

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



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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 www.pinellaseducation.org/research/. This report is the latest in the series and focuses on college and career readiness.

For this report, *college and career ready* is defined by the indicator tracked by the Florida Department of Education. It is 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. Although this is the indicator tracked by the Florida Department of Education and will allow for consistency over time, 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 awareness¹. 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 college².

Why do students need more than a diploma? By 2020, nearly two-thirds of jobs will require postsecondary education or training³ and nearly 60% of employers reported that high schools are not preparing students for college or careers⁴. 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 years⁵. Employers also report that high school graduates are not prepared even for jobs that don't require a college degree⁶.

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. Specifics 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

What the research recommends	Examples of strategies implemented by Pinellas County Schools and Pinellas Education Foundation*
Encourage aspirations and contextual skills and awareness and	
promote academic behaviors	
Promote a college-going culture ⁷ , expose students to programs that	- AVID schoolwide
build attitudes and behaviors needed, engage students with adults and peers that support their aspirations ⁸ , and help students learn the	- FAFSA completion campaign
information necessary to understand college culture and context ⁹ .	- School counseling model - Take Stock in Children
Set college-ready expectations	
Before students even enter high school, communicate to students and their families what constitutes a college-ready curriculum ¹⁰ , ¹¹ and align standards, curricula, and assessments to college-ready expectations ¹² .	-Pathways to Graduation
Match	
Encourage efforts to "fit and match" students with college and careers ¹³ .	 Career and Technical Education Master Plan Elevating Excellence Future Plans®
Monitor	
Monitor whether students are completing their required core classes ¹⁴ , assess and monitor student learning and use data to implement interventions ¹⁵ , and use assessment data to track progress ¹⁶ .	 Graduation cohort process Mentors (Bridging the Gap plan)
Staff and professional development	
Ensure highly qualified and prepared teachers are teaching at schools with high concentrations of underrepresented students ¹⁷ and ensure strong principals and teachers with effective professional development ¹⁸ .	 Culturally relevant teaching (Bridging the Gap plan) Differentiated hiring Recruitment and retention plan

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

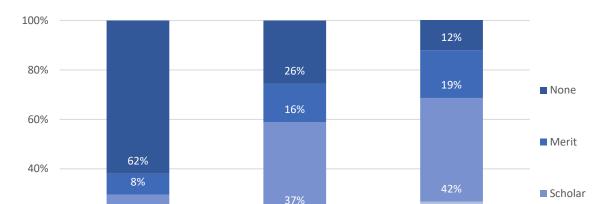


Figure 2: Percentage of students earning each diploma seal, by graduating class

20%

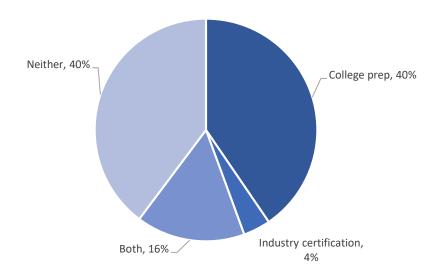
0%

2016

The Pathways to Graduation requirements are different than the state college and career readiness indicator. Figure 3 provides data on the state indicator: the percentage of students who complete college prep coursework, earn an industry certification, do both, or do neither. The indicator includes only those that complete, not those that participate. 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 not included in the indicator but benefit from those activities. 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.

2017





Advanced

2018

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.

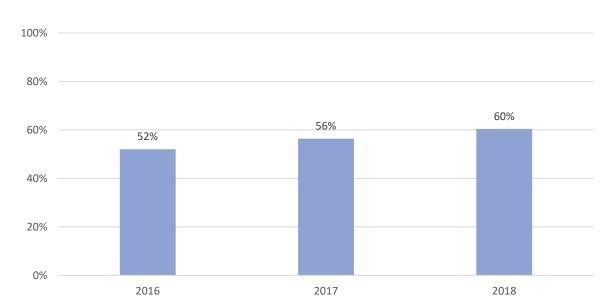
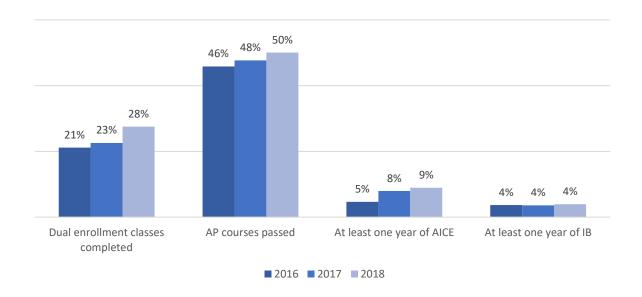


Figure 4: The percentage of students who completed college prep coursework, by graduating class

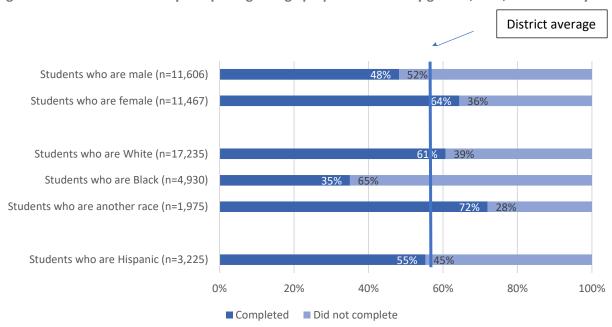
Figure 5 provides the percentage of students completing each type of college prep program (vs. participating). Students have a variety of options for participation in one of these programs. For example, every high school offers at least 17 advanced placement classes and at least seven dual enrollment 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.





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 6provides 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).

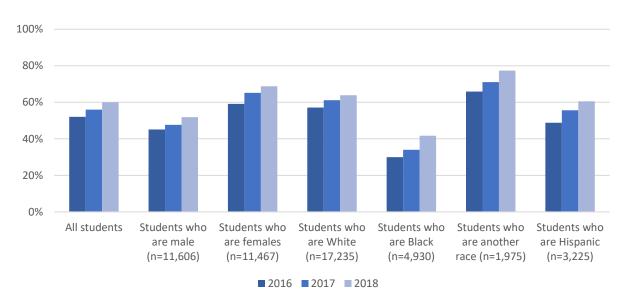


Figure 7: Percentage of students completing college prep coursework, by year

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.

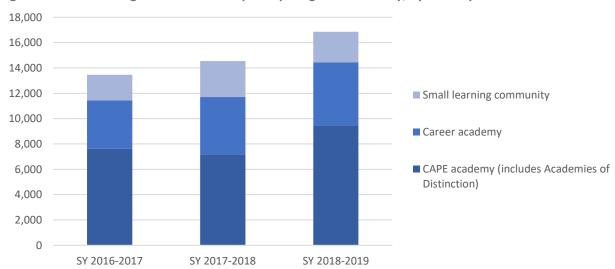


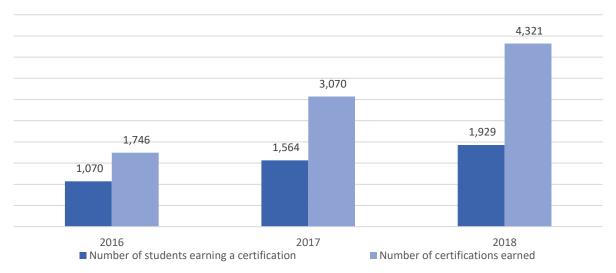
Figure 8: Number of high school students participating in an academy, by school year

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.

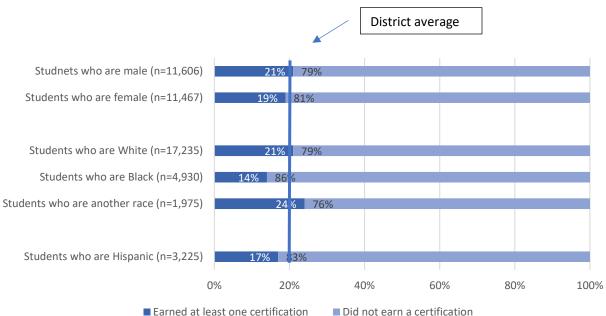


Figure 10: Percentage of students earning at least one certification in high school, all programs



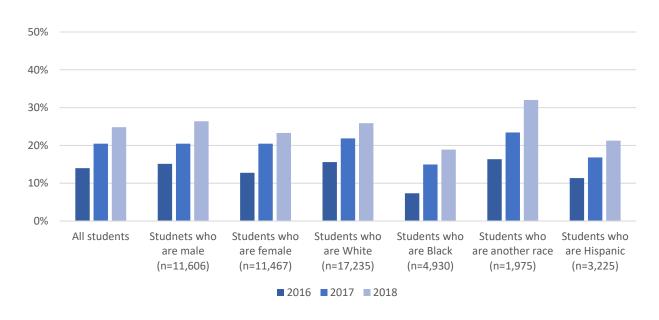


Figure 12 provides the type of certifications earned. Certifications related to business (such as Microsoft Office programs, entrepreneurship, financial planning) are the most prevalent, followed by computer-related (Adobe, Microsoft Technology, Autodesk), and then health (including Certified EKG technician, 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.

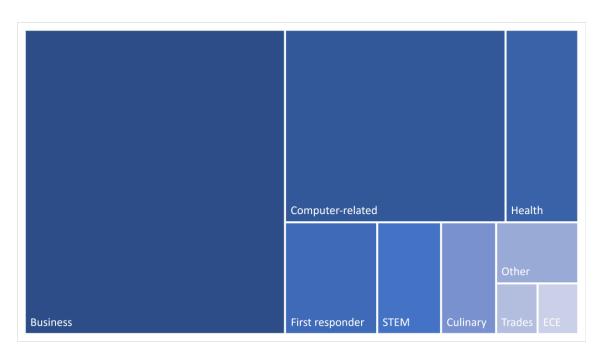


Figure 12: Most common certifications across graduating classes, by type, all programs

Indicators of College and Career Readiness

Prior sections focused on the individual components of the state indicator. This section provides data on the overall indicator: students who earn an industry certification and/or complete college prep coursework. As noted, the indicator includes only those that complete, not those that participate. As shown in Figure 13, the percentage of students with an indicator has grown from 54% to 66%.

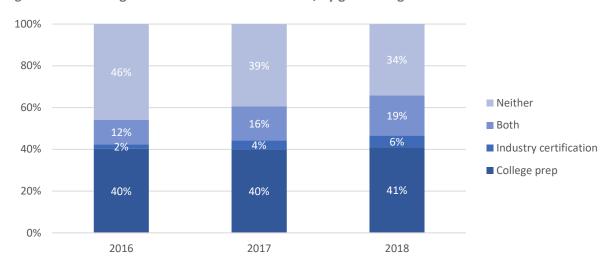


Figure 13: Percentage of students with an indicator, by graduating class

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 thier peers. See https://www.pcsb.org/btg for the plan and progress made. Figure 15 provides the trend data.

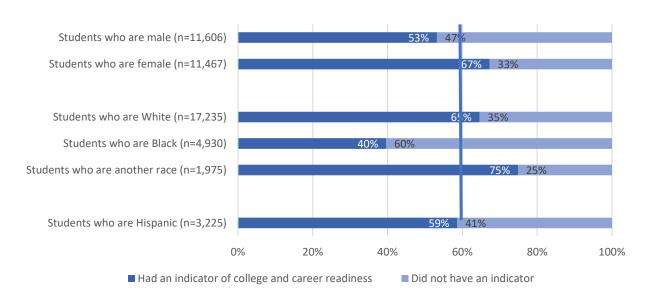


Figure 14: Students with an indicator of college and career readiness, by demographic variables

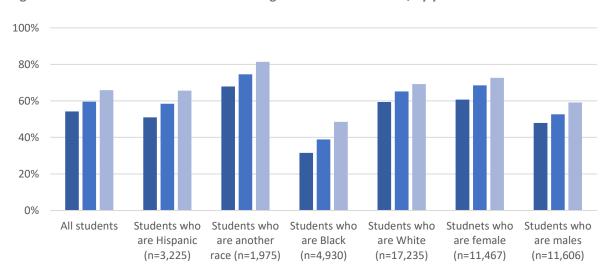


Figure 15: Students with an indicator of college and career readiness, by year

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.

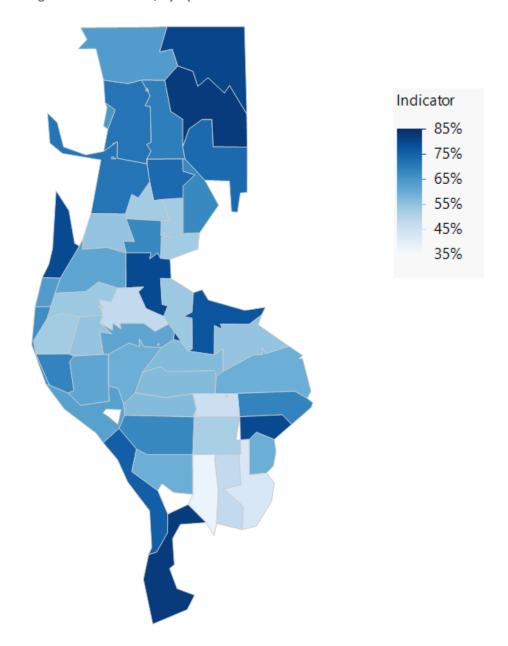
■2016 ■2017 ■2018

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%

Zip Code	Number of students from the zip code	Students with an indicator
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.

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 Health St. Petersburg is a private foundation working with the communities of Pinellas County to eradicate inequality, achieve health equity, and improve population health. The Foundation inspires and empowers people, organizations, ideas, and relationships to ensure that every person equitably achieves optimal health and well-being.



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 recommedations. Students can earn more than one diploma designation.

This coun elective c to compe to compe This inclu	This course of study includes a rigorous level of required and	This court				
elective c to compe This inclu		INIS COM	This course of study includes a rigorous level of required and elective	This cou	This course of study offers the opportunity for students to	
This inclu	elective courses that best prepare students seeking admittance	courses t	courses that best prepare students for entry into a college or four	challeng	challenge themselves in specific academic and elective areas	as
	to competitive four-year universities both in and out of state. This includes all students pursuing an AICE and IB diploma.	year univ	year university both in and out of state. 9 th Grade	of inter	of interest, earn nationally recognized industry certifications, and bursue entry into a post-secondary technical school or	15,
• • • • •	9th Grade	•	English 1 or 2 Honors	state college.	ollege.	
	English 1 or 2 Honors	•	Algebra 1 or Geometry Honors		9 th Grade	
	Advanced Placement Human Geography	•	Social Science Honors or Advanced Placement Human	•	English 1 or English 1 Honors	
	Geometry Honors or Algebra 2 Honors		Geography	•	Algebra 1, Geometry or Geometry Honors	
• •	Biology 1 Honors	•	Earth Space Science or Biology 1 Honors	•	Social Science or Social Science Honors	
•	World Language 1, 2 or 3	•	World Language 1, 2, or 3	•	Earth Space Science or Biology 1 Honors	
	Fine, Performing or Practical Arts elective (including	•	Fine, Performing or Practical Arts elective (including many	•	Fine, Performing or Practical Arts elective	
	many options in Career/Technical courses)		options in Career/Technical courses)	•	World Language 1, 2 or 3	
•	Elective	•	Elective	•	Career/Technical Education Course	-
	10" Grade		10th Grade		10 ^m Grade	Araba
•	English 2 or 3 Honors, or Advanced Placement	•	English 2 or 3 Honors	•	English 2 or English 2 Honors	
	English 3 Language and Composition	•	Geometry Honors or Algebra 2 Honors	•	Geometry, Geometry Honors, or Algebra 2 Honors	ors.
•	Advanced Placement World History	•	World History, World History Honors, or Advanced	•	World History, World History Honors, or Advanced	pa
	Chomister 1 Honors on Division 1 Honors		Placement World History	•	Placement World History	
	World Language 2, 3 or 4	•	Biology 1 Honors	•	Chemistry 1 Honors	
•	Wolld Language Z, 3 or 4	•	World Language 2, 3 or 4	•	Model Common 1 2 or 3	
•	n.O.r.c. (re/negiul) Flactiva	•	H.O.P.E. (PE/Health)		Wolld Lailguage 1, 2 of 3	-
	11th Grade	•	Elective	•	Career/Technical Education Course	
•	English 3 or / Honors or Advanced Discoment		11 th Grade		(area) required Education Course	
	English 3 Language and Composition, or Advanced	•	English 3 or 4 Honors, Advanced Placement English Janeuage and Commostition or Dual Furnillment	٠	English 3, English 3 Honors, Composition 1, or	
	Placement English Literature and Composition		Composition 1		Advanced Placement English Language and	
•	Advanced Placement US History	•	Algebra 2 Honors, Pre-Calculus, or College Algebra		Composition ,	
•	Pre-Calculus, Advanced Placement Calculus, or	•	US History Honors or Advanced Placement US History	•	Algebra 2, Algebra 2 Honors, Pre-Calculus, or	
,	Advanced Discount Chamistry Advanced	•	Chemistry 1 Honors, Physics 1 Honors, Marine Science	•	IIC Liston, IIC Liston, Honore or Advanced	
•	Advanced Placement Chemistry, Advanced Placement Biology, Chemistry 1 Honors or Physics 1		Honors, Anatomy & Physiology Honors, or Advanced		Placement US History	
	Honors		Placement Science	•	Marine Science, Anatomy & Physiology, Chemistry	7
•	World Language 3, 4 or 5, or Advanced Placement	•	World Language 3, 4 or 5		1, Physics 1, or Advanced Placement Science	
	World Language	•	Z Electives	•	Career/Technical Education Course or PTEC Dual	_
•	2 Electives		12 Grade		Enrollment Courses	
	12th Grade	•	and Composition of Dual Engliment Composition 1 or 3	•	2 Electives or World Language 2, 3 or 4	
•	English 4 Honors, Advanced Placement English	•	Pro Calculus Advanced Placement Cartifolds of Advanced		· 12" Grade	
	Literature and Composition, or Dual Enrollment	•	Placement Calculus	•	English 4, English 4 Honors, Composition 1 & 2, or	or
	course	•	11S Government 11S Government Honors or Advanced		Advanced Placement English 4	
•	US Government Honors or Advanced Placement US		Placement US Government	•	Pre-calculus, College Algebra, or Advanced	
	Government	•	Economics, Economics Honors, or Advanced Placement	75	Placement Math	
•	Economics Honors or Advanced Placement		Macro/Micro Economics	•	Advanced Placement, US Government Honors, or	
	Micro/Macro Economics	•	Physics Honors, Anatomy & Physiology Honors, or	•	Economics Economics Honors or Advanced	
•	Advanced Placement level math or upper level		Advanced Placement Science	•	Placement Macro/Micro Fonomic	
	college math (placement test required)	•	World Language 4 or 5, or Advanced Placement World	•	Chemistry Chemistry Hopors Physics Physics	
•	Advanced Placement Science		Language		Honors or Advanced Placement Science	
•	World Language 4 or 5, or Advanced Placement World Language	•	2 Electives	•	Career/Technical Education Courses or PTEC Dual	=
•	2 Electives		All Pathways are Effective for 2014-2015		Enrollment Courses	

Appendix D: List of Certifications Earned in High School

Source: Dataset provided by Pinellas County Schools

Certification	Class of 2016	Class of 2017	Class of 2018
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

Certification	Class of 2016	Class of 2017	Class of 2018
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

Certification	Class of 2016	Class of 2017	Class of 2018
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

Certification	Class of 2016	Class of 2017	Class of 2018
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

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