a school's graduation rate, students that are off track, test scores, grade point averages, and many other metrics. The process is used as a regular progress monitoring measure for schools and students.

**International Baccalaureate Program (IB):** The International Baccalaureate® is actually four separate programs, each with its own curriculum: primary, middle years, diploma, and career. Each program encourages both personal and academic achievement, challenging students to excel in their studies and in their personal development.

**Pathways to Graduation:** In order to promote college and career readiness, the State of Florida offers two diploma seals on standard diplomas: the Merit seal, focusing on industry certification, and the Scholar seal, focusing on college prep coursework Pinellas County offers a third option, the Advanced Scholar seal which includes additional academic requirements and refers to the expanded program as Pathways to Graduation.

**Recruit and Retention Plan:** Pinellas County Schools has a number of strategies in place to attract and retain quality teachers. Practices include a robust teacher induction program, site-based mentors, and a comprehensive professional development system. In certain identified schools, recruitment and retention bonuses are used to attract and retain quality teachers.

**School Counseling Model:** Pinellas County Schools employs a minimum of one school counselor at every school to support students' academic, social and emotional needs. On average, there are 450 students for every one school counselor.

**Take Stock in Children:** Take Stock in Children of Florida is a non-profit organization in Florida that provides college scholarships and mentors to students from families with low incomes, many of whom are from minority families. Services start in middle school and continue through transition into college.

## Appendix B: Methodology

---

The Pinellas Education Foundation disseminated a request for proposal to conduct this project. Once the researcher was selected, the project team from the Pinellas Education Foundation then met with representatives from the district to review the approach, discuss the availability of data, and determine how the report would be used to benefit students.

Although this report was developed in partnership with Pinellas County Schools, the researcher submitted a formal research request that documented steps taken to safeguard student information. For example, student names, addresses, and other contact information was not shared. Students in the study are those that entered ninth grade in Pinellas County in either 2012, 2013, or 2014 for a total of 23,073 records. Those years were chosen so that graduation outcomes and college enrollment would be available for analysis. The district provided Excel files that included the variables included in this report, such as CAPE participation, industry certification, graduation outcomes, and college enrollment. Files were analyzed both separately and merged. The district also provided a data dictionary to detail the variables used. The analytical software used was JMP.

Robertson Consulting Group, Inc. (RCG) conducted the analysis. Representatives from LEAP, Pinellas County Schools, Pinellas Education Foundation, and RCG. developed the report. The final draft of the document was then shared with LEAP leadership and representatives from the Foundation for a Healthy St. Pete. A data walk of the final product occurred on May 2, 2019.

# Appendix C: Pathways to Graduation Program Details

All Pinellas Pathways to Graduation prepare students to earn Florida's Standard High School Diploma. Students will receive support from school counselors to select a pathway that best fits their college and/or career plans. Students are not locked into one pathway, the lists below are recommendations. Students can earn more than one diploma designation.

Advanced Scholar Pathway	College Pathway (Scholar)	Technical/College Pathway (Merit)
<p>This course of study includes a rigorous level of required and elective courses that best prepare students seeking admittance to competitive four-year universities both in and out of state. This includes all students pursuing an AICE and IB diploma.</p> <p><b>9<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>English 1 or 2 Honors</li> <li>Advanced Placement Human Geography</li> <li>Geometry Honors or Algebra 2 Honors</li> <li>Biology 1 Honors</li> <li>World Language 1, 2 or 3</li> <li>Fine, Performing or Practical Arts elective (including many options in Career/Technical courses)</li> <li>Elective</li> </ul> <p><b>10<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>English 2 or 3 Honors, or Advanced Placement</li> <li>English 3 Language and Composition</li> <li>Advanced Placement World History</li> <li>Algebra 2 Honors or Pre-Calculus</li> <li>Chemistry 1 Honors or Physics 1 Honors</li> <li>World Language 2, 3 or 4</li> <li>H.O.P.E. (PE/Health)</li> <li>Elective</li> </ul> <p><b>11<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>English 3 or 4 Honors, or Advanced Placement</li> <li>English 3 Language and Composition, or Advanced Placement English Literature and Composition</li> <li>Advanced Placement US History</li> <li>Pre-Calculus, Advanced Placement Calculus, or Advanced Placement Statistics</li> <li>Advanced Placement Chemistry, Advanced Placement Biology, Chemistry 1 Honors or Physics 1 Honors</li> <li>World Language 3, 4 or 5, or Advanced Placement World Language</li> <li>2 Electives</li> </ul> <p><b>12<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>English 4 Honors, Advanced Placement English Literature and Composition, or Dual Enrollment course</li> <li>US Government Honors or Advanced Placement US Government</li> <li>Economics Honors or Advanced Placement Micro/Macro Economics</li> <li>Advanced Placement level math or upper level college math (placement test required)</li> <li>Advanced Placement Science</li> <li>World Language 4 or 5, or Advanced Placement World Language</li> <li>2 Electives</li> </ul>	<p>This course of study includes a rigorous level of required and elective courses that best prepare students for entry into a college or four year university both in and out of state.</p> <p><b>9<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>English 1 or 2 Honors</li> <li>Algebra 1 or Geometry Honors</li> <li>Social Science Honors or Advanced Placement Human Geography</li> <li>Earth Space Science or Biology 1 Honors</li> <li>World Language 1, 2, or 3</li> <li>Fine, Performing or Practical Arts elective (including many options in Career/Technical courses)</li> <li>Elective</li> </ul> <p><b>10<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>English 2 or 3 Honors</li> <li>Geometry Honors or Algebra 2 Honors</li> <li>World History, World History Honors, or Advanced Placement World History</li> <li>Biology 1 Honors</li> <li>World Language 2, 3 or 4</li> <li>H.O.P.E. (PE/Health)</li> <li>Elective</li> </ul> <p><b>11<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>English 3 or 4 Honors, Advanced Placement English Language and Composition, or Dual Enrollment Composition 1</li> <li>Algebra 2 Honors, Pre-Calculus, or College Algebra</li> <li>US History Honors or Advanced Placement US History</li> <li>Chemistry 1 Honors, Physics 1 Honors, Marine Science Honors, Anatomy &amp; Physiology Honors, or Advanced Placement Science</li> <li>World Language 3, 4 or 5</li> <li>2 Electives</li> </ul> <p><b>12<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>English 4 Honors, Advanced Placement English Literature and Composition, or Dual Enrollment Composition 1 or 2</li> <li>Pre-Calculus, Advanced Placement Statistics, or Advanced Placement Calculus</li> <li>US Government, US Government Honors, or Advanced Placement US Government</li> <li>Economics, Economics Honors, or Advanced Placement Macro/Micro Economics</li> <li>Physics Honors, Anatomy &amp; Physiology Honors, or Advanced Placement Science</li> <li>World Language 4 or 5, or Advanced Placement World Language</li> <li>2 Electives</li> </ul>	<p>This course of study offers the opportunity for students to challenge themselves in specific academic and elective areas of interest, earn nationally recognized industry certifications, and pursue entry into a post-secondary technical school or state college.</p> <p><b>9<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>English 1 or English 1 Honors</li> <li>Algebra 1, Geometry or Geometry Honors</li> <li>Social Science or Social Science Honors</li> <li>Earth Space Science or Biology 1 Honors</li> <li>Fine, Performing or Practical Arts elective</li> <li>World Language 1, 2 or 3</li> <li>Career/Technical Education Course</li> </ul> <p><b>10<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>English 2 or English 2 Honors</li> <li>Geometry, Geometry Honors, or Algebra 2 Honors</li> <li>World History, World History Honors, or Advanced Placement World History</li> <li>Biology 1 or Biology 1 Honors, Chemistry 1 or Chemistry 1 Honors</li> <li>World Language 1, 2 or 3</li> <li>H.O.P.E. (PE/Health)</li> <li>Career/Technical Education Course</li> </ul> <p><b>11<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>English 3, English 3 Honors, Composition 1, or Advanced Placement English Language and Composition</li> <li>Algebra 2, Algebra 2 Honors, Pre-Calculus, or Advanced Placement Statistics</li> <li>US History, US History Honors, or Advanced Placement US History</li> <li>Marine Science, Anatomy &amp; Physiology, Chemistry 1, Physics 1, or Advanced Placement Science Career/Technical Education Course or PTEC Dual Enrollment Courses</li> <li>2 Electives or World Language 2, 3 or 4</li> </ul> <p><b>12<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>English 4, English 4 Honors, Composition 1 &amp; 2, or Advanced Placement English 4</li> <li>Pre-calculus, College Algebra, or Advanced Placement Math</li> <li>US Government, US Government Honors, or Advanced Placement US Government</li> <li>Economics, Economics Honors, or Advanced Placement Macro/Micro Economic</li> <li>Chemistry, Chemistry Honors, Physics, Physics Honors, or Advanced Placement Science Career/Technical Education Courses or PTEC Dual Enrollment Courses</li> <li>2 Electives</li> </ul>

All Pathways are Effective for 2014-2015



## Appendix D: List of Certifications Earned in High School

Source: Dataset provided by Pinellas County Schools

<b>Certification</b>	<b>Class of 2016</b>	<b>Class of 2017</b>	<b>Class of 2018</b>
Adobe Certified Associate (ACA) – Dreamweaver	8	10	12
Adobe Certified Associate (ACA) – Flash	7	10	3
Adobe Certified Associate (ACA) – Flash	0	0	11
Adobe Certified Associate (ACA) - Illustrator	14	64	61
Adobe Certified Associate (ACA) – InDesign	8	32	58
Adobe Certified Associate (ACA) – Photoshop	83	84	155
Adobe Certified Associate (ACA) – Premier	21	12	46
Adobe Certified Associate (ACA) - Rich media	20	5	4
Adobe Certified Associate (ACA) – Illustrator	18	16	0
Adobe Certified Associate (ACA) - InDesign	14	19	3
Adobe Certified Associate (ACA) - Video Co	2	0	0
Adobe Certified Associate (ACA) - Video Co	20	56	42
Adobe Certified Associate (ACA) - Visual C	80	17	0
Adobe Certified Associate (ACA) - Visual C	55	123	101
Adobe Certified Associate (ACA) - Web comm	11	0	0
Adobe Certified Associate (ACA) - Web comm	12	7	12
Adobe Certified Expert (ACE) - Acrobat	0	0	1
Adobe Certified Expert – Illustrator	0	0	1
Adobe Certified Expert – InDesign	0	1	0
Adobe Certified Expert - Photoshop	7	15	1
Adobe Photoshop (CS6)	0	0	2
Agricultural Biotechnology Certification	6	0	0
Agricultural Biotechnology Certification	0	1	0
Agricultural Technician Certification	2	1	0
Agricultural Technician Certification	1	0	6
American Heart Assoc. Basic Life Support	0	21	82
American Heart Assoc. Heartsaver	0	21	32
Apple Certified Pro (ACP) – Final cut pro	6	2	2
Applied Finance - 10	0	32	27
ASE Collision Repair and Refinishing Tech	0	4	8
Autodesk Certified Professional - 3DS MA	0	0	1
Autodesk Certified Professional – AutoCAD	0	0	1
Autodesk Certified User – AutoCAD	19	16	19
Autodesk Certified User - Inventor	2	7	13
Autodesk Certified User – Revit Architecture	0	0	2
Autodesk Maya	0	0	3
Biotechnician Assistant	10	25	38

<b>Certification</b>	<b>Class of 2016</b>	<b>Class of 2017</b>	<b>Class of 2018</b>
Bloodborne Pathogens	0	20	44
CAPE Innovation Course	10	45	71
Certificate Member (CM)	0	1	0
Certified EKG Technician (CET)	78	98	94
Certified Food Protection Manager – ServS	3	0	0
Certified Food Protection Manager – ServS	47	48	65
Certified Health Unit Coordinator (CHUC)	3	0	0
Certified Horticulture Professional	1	0	0
Certified Internet Web (CIW)	0	3	20
Certified Medical Administrative Assistant	36	50	0
Certified Nursing Assistant (CNA)	83	78	99
Certified Personal Trainer	2	0	0
Certified Solidworks Associate-Academic	6	4	0
Certified Veterinary Assistant (CVA)	21	34	19
Child Development Associate (CDA)	5	13	9
CompTIA A+	5	2	4
CompTIA A+ - Essentials	0	0	4
CompTIA A+ - Practical Applications	0	0	2
CompTIA Network+	0	0	1
CompTIA Security+	5	5	3
Cosmetologist	0	0	1
C-Tech Telecommunications Technologies	0	0	3
Digital Video Production	0	0	20
Early Childhood Professional Certificate	0	9	0
Early Childhood Professional Certificate	0	5	23
Electronics System Associate (ESA)	1	1	0
Emergency Medical Responder	0	12	59
Emergency Medical Responder (EMR)	4	0	0
Engineering Core Certification	50	27	8
Entrepreneurship	0	0	1
Entrepreneurship and Small Business	0	0	26
Entrepreneurship and Small Business	0	9	43
FEMA IS 100 (ICS)	0	0	1
FEMA IS 120 - Exercise Design	0	24	0
FEMA IS 22 - Are You Ready	0	0	1
FEMA IS 42 - Social Media	0	0	18
FEMA IS 45 - Military Resources	0	0	38
FEMA IS 5 - HazMat	0	0	30
FEMA IS 700 - National Incident Mgmt System	0	0	1
FEMA IS 800 (NRF)	0	60	0
Financial Planning - 12	0	33	39
Fire Fighter I	0	7	3

<b>Certification</b>	<b>Class of 2016</b>	<b>Class of 2017</b>	<b>Class of 2018</b>
First Aid	0	41	97
Florida Automobile Dealers Association	10	19	17
Foodservice Management Professional (FMP)	7	0	1
IC3 – Computing Fundamentals	0	0	1
IC3 – Key Applications	0	0	1
IC3 – Living Online	0	0	1
IC3 Spark	0	0	1
Intro to Programming using HTML and CSS	0	0	6
Intro to Programming using Java Script	0	0	5
Introductory Child Care Training	0	18	30
Managerial Accounting- Acctg 2	0	0	21
Microsoft Access 2010/2013	0	3	1
Microsoft Access 2013/2016	0	0	3
Microsoft Excel 2010/2013	8	148	92
Microsoft Excel 2013/2016	0	0	149
Microsoft Excel Expert 2016	0	0	5
Microsoft Excel Expert 2010/2013 Part 1	0	1	1
Microsoft Excel Expert 2010/2013 Part 2	0	1	1
Microsoft Excel Expert 2013/2016 Part 1	0	0	1
Microsoft Office Specialist (MOS) Bundle	362	376	41
Microsoft Office Specialist (MOS) Bundle	190	362	872
Microsoft Office Specialist Master	3	4	4
Microsoft Office Specialist Master	16	20	21
Microsoft OneNote/2013	0	2	3
Microsoft Outlook 2010/2013	0	1	4
Microsoft Outlook 2013/2016	0	0	9
Microsoft PowerPoint 2010/2013	9	158	117
Microsoft PowerPoint 2013/2016	0	0	185
Microsoft SharePoint 2013	0	0	4
Microsoft Technology Associate (MTA) - D	4	17	21
Microsoft Technology Associate (MTA) - G	2	2	1
Microsoft Technology Associate (MTA) - H	1	0	0
Microsoft Technology Associate (MTA) - M	0	0	31
Microsoft Technology Associate (MTA) - N	13	0	0
Microsoft Technology Associate (MTA) - N	54	60	66
Microsoft Technology Associate (MTA) - S	40	0	0
Microsoft Technology Associate (MTA) - S	44	128	164
Microsoft Technology Associate (MTA) - W	1	0	0
Microsoft Technology Associate (MTA) - W	39	29	33
Microsoft Word 2010/2013	8	241	145
Microsoft Word 2013/2016	0	0	277
Microsoft Word Expert 2016	0	0	8

<b>Certification</b>	<b>Class of 2016</b>	<b>Class of 2017</b>	<b>Class of 2018</b>
Microsoft Word Expert 2010/2013 Part 1	0	1	6
Microsoft Word Expert 2010/2013 Part 2	0	1	3
Microsoft Word Expert 2013/2016 Part 1	0	0	5
NAFTrack	0	0	22
NASM Certified Personal Trainer (CPT)	0	0	1
National ProStart Certificate of Achievement	1	0	0
National ProStart Certificate of Achievement	13	35	11
NCCER Carpentry - Level 1	1	0	0
NCCER Carpentry - Level 1	0	0	1
NCCER Carpentry- Level 1 Secondary	25	1	0
NCCER Construction Technology Secondary	23	0	0
NCCER Core	0	6	14
NCCER Electrical - Level 1	8	0	0
NCCER Electrical – Level 1 Secondary	2	3	3
OSHA 10	0	11	17
Principles of Accounting - 11	0	29	27
Principles of Finance - 9	0	38	32
Professional Ethics	0	0	6
QuickBooks Certified User	18	15	28
RECF Pre-Engineering Certification	21	1	0
RECF Pre-Engineering Certification	11	26	39
RECF Robotics Certification	14	1	0
RECF Robotics Certification	11	19	33
S/P2 Mechanical Pollution Prevention Certification	0	0	7
S/P2 Mechanical Safety Certification	0	0	8
SafeStaff Employee Foodhandler Training	0	38	55
Small UAS Safety Certification	0	2	2
Staff Credential	0	15	23
VITA Advanced	0	0	41
Wildland Fire Fighter	0	7	0

## Endnotes

---

- <sup>1</sup> Conley, D. (2007). Redefining college readiness. Eugene:OR, Educational Policy Improvement Center.
- <sup>2</sup> Mueller, D., & Gozali-Lee, E. (April 2013). College and career readiness: A review and analysis conducted for Generation Next. St. Paul, MN: Wilder Research. Retrieved October 15, 2018 from [https://www.wilder.org/sites/default/files/imports/GenerationNext\\_CollegeCareerReadiness\\_4-13.pdf](https://www.wilder.org/sites/default/files/imports/GenerationNext_CollegeCareerReadiness_4-13.pdf)
- <sup>3</sup> Carenvale, Smith & Strohl, 2013
- <sup>4</sup> Amos, J. 2015, (Not) rising to the challenge: Recent high school graduates not prepared for rigors of college or work, according to new Achieve survey findings. Retrieved December 7, 2018 from <https://all4ed.org/artickes/>.
- <sup>5</sup> Shapiro, D., Dundar, A., Huie, F., Wakhungu, P., Yuan, X., Nathan, A & Hwang, Y., A. (2017, April). A National View of Student Attainment Rates by Race and Ethnicity – Fall 2010 Cohort (Signature Report No. 12b). Herndon, VA: National Student Clearinghouse Research Center.
- <sup>6</sup> Loschert, K. 2017. Why a high school diploma alone no longer guarantees career success. Retrieved December 7, 2018 from <https://all4ed.org/artickes/>.
- <sup>7</sup> Nebbergall, A., & Hembrick, K. (2011). College and Career Readiness. Fairfax, VA: ICF International. Retrieved October 15, 2018 from <https://files.eric.ed.gov/fulltext/ED532588.pdf>.
- <sup>8</sup> Mueller, D., & Gozali-Lee, E. (April 2013). College and career readiness: A review and analysis conducted for Generation Next. St. Paul, MN: Wilder Research. Retrieved October 15, 2018 from [https://www.wilder.org/sites/default/files/imports/GenerationNext\\_CollegeCareerReadiness\\_4-13.pdf](https://www.wilder.org/sites/default/files/imports/GenerationNext_CollegeCareerReadiness_4-13.pdf)
- <sup>9</sup> Conley, D. (2007). Redefining college readiness.
- <sup>10</sup> Nebbergall, A., & Hembrick, K. (2011). College and Career Readiness. Fairfax, VA: ICF International. Retrieved October 15, 2018 from <https://files.eric.ed.gov/fulltext/ED532588.pdf>.
- <sup>11</sup> Mueller, D., & Gozali-Lee, E. (April 2013). College and career readiness: A review and analysis conducted for Generation Next. St. Paul, MN: Wilder Research. Retrieved October 15, 2018 from [https://www.wilder.org/sites/default/files/imports/GenerationNext\\_CollegeCareerReadiness\\_4-13.pdf](https://www.wilder.org/sites/default/files/imports/GenerationNext_CollegeCareerReadiness_4-13.pdf)
- <sup>12</sup> Conley, D. (April 2007). The challenge of college readiness. *Educational Leadership*, 64(7), 23-29.
- <sup>13</sup> Moore, J., & Flowers, L. (October, 2016). Supporting the college and career readiness of African American males: Policy implications for school counselors. Baltimore, MD: Johns Hopkins Institute for Education Policy. Retrieved October 15, 2018 from <http://edpolicy.education.jhu.edu/supporting-the-college-and-career-readiness-of-african-american-males-policy-implications-for-school-counselors/>.
- <sup>14</sup> Nebbergall, A., & Hembrick, K. (2011). College and Career Readiness. Fairfax, VA: ICF International. Retrieved October 15, 2018 from <https://files.eric.ed.gov/fulltext/ED532588.pdf>.
- <sup>15</sup> ACT. (2012). Rising to the challenge of college and career readiness: A framework for effective practices. Austin, TX: Author. Retrieved October 15, 2018 from <https://www.act.org/content/dam/act/unsecured/documents/RisingToChallenge.pdf>
- <sup>16</sup> Mueller, D., & Gozali-Lee, E. (April 2013). College and career readiness: A review and analysis conducted for Generation Next. St. Paul, MN: Wilder Research. Retrieved October 15, 2018 from [https://www.wilder.org/sites/default/files/imports/GenerationNext\\_CollegeCareerReadiness\\_4-13.pdf](https://www.wilder.org/sites/default/files/imports/GenerationNext_CollegeCareerReadiness_4-13.pdf)
- <sup>17</sup> Moore, J., & Flowers, L. (October, 2016). Supporting the college and career readiness of African American males: Policy implications for school counselors. Baltimore, MD: Johns Hopkins Institute for Education Policy. Retrieved October 15, 2018 from <http://edpolicy.education.jhu.edu/supporting-the-college-and-career-readiness-of-african-american-males-policy-implications-for-school-counselors/>.
- <sup>18</sup> Conley Gates 2007
- <sup>19</sup> Moore, J., & Flowers, L. (October, 2016). Supporting the college and career readiness of African American males: Policy implications for school counselors. Baltimore, MD: Johns Hopkins Institute for

---

Education Policy. Retrieved October 15, 2018 from <http://edpolicy.education.jhu.edu/supporting-the-college-and-career-readiness-of-african-american-males-policy-implications-for-school-counselors/>.

<sup>20</sup> Conley, D. (March 2007). Redefining college readiness. Eugene, OR: Educational Policy Improvement Center. Retrieved October 15, 2018 from <https://files.eric.ed.gov/fulltext/ED539251.pdf>.

<sup>21</sup> Conley, D. (April 2007). The challenge of college readiness. *Educational Leadership*, 64(7), 23-29.

<sup>22</sup> Nebbergall, A., & Hembrick, K. (2011). *College and Career Readiness*. Fairfax, VA: ICF International. Retrieved October 15, 2018 from <https://files.eric.ed.gov/fulltext/ED532588.pdf>.

<sup>23</sup> Nebbergall, A., & Hembrick, K. (2011). *College and Career Readiness*. Fairfax, VA: ICF International. Retrieved October 15, 2018 from <https://files.eric.ed.gov/fulltext/ED532588.pdf>.

<sup>24</sup> Nebbergall, A., & Hembrick, K. (2011). *College and Career Readiness*. Fairfax, VA: ICF International. Retrieved October 15, 2018 from <https://files.eric.ed.gov/fulltext/ED532588.pdf>.

**Prepared by the Pinellas Education Foundation**

*Supported by the Foundation for a Healthy St. Petersburg*



**Pinellas Education  
Foundation**



**Foundation for a  
Healthy St. Petersburg**