

Post-secondary
success for all:
learnings from an
analysis of five
school districts

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We are grateful to the five school districts that participated in the cohort – Hartford Public Schools (CT), Malden Public Schools (MA), Manchester School District (NH), Portland Public Schools (ME), and Worcester Public Schools (MA). Their time, dedication, thoughtful contributions to take on difficult topics improved the learning experience for the entire cohort.

The leadership teams of the five districts have agreed to share the findings from their data so that other districts may learn from their experiences.

EY-Parthenon Education practice

Springpoint

Foreword

During the fall of 2019 and winter of 2020, EY-Parthenon (EYP), Springpoint, and the Barr Foundation began an effort to produce this report to summarize the findings of the “Planning for Post-Secondary Success for All Students” cohort initiative. This program sought to support five New England districts in thinking about how to improve post-secondary success (PSS) for their students. It resulted in rich data sets around equity, post-secondary readiness and high school experiences. At the time, it was clear that these findings had the potential to resonate with a wide range of school districts, and making them public seemed an important service to the education community. Before the report could be released, the education landscape – and the world – changed dramatically with the onset of the COVID-19 pandemic. School districts around the country had to immediately pivot to provide emergency remote instruction and make sure that students were safe and healthy, all while still working on getting the class of 2020 to graduation. The education community’s focus quickly and rightly shifted to making sure all students had access to technology, maintaining a strong focus on student learning in a remote or hybrid context, and engaging with students and families.

Against the backdrop of these new challenges, existing challenges remained – and, indeed, the COVID-19 pandemic only exacerbated existing equity gaps within our education system. A recent Center on Reinventing Public Education (CRPE) study found that students in the highest poverty districts were the most likely to start the 2020 school year remotely, with 41% of districts in the highest poverty quartile planning remote starts relative to 24% in the lowest poverty quartile.¹ For these students, the potential consequences of not having in-person learning could be significant. A Northwest Evaluation Association (NWEA) study found that the average student could begin the 2020 school year having lost as much as a third of expected progress from the prior year in math and half of the expected progress in math due to the remote spring. An analysis of 800,000 students by researchers at Brown and Harvard using the online platform Zearn found that student progress in math decreased by half in classrooms located in low-income ZIP

codes. Progress fell by a third in classrooms in middle-income ZIP codes and not at all in classrooms in high-income ZIP codes.²

On the post-secondary side, the effects are no less troubling. In September 2020, the *Washington Post* published an article entitled “The latest crisis: Low-income students are dropping out of college this fall in alarming numbers.”³ Indeed, some 100,000 fewer high school seniors completed financial aid applications to attend college this year, according to Free Application for Federal Student Aid (FAFSA) data through August. And students from families with incomes under \$75k were nearly twice as likely to say they “canceled all plans” to take classes this fall as students from families with incomes over \$100k, according to a US Census Bureau survey in late August. This is a true crisis: many of these students may never enroll, and for those who are dropping out of school, the National Student Clearinghouse has found that only 13% of these students ever return and even fewer graduate.

As we look ahead to 2021, a fairly substantial portion of the country – including some of the country’s largest districts – will most likely employ remote or hybrid learning. While districts and schools have had more time to plan and improve their practice, key inequities observed earlier in the year will likely become further entrenched in many places. While the data in this report was not collected during a time of remote learning amid a pandemic, we believe the data findings and insights can be even more meaningful to districts and educators than they were this time last year. It is important to think through how learning experiences at the high school level can better support students on the path to post-secondary success, what structures can be set up to catch those struggling, and how we close the equity gaps that continue to affect our students.

¹“Getting Back to School,” CRPE website, www.crpe.org/sites/default/files/getting_back_to_school_brief.pdf, accessed 4 February 2022.

²“Research Shows Students Falling Months Behind During Virus Disruptions,” *New York Times* website, www.nytimes.com/2020/06/05/us/coronavirus-education-lost-learning.html, accessed 4 February 2022.

³“The latest crisis: Low-income students are dropping out of college this fall in alarming numbers,” *Washington Post* website, www.washingtonpost.com/business/2020/09/16/college-enrollment-down/, accessed 4 February 2022.

Executive summary

This report summarizes the key findings of the first year of the Barr Foundation's "Planning for Post-Secondary Success for All Students" cohort project. This effort brought together five districts from around New England: Hartford Public Schools (CT), Malden Public Schools (MA), Manchester School District (NH), Portland Public Schools (ME), and Worcester Public Schools (MA). This was the first such cohort for post-secondary success that the Barr Foundation had put together, and the first step of the program involved a one-year deep dive into the data. The districts have continued with this multiyear journey and have continued to be supported by the Barr Foundation as they build out and implement action plans.

As part of the cohort, the districts engaged in an assessment of post-secondary readiness of their high school students and strategic planning to improve post-secondary outcomes for all students. The districts based their assessment, reflection and planning on extensive quantitative and qualitative data collected and analyzed by EYP's Education practice and Springpoint.

The EYP team relied on student-level data from the districts' student information systems to assess students' experiences in high school and on data from the National Student Clearinghouse to assess students' experiences in post-secondary settings. As part of this quantitative analysis, the EYP team identified two factors that appear to be most predictive of students' likelihood to succeed in post-secondary education: **student attendance** and **GPA**.

The Springpoint team visited a representative sample of high schools in each district to gather qualitative data to uncover key insights related to the current student experience and help districts and their high schools set a clear path forward to improve this experience. Springpoint utilized a rubric rooted in research-based design principles and national best practices to guide the school observation visits.

The EYP and Springpoint teams came together with the district teams at multiple points during the year-long journey to lead the districts in an inquiry-based process to identify where the quantitative and qualitative data pointed to important conclusions or areas for further exploration. Key findings

emerged across districts as a result of this deep reflection. These findings provided a framework to guide discussions and develop recommendations for possible district actions:

Overall finding:

Equity gaps result in disparate outcomes for students across certain demographic groups.

Key findings:

- 1 The ninth grade year can be critical to post-secondary success.
- 2 Eighth grade "early warning indicators" (EWIs) can play a key role in predicting post-secondary success.
- 3 For students without eighth grade early warning signs, high school course failure can be a key indicator.
- 4 Students – even those within the same district or school – have inconsistent access to academically rigorous and relevant learning experiences.
- 5 The type of higher education institution plays a critical role in outcomes, but student access to different types of institutions is uneven.

The iterative data analysis, reflection and planning cycle identified many opportunities for districts to take action to improve student post-secondary success, but perhaps just as importantly, it also highlighted existing strengths that could become the foundation for future improvements.

1

Part 1: Context

In the fall of 2018, the Barr Foundation convened a group of five school districts in New England – with representation from Connecticut, Maine, Massachusetts, and New Hampshire – for the Foundation’s first “Planning for Post-Secondary Success for All Students” cohort program. The five districts, which participated in an open application process to become part of the cohort, agreed to participate in a project spanning the length of the school year focused on an in-depth examination of student post-secondary success. As part of this examination, the districts sought to understand:

- ▶ The degree to which students were prepared for post-secondary success through their high school journey

- ▶ What experiences were critical in improving post-secondary readiness and therefore which factors could be “predictive” of post-secondary success
- ▶ Additional actions the districts could take to better prepare students to enter and persist in their education (inclusive of both two-year and four-year college experience)

To participate in the cohort, each district was asked to put together a team made up of administrative leaders and educators. These district teams were responsible for participating in the first year of the cohort program, which included four key phases (**Figure 1**).

Figure 1: Overview of the first-year project goals and approach

	September-November	December-February	February-April	May-August
	Phase 1: Self-assessment	Phase 2: Engaging with the data	Phase 3: Reflection and prioritization	Phase 4: Action planning
Goal	Assess initiatives undertaken to date and how this project can contribute to district actions	Use student and school level data to understand how the district is currently serving students	Reflect on potential solutions to address district challenges	Develop individual district action plans
Key questions	<ul style="list-style-type: none"> ▶ What are the challenges and opportunities facing each district? ▶ How can districts learn from one another throughout this project? 	<ul style="list-style-type: none"> ▶ What does it mean for students to be on or off track to post-secondary success? How are different groups of students performing? ▶ What are the school-based experiences of different groups of students? 	<ul style="list-style-type: none"> ▶ What are the common challenges across districts? What does this imply for common strategies? ▶ Are there strategies that may work in one district but are not a good fit for others? 	<ul style="list-style-type: none"> ▶ What are the district’s core goals in the coming years? ▶ What actions should occur this year, next year, and into the future in response to the findings?

1

Part 1: Context

The districts participating in the post-secondary success cohort ranged in terms of size, demographics, and performance.

(Figure 2). However, all shared a commitment to improving post-secondary outcomes all for students.

Figure 2: Demographic characteristics of participating districts

	Hartford Public Schools (CT)	Malden Public Schools (MA)	Manchester Public Schools (NH)	Portland Public Schools (ME)	Worcester Public Schools (MA)
Size					
Number of students (all grades)	20,893	6,540	13,621	6,725	25,306
Number of high schools	15	1	4	3	7
Number of high school students per district	7.9k	1.8k	4.1k	2.1k	7.2k
Demographics					
Asian	4%	24%	5%	5%	7%
Black or African American	30%	20%	9%	25%	16%
Hispanic or Latinx	53%	23%	23%	7%	43%
White, non-Hispanic	11%	30%	57%	56%	30%
Other race/ethnicity	2%	4%	5%	6%	4%
Economically disadvantaged	71%	45%	57%	54%	60%
English learners	19%	20%	12%	24%	34%
Special education	18%	16%	20%	16%	19%
Outcomes					
4-year graduation rate	69% (2017)	84% (2017)	76% (2017)	82% (2016)	82% (2017)
4-year graduation rate, 10 years prior	34% (2007)	75% (2007)	78% (2007)	74% (2006)	70% (2007)

All five districts agreed that participating in the cohort experience was very valuable. “While we felt strongly that we used a lot of data in our decision making, we learned from this process that we weren’t digging deep enough. Through this process, we were really able to get to some of the heart of the issues in our district – and we learned things that we hadn’t necessarily seen before in the data,” explained one district representative. As another noted, “Both the qualitative and quantitative data had deep value. Having someone bring an objective eye to our classroom practices through the qualitative data really deepened our understanding.”

Another district leader commented on the sense of community within the cohort and the realization that other districts were working through similar challenges: “What was honestly so helpful was seeing the similarity in the qualitative and

quantitative data across districts. It was helpful to see others sharing our problems, and work together to help brainstorm solutions.” Other district representatives widely shared this sentiment and saw the cohort experience as a powerful forum that created a safe space for participants to share challenges and bright spots candidly.

Other district leaders emphasized the benefits of carving out dedicated time to workshop and focus on their post-secondary success priorities. “It was incredibly powerful for our leadership team to have some dedicated time to be together. When we’re in the day-to-day, it can be really hard to focus on the bigger picture issues. Forcing ourselves to take time out and really focus on post-secondary success was so helpful and not something we necessarily would have made the time to do in such a dedicated fashion without this process.”

Part 2: Data collection

The first phase of work involved a significant amount of data collection and analysis by the EYP and Springpoint teams.

Quantitative data

- ▶ EYP gathered student-level data from each district's student information system. All data collected was linked to scrambled student ID numbers to maintain confidentiality.
- ▶ The majority of analysis focused on the high school graduating class of 2016. This cohort was chosen because the students could be followed two years into their post-secondary careers.
- ▶ Student-level data collected from the districts included:
 - ▶ Demographic information
 - ▶ Academic records (eighth grade through 12th grade)
 - ▶ Standardized test scores
 - ▶ Attendance records
- ▶ To assess how each student progressed into post-secondary education, each district collected student-level data from the National Student Clearinghouse, which aggregates data from post-secondary institutions around the country. The districts collected post-secondary enrollment records for each student in order to answer the following questions:
 - ▶ Did the student enroll in a two- or four-year college?
 - ▶ If yes, in which college or university did the student enroll?
 - ▶ If yes, how long did the student remain enrolled in that institution?
- ▶ EYP then analyzed all collected data to paint a full picture of the Class of 2016 high school graduating cohort from eighth grade through their second year of post-secondary education.

Qualitative data

- ▶ Springpoint visited two to three high schools in each district, collecting low-inference data through:
 - ▶ School leader interviews
 - ▶ Classroom observations
 - ▶ School-based observations (advisories, electives, etc.)
 - ▶ Separate focus groups with students, teachers and support staff
 - ▶ Review of student work
- ▶ Springpoint used a rubric rooted in research-based design principles and national best practices to evaluate these observations and detail the trends observed, including overall strengths and areas for growth.
- ▶ Separately, an independent consultant conducted alumni panels with former students of each district to understand how these students experienced preparation for post-secondary success while they were enrolled at the district.
- ▶ Springpoint and EYP analyzed both the qualitative results and the quantitative data, to provide districts with a holistic picture of how students in each district were being prepared for post-secondary success.

As part of the cohort experience and in addition the data received, each district also had the opportunity to participate in five in-person cohort convenings throughout the year. During these events, district teams learned from one another, heard from and engaged with guest speakers who had experience leading change work in districts, and spent time working in teams to identify actions, rooted in data, that would set each district on a path to improving post-secondary readiness of all high school students.

Part 3: Methodology

While each district had individual data findings and ultimately came up with an individualized action plan appropriate to its context, this report focuses on the core findings that were consistent across all five districts. Given the varied demographics and sizes of the cohort participants, we hypothesize that these findings are likely relevant for many school districts nationally. As such, all data featured in the report is aggregated or blinded.

Definition of post-secondary success

Given that the cohort was focused on post-secondary success, one of the first requirements of the project was to define this term. Clearly, a term as broad as “post-secondary success” can mean many different things. For the purposes of the cohort program (and this report), the five districts agreed that students could be defined as experiencing post-secondary success **if they persisted into the second year at either a two- or four-year institution, as recorded by the National Student Clearinghouse.** This allowed for the definition to be grounded in data that could be collected consistently for all students across the five districts.

This definition does have several limitations:

- ▶ For one, the National Student Clearinghouse does not track data from trade schools or from the military, and participation in either could arguably constitute post-secondary success. However, the Clearinghouse is the most comprehensive data set available that can be linked back to students’ high school experiences;
- ▶ In addition, it is certainly possible that even if students persisted into their second year, they did not go on to graduate

from the post-secondary institution. However, in order to have reasonably recent data (2016 high school graduating cohort) and to provide the districts with more actionable data, the threshold was set at the second year to measure post-secondary success.

Definition of on track to post-secondary success

Throughout this report, the term on track to post-secondary success will be used. This, too, was a definition created as part of this project. Through a deep analysis of the student data at each of the five districts, EYP team concluded that students’ GPA and high school attendance records are most predictive of whether they go on to experience post-secondary success (as defined above). In making this assessment, EYP evaluated multiple other factors (behavior records, standardized test scores, state exam scores, etc.) and ultimately concluded that GPA and high school attendance were most predictive. Given the diversity of the five districts in the cohort, it is likely that these variables would be important in nearly any district. It is possible, though, that other variables may need to be included in other districts given their particular contexts.

EYP then used student-level GPA and attendance data to “tag” students at different points in their high school journey based on whether they were on track to post-secondary success at that point in time. This allowed districts to answer questions such as “Do all students who are ‘on track’ for success at the end of ninth grade actually go on to experience post-secondary success?” The definition is reflected in **Figure 3** to the right.



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Part 3: Methodology

Figure 3: Illustrative definition of post-secondary success*

*Note: Each district received its own customized definition based on the district's attendance and GPA policies. The definitions were all broadly similar, but policy differences led to small adjustments of individual thresholds.

Class of 2016 Cohort

		Cumulative Weighted GPA										
		D-F	D	D+	C-	C	C+	B-	B	B+	A-	A
		≤ < 1.0	1.0-1.3	1.3-1.7	1.7-2.0	2.0-2.3	2.3-2.7	2.7-3.0	3.0-3.3	3.3-3.7	3.7-4.0	4.0+
Average HS Attendance	96%-100%	Off track	Off track	On track to graduate, but unprepared for post-secondary success	On track to graduate, but unprepared for post-secondary success	On track to graduate, but unprepared for post-secondary success	On track for success at a two-year institution	On track for success at a two-year institution	On track for success at a two-year institution	On track for success at a four-year institution	On track for success at a four-year institution	On track for success at a four-year institution
	91%-95%	Off track	Off track	On track to graduate, but unprepared for post-secondary success	On track to graduate, but unprepared for post-secondary success	On track to graduate, but unprepared for post-secondary success	On track for success at a two-year institution	On track for success at a two-year institution	On track for success at a two-year institution	On track for success at a four-year institution	On track for success at a four-year institution	On track for success at a four-year institution
	86%-90%	Off track	Off track	Off track	On track to graduate, but unprepared for post-secondary success	On track to graduate, but unprepared for post-secondary success	On track to graduate, but unprepared for post-secondary success	On track for success at a two-year institution	On track for success at a two-year institution	On track for success at a four-year institution	On track for success at a four-year institution	On track for success at a four-year institution
	81%-85%	Off track	Off track	Off track	Off track	On track to graduate, but unprepared for post-secondary success	On track to graduate, but unprepared for post-secondary success	On track for success at a two-year institution	On track for success at a two-year institution	On track for success at a four-year institution	On track for success at a four-year institution	On track for success at a four-year institution
	76%-80%	Off track	Off track	Off track	Off track	Off track	On track to graduate, but unprepared for post-secondary success	On track to graduate, but unprepared for post-secondary success	On track to graduate, but unprepared for post-secondary success	On track for success at a four-year institution	On track for success at a four-year institution	On track for success at a four-year institution
	75%	Off track	Off track	Off track	Off track	Off track	Off track	Off track	Off track	Off track	Off track	Off track

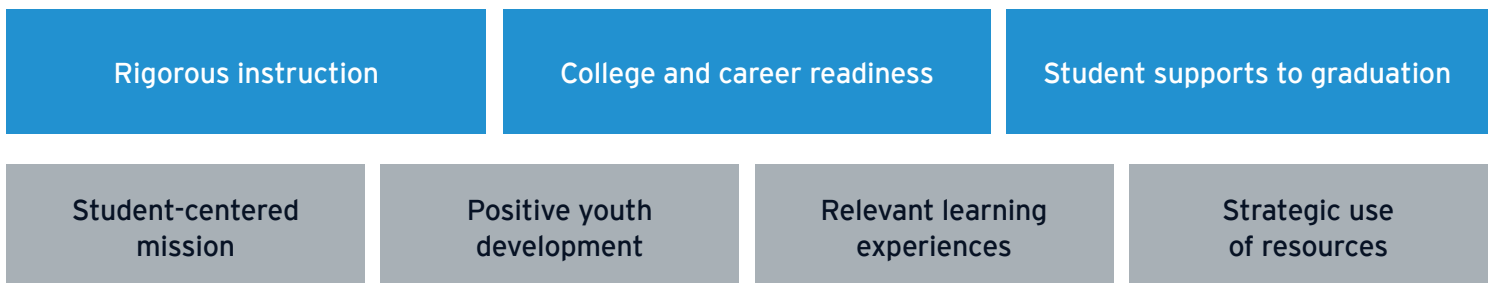
■ On track for success at a four-year institution
 ■ On track for success at a two-year institution
 ■ On track to graduate, but unprepared for post-secondary success
 ■ Off track

Research-based indicators to support qualitative data gathering and analysis

Springpoint utilized a set of seven research-based indicators to guide school observation visits, with three prioritized indicator categories (Figure 4 below). Application of this rubric during school visits helped identify key trends in each district. Springpoint then summarized key themes and trends in a

summary report for each, district that highlighted: 1) overall strengths and areas for growth, 2) detailed analysis of prioritized indicators, and 3) literal, low-inference notes from each visit component.

Figure 4: Seven research-based indicators guiding school observation visits



Part 3: Methodology

Below is an example of raw qualitative data and an accompanying sample analysis.

1 Classroom observation low-inference narrative

- ▶ In a 12th grade English Language Arts (ELA) class, students spent all 15 minutes of the time observers were in the class coloring pictures.
- ▶ In more than half the observed classrooms in one school, students were either taking notes as the teacher lectured or answering recall-based questions in packets.
- ▶ In an 11th grade science class, students were labeling a water cycle, a sixth grade content standard executed without analysis or evaluation.
- ▶ 12th grade AP Statistics students were observed copying notes directly from the textbook into their notebooks.
- ▶ In one higher-level class, students were engaged in academic discourse around a set of questions comparing slavery in Africa with slavery and other coercive labor systems in the Americas. In a similar class, students worked in groups to develop extended metaphors.

2 Student panel exchange

- ▶ Observer: "How often do you feel clear/unclear about the purpose of a lesson or an assignment?"
- ▶ Student: "It's always unclear. Students really don't know the purpose. We just have to do it. Like how are Romans going to help me in the medical field?"

3 Student work review

- ▶ Five of eight assignments provided (from a range of courses) required no reading or analysis of any kind to complete the task. Instead students used personal anecdotes or outside, unsubstantiated evidence to support claims.
- ▶ Seven of eight assignments asked for factual recall and procedural one-step problems in math. Only one assignment, from an AP Language class, required analysis (e.g., What was the impact of MLK's rhetorical strategies in Letter from a Birmingham Jail?).

Part 3: Methodology

Sample analysis

Student learning experiences are characterized by an overall lack of rigor and relevance.

- ▶ In most of the classrooms observed and most of the student work assignments analyzed, students were asked to complete tasks that did not require grade-level reading, substantive or evidence-based writing, and only required a low level of thinking (e.g., recall, finding out versus figuring out).
- ▶ Expectations for student work products are low, with several teachers asking such leading questions as to take the thinking entirely out of the work at hand, or by breaking down a problem into such small components that the students are merely going through procedural steps rather than actively discovering or synthesizing independently.
- ▶ Rubrics and teacher comments on student work, when provided, tended to emphasize completion over quality (checklists instead of descriptions of strong versus weak claims, for example).
- ▶ These trends in quality of assignments, method of instruction and articulated expectations for student work occur across subject areas.
- ▶ A few higher-level courses were outliers, effectively engaging students in rigorous, cognitive work while students in lower-level courses had access to far less rigorous work.

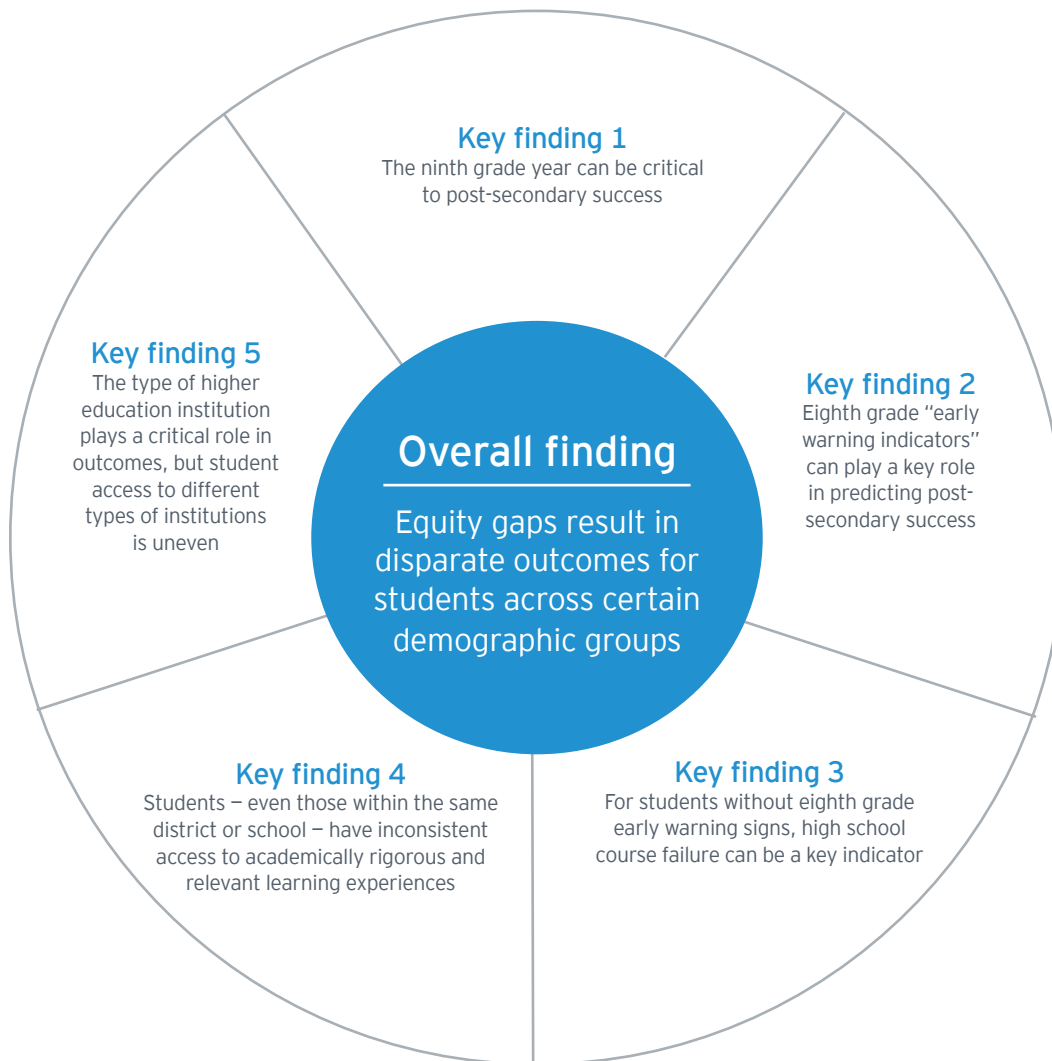
Student learning experiences also lack relevance

- ▶ Assignments analyzed in classrooms and student work submissions did not attempt to make connections between the work at hand and any external or future purpose for this work.
- ▶ The audience for all assignments observed was exclusively the classroom teacher.
- ▶ Most students, both in classrooms and the student panel, indicated that they did not understand the purpose of the work that they were being asked to do. This evidence, together with the nature of classroom activities observed, supports this finding.



Part 4: Key findings

Over the course of the year, the five districts engaged with a multitude of both qualitative and quantitative findings and took part in facilitated working sessions to build understanding of the data, provide feedback and perspectives and discuss the implications of the findings for each district and its students. Several consistent themes came up again and again. The five participating districts have agreed to share the six findings in this report in hopes that they can help districts across the nation engage with these difficult topics and formulate actions to improve post-secondary readiness of their students.



Overall finding:

Equity gaps result in disparate outcomes for students across certain demographic groups

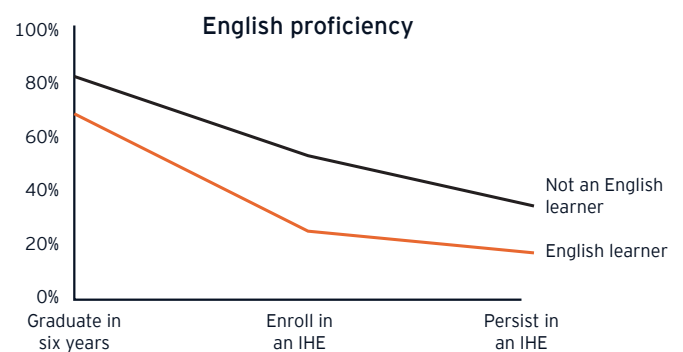
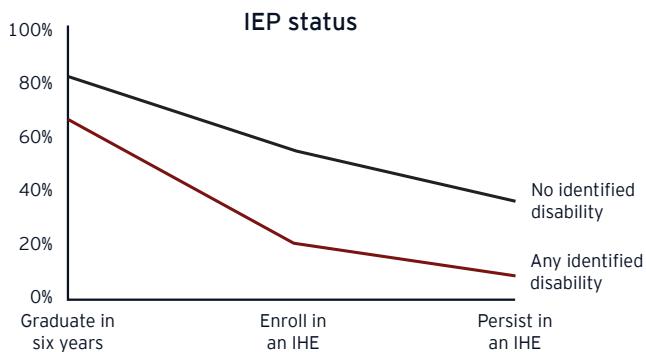
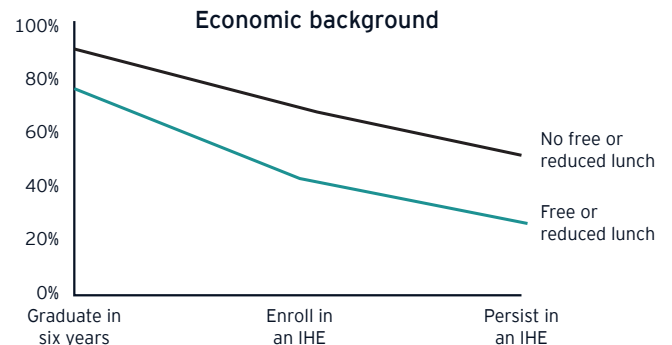
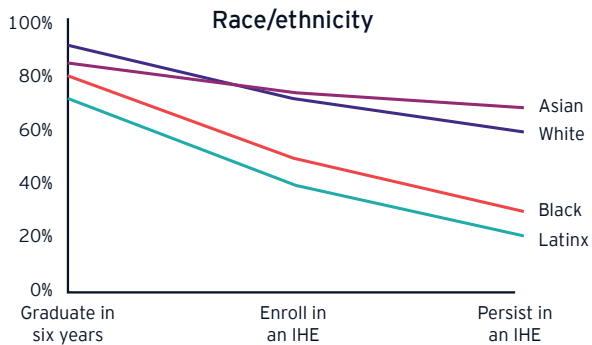
The demographically diverse districts participating in the cohort shared a clear challenge: the data revealed that significant outcome gaps existed between student subgroups, specifically in six-year high school graduation rates, enrollment in any kind of institution of higher education (IHE), and persistence at that institution of higher education. **Figure 5** illustrates the significant gaps observed between different subgroups.

4

Part 4: Key findings

Figure 5: Six-year outcomes by subgroup (example district)

Class of 2016 cohort



These overall equity gaps manifest themselves in different aspects of the student experience. Access to advanced coursework (further described later in the report) is one example. While there are many reasons contributing to these equity gaps, Springpoint’s qualitative observations offered one potential key factor: an adult’s perception of a student’s abilities and circumstances often appears to inform the adult’s expectations and understanding of what is acceptable for student achievement. This mindset issue likely drives decisions around which students are given grade-level coursework and which are recommended for advanced coursework. It also influences messages that adults send to students about what’s possible for them, including the specific college guidance they receive. These factors have a profound effect on the individual student experience and have far-reaching implications for the student’s future.

Opportunity to address finding: Addressing problematic adult mindsets explicitly and intentionally can help strengthen post-secondary success by allowing key reforms to take hold in a meaningful way. Without this critical step, it may be unlikely that post-secondary success goals will be met for all students.

4

Part 4: Key findings

Key finding 1:

The ninth grade year can be critical to post-secondary success

This is far from the first report in education to proclaim the importance of ninth grade, but it is worth repeating since the data across the five districts could not be clearer on this point. Utilizing the definition of “on track to post-secondary success,” **Figure 6** illustrates that for those who are “on track” at the end of ninth grade, high school success is all but certain – **71%** of these students do go on to experience post-secondary success. On the other hand, very few students who are off track at the end of ninth grade ever experience post-secondary success or even enroll in a post-secondary institution.

Figure 6: Six-year outcomes by ninth grade on- or off-track status

Class of 2016 Cohort

	On track for success at a four-year institution (31% of ninth graders)	On track for success at a two-year institution (29% of ninth graders)	Off track for PSS but likely to graduate (25% of ninth graders)	Most at risk not to graduate high school (15% of ninth graders)
Graduate in six years	99%	96%	87%	58%
Enroll in post-secondary	86%	69%	42%	22%
Persist into their second year	75%	47%	19%	7%

These statistics are troubling in and of themselves. What is perhaps even more worrisome is the fact that students rarely switch between the above categories once they complete ninth grade. **Indeed, 89% of students deemed on track at the end of ninth grade stay on track through the end of high school, and 85% of students who are off track for post-secondary success at the end of ninth grade remain off track.**

Opportunity to address finding: Although districts could certainly do more to help students get back on track beyond ninth grade, this finding suggests that ninth grade is a critical window that districts should use to provide targeted supports to students.

4

Part 4: Key findings

Key finding 2:

Eighth grade “early warning indicators” can play a key role in predicting post-secondary success

Given the critical importance of the ninth grade year, it is worth examining how districts can best assess which students are most likely to fall off track to post-secondary success during ninth grade. Fortunately, analysis of eighth grade data points to four **early warning indicators (EWIs)** which can be identified in middle school:

- ▶ **Attendance:** Poor attendance record (specific thresholds varied by district)
- ▶ **Behavior:** One or more days suspended out of school
- ▶ **Course failure:** One or more English or math course failed
- ▶ **Standardized test performance:** Failure on a state standardized test (specific thresholds/tests varied by district)

There is a clear correlation between these early warning indicators and the likelihood of a student being “on track for post-secondary success” by the end of ninth grade, as suggested by **Figure 7**.

Figure 7: Ninth grade on- or off-track status by eighth grade EWI status*

Class of 2016 Cohort

	No EWIs (46% of cohort)	One EWI (15% of cohort)	Multiple EWIs (9% of cohort)	Not in district middle school (30% of cohort)
On track for success at a four-year institution	41%	8%	3%	38%
On track for success at a two-year institution	33%	25%	10%	29%
Off track for PSS but likely to graduate	20%	43%	37%	18%
Most at risk not to graduate high school	6%	24%	50%	15%

*Note: Excludes students who were not in the district in middle school (as a result, rows do not sum to 100%)

Opportunity to address finding: The fact that only 8% of students with one early warning indicator and just 3% of students with multiple early warning indicators are on track for post-secondary success by the end of ninth grade highlights a very clear opportunity. Districts can identify these students on the first day of ninth grade or even over the summer. They can organize resources specifically to support these students throughout this most critical year.

Part 4: Key findings

Key finding 3:

For students without eighth grade early warning signs, high school course failure can be a key indicator

Eighth grade early warning indicators can play a powerful role in helping to identify students on whom districts should focus when planning supports, both to get these students to graduation and on to post-secondary success. However, not every student who struggles in ninth grade will display an early warning indicator prior to entering high school. Moreover, districts are also likely to have a substantial number of students who enter the district in high school, and for those students it can be difficult to obtain early warning indicators from their time in another district.

Fortunately, the post-secondary success data analysis revealed that, for students without the four early warning indicators described earlier, or in cases where that information may not be available, there is another clear indicator that a student may be at risk of not attaining post-secondary success: course failure in high school. Across the five districts, students with no early warning indicators who **never** failed a course were 2.5 times more likely to have post-secondary success than those who did fail a course – and the majority of students who experienced course failure, failed more than one course (Figures 8 and 9).

Figure 8: Number of high school course failures by post-secondary success status

Class of 2016 Cohort

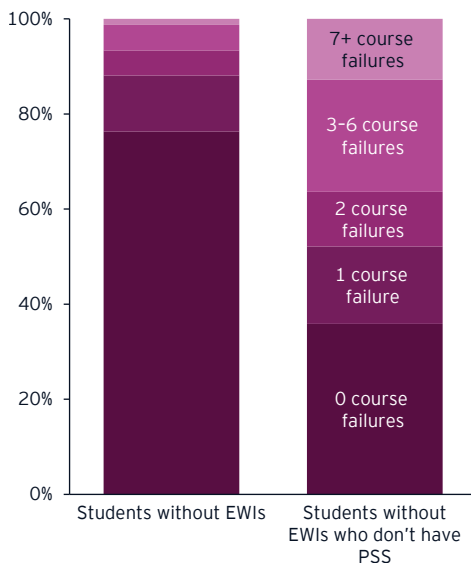
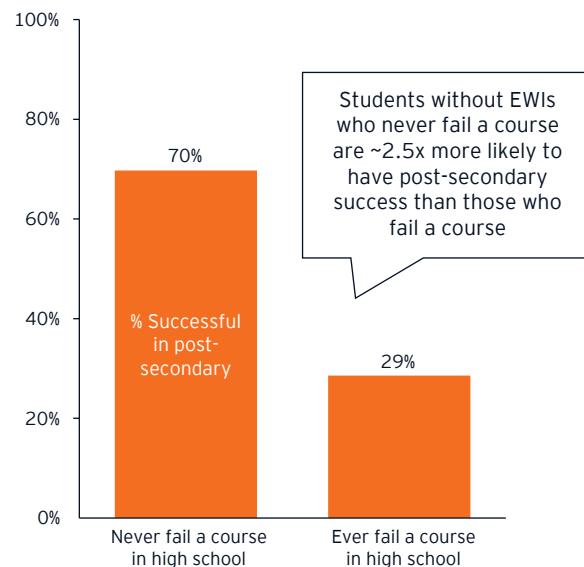


Figure 9: Share of students with no EWIs who did or did not fail a course who have post-secondary success

Class of 2016 Cohort



Opportunity to address finding: Students do not just fail a course out of the blue. They must first fail a quiz, a homework or a test – and then fail another. Each of these points is an opportunity to intervene with students to ensure that they find success along the way. For students without early warning indicator data, there is a clear opportunity to use this type of data to help identify students who need support and to provide that support.

4

Part 4: Key findings

Key finding 4:

Students – even those within the same district or school – have inconsistent access to academically rigorous and relevant learning experiences

Perhaps the most consistent finding during the school visits conducted by Springpoint was a high degree of variability in instructional rigor encountered across classrooms. For example, in one 11th grade science class, students examined a set of pictures to determine the different types of energy represented in each example (a sixth grade state science standard). Students then spent the rest of the class copying definitions from the board into a worksheet. But in an AP Research class at the same school, students were engaged in a much higher level of rigor – conducting individualized research projects on issues such as public health.

The classrooms with a low level of rigor often also appeared to lack relevance. In the majority of classrooms observed, there was little evidence of teachers attempting to articulate the larger purpose of what students were learning. Interviewed students expressed that they often struggled to connect what they were learning to the real world and did not understand why it would help their later lives.

Advanced placement, international baccalaureate (IB), or dual enrollment courses, while not the right “answer” for all students, did appear to be the classrooms where both rigor and relevance were evident. This translated to post-secondary success: students who are “on track” at the end of ninth grade for post-secondary success are nearly **twice as likely** to actually experience post-secondary success if they take an advanced course (AP, IB, or dual enrollment classes) in high school. However, access to these courses was inconsistent for students from different subgroups across districts – even within the same schools:

- ▶ Students with an eighth grade EWI were 75% less likely to take an advanced course
- ▶ Economically disadvantaged students were up to 75% less likely
- ▶ Students with an identified disability were 60% to 95% less likely
- ▶ Black and Latinx students were up to 60% less likely
- ▶ Male students were up to 35% less likely
- ▶ English learners were 25% to 90% less likely

Opportunity to address finding: Some bright spots emerged as a result of high school observation visits and student experience analysis. Indeed, some high schools had begun to alter their policies to ensure that students had greater access to advanced courses, which meaningfully reduced some of the identified subgroup gaps. While this move is certainly promising, making meaningful progress on improving post-secondary success outcomes will also require that districts improve access to rigor and relevance in **all** classrooms, not just those teaching advanced courses.

Part 4: Key findings

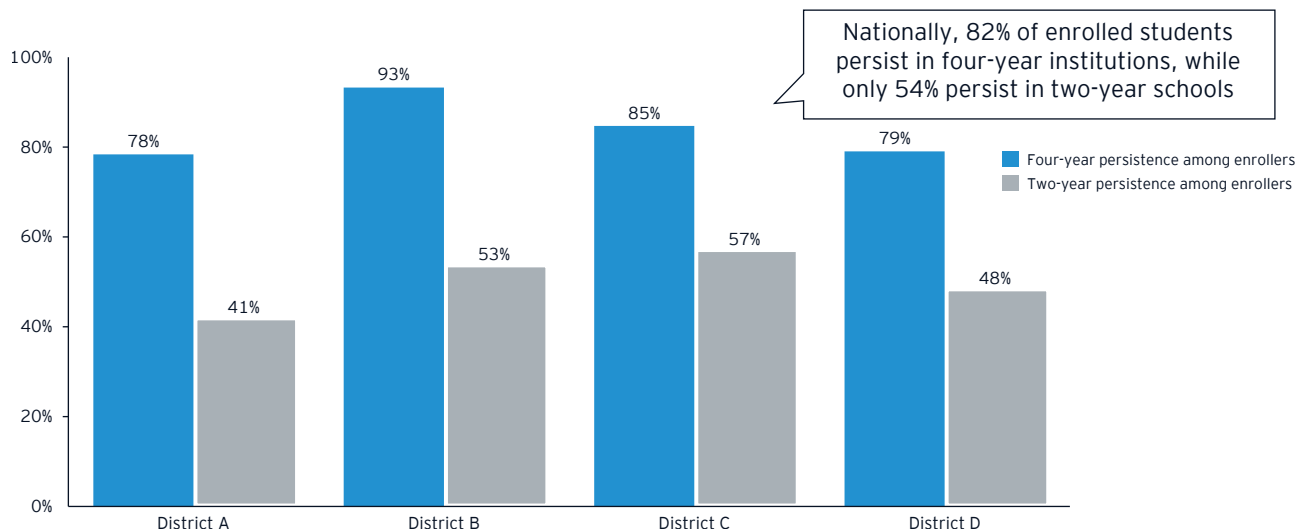
Key finding 5:

The type of higher education institution plays a critical role in outcomes, but student access to different types of institutions is uneven

Across all five districts, 56% of students enrolled in some type of higher education institution, and 39% of all high students persisted into their second year (i.e., experienced “post-secondary success”). But what was perhaps more revealing was the breakdown of student persistence by institution type (**Figure 10** below). Across districts, persistence rates at four-year institutions were nearly double those of two-year institutions, mirroring a national trend (the National Clearinghouse indicates that 82% of enrolled students persist in four-year institutions nationally, compared to 54% at two-year schools).

Figure 10: Post-secondary persistence among enrollees by higher education institution type

Class of 2016 Cohort



That these districts would reflect the larger national trend is not surprising. It does point to an opportunity to guide students toward a four-year institution if such an experience is available for them, as these appear to be the schools that are providing the strong supports predictive of success. Across the districts, students who are Latinx, economically disadvantaged or have a unique learning need are considerably less likely to enroll in four-year institutions than their peers (**Figure 11** on the following page). And yet, for students in these subgroups who enroll in a four-year institution, the gaps in persistence rates are much less dramatic than the gaps in enrollment rates. **Put another way, although students in these subgroups do not enroll at the high rates of their peers, they do nearly as well once they actually arrive at a four-year institution – suggesting that the real gap is in access to four-year higher education institutions (Figure 12 on the next page).**

4

Part 4: Key findings

Figure 11: Four-year higher education institution enrollment rate by subgroup (aggregated across all districts)

Class of 2016 Cohort

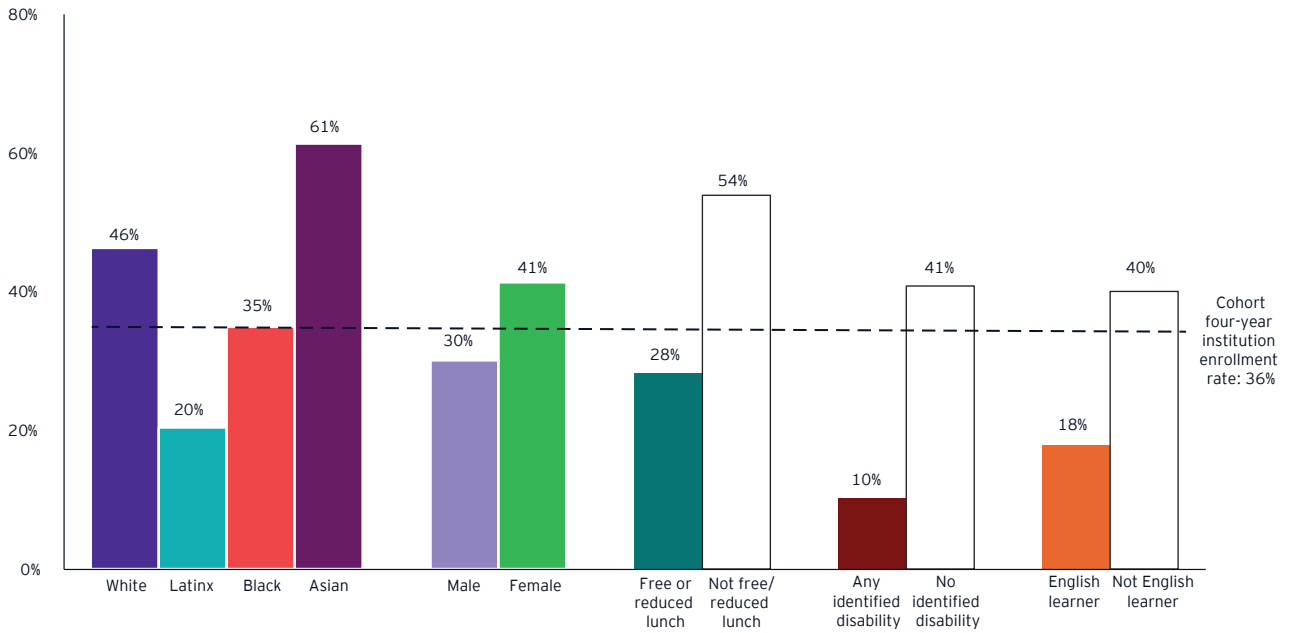
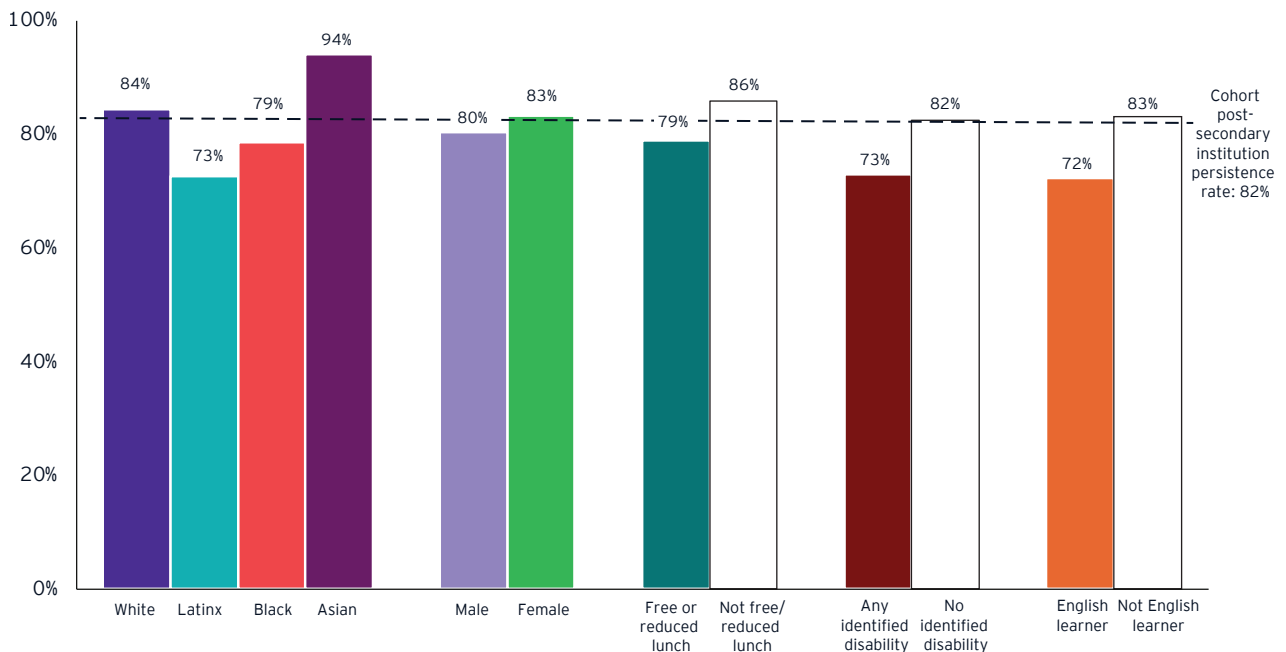


Figure 12: Four-year higher education institution persistence rate among enrollees by subgroup (aggregated across all districts)

Class of 2016 Cohort



4

Part 4: Key findings

School visit data also supports the hypothesis that the post-secondary success gap between subgroups is driven largely by access to four-year institutions. Across districts, the Springpoint team found room for improvement in how schools define and support student pathways to high school graduation and post-secondary success.

- ▶ Guidance counselors across the districts routinely have caseloads of 300+ students, making it difficult to spend meaningful time encouraging students who may not naturally consider a four-year institution. Data indicates that, across the districts, between 10% and 30% of students who are “on track” for post-secondary success do not ultimately enroll in college.
- ▶ Many adults in the schools are reticent to express a “college for all” or even a “college for most” message.
- ▶ Some of this is caused by misunderstandings about college, including affordability and what is necessary for career success. The situation is further exacerbated by the fact that college advising is not often grounded in data.
- ▶ Finally, interviewed students commented that there are few activities in grades 9 and 10 that prepare them for college. They often feel as though they have to take the initiative to go to their guidance counselors or begin college preparatory activities. Students recognized that for those who do not have parents with a college degree, taking this level of initiative is considerably more difficult.

Opportunity to address finding: Ultimately, this analysis is not meant to suggest that all students must go to a four-year institution. However, it does suggest that districts looking to improve the post-secondary readiness and success of all students may need to focus on supporting every student to be prepared for a four-year institution in case that is the path the student wishes to take.



5

Part 5: Implications

As the prior section on key findings suggests, there are few “easy answers” for districts to improve post-secondary readiness of their students, but the answers do exist for those willing to take the necessary steps.

For each key finding, the table below describes some “bright spots” or initial actions that the five districts in the New England

cohort were willing to take. The collaborative work of the districts went significantly further, also recommending systemic changes the districts could take to achieve a step change in students’ post-secondary readiness and success outcomes. These actions are described in the last column of the table.

Overall finding	Equity gaps result in disparate outcomes for students across certain demographic groups
District actions to date as part of the post-secondary success cohort experience	<ul style="list-style-type: none"> ▶ Portland Public Schools has already funded and filled a district equity coordinator position. As a result of the project, the district determined the need for and hired an academic supports and transitions coordinator to address, from a system level, the ways in which students may fall through the cracks and work to identify broader practices and solutions that work towards more equitable outcomes. ▶ For example, Portland spent several months last spring creating a presentation on the American college process, with the goal of demystifying each steps for those who are unfamiliar with the US higher education system. ▶ To do this, Portland partnered with multilingual and multicultural experts to develop a presentation emphasizing the most salient messages, then invited parents to a “parent university” that was available in multiple languages. ▶ Malden Public Schools sent over 10 teachers to a “standards institute” where they learned how ground curriculum standards in diversity, equity and inclusion efforts.
Possible additional district actions	<ul style="list-style-type: none"> ▶ Districts can implement systems that start to address equity concerns. For example, they might create a regular practice of analyzing data by demographic characteristics and developing a continuous understanding of the learning experience for specific subgroups (e.g., English language learners). This will promote a data-informed understanding of how all students are being served. ▶ Districts can also embed training and professional development that focuses on increasing equity across their schools, such as implicit bias training and culturally responsive instruction.

Note: Equity issues are a result of a wide range of actions interconnected with one another. No one discrete activity or initiative can solve equity issues – they need to be addressed holistically in multifaceted ways. However, the districts in the cohort have engaged in activities that begin to represent some potential actions.

5

Part 5: Implications



Key finding 1	The ninth grade year can be critical to post-secondary success
District actions to date as part of the post-secondary success cohort experience	<ul style="list-style-type: none"> ▶ Malden Public Schools is putting a significant emphasis on the ninth grade year. The district reprioritized their operating budget to hire a freshman guidance counselor who is responsible not only for focusing on the freshman class upon their arrival, but also creating a more effective bridge between K-8 and high school. ▶ Malden has also created a ninth grade “Academy” structure, where ninth graders take courses separately from the rest of the school. This year, the school brought together the Malden HS Academy teachers with the K-8 assistant principals in the district. This group worked together so that the K-8 assistant principals could see the target student trajectory that would set their students up for success in ninth grade. ▶ Malden is also starting to prepare families early by holding eighth grade parent nights a full year before these students transition to the ninth grade. ▶ Hartford Public Schools is implementing a data-driven Freshman Academy experience across multiple high schools. The structure is meant to engage students in high school and establish a path to and through post-secondary success.
Possible additional district actions	<ul style="list-style-type: none"> ▶ Districts could focus on making sure that no ninth grade student fails, not by lowering standards but by strategically increasing supports for these students. ▶ There are many potential options to increase support: <ul style="list-style-type: none"> ▶ Investigating student experiences in eighth grade to better understand the transition to high school ▶ Introducing common planning time for ninth grade teachers ▶ Focusing data protocols on pass rates for ninth graders

5

Part 5: Implications

Key finding 2	Eighth grade “early warning indicators” can play a key role in predicting post-secondary success
District actions to date as part of the post-secondary success cohort experience	<ul style="list-style-type: none"> ▶ Hartford Public Schools has created a “Freshman Academy,” in which scheduled academic intervention is a core tenet. Using EWI data, the district assigns entering ninth grade students to one of four intervention periods: 1) intervention for math, 2) intervention for ELA, 3) intervention for both or 4) no intervention. The intervention period will be a separate class, taught by the student’s core content teacher. Teachers will utilize a station rotation model during this block to help students remain on track and will facilitate student goal setting and progress monitoring to encourage and celebrate academic growth. ▶ Malden Public Schools is also using EWI data as a core part of their Freshman Academy to guide their work facilitating an effective transition between middle school and high school for all students.
Possible additional district actions	<ul style="list-style-type: none"> ▶ Eighth grade warning data can be a powerful tool, but only if districts actively build structures to integrate this data and ensure that students are supported from the very first day of ninth grade onward (these are also the students who might be identified for Summer Bridge programs, etc.). ▶ One potential best practice for districts and schools is to form “early warning indicator teams” for students who have been identified as being at risk of falling “off track.” These teams would consistently review student data throughout the ninth grade year. ▶ These efforts should be connected to and integrated with other ninth grade supports.

Key finding 3	For students without eighth grade early warning signs, high school course failure can be a key indicator
District actions to date as part of the post-secondary success cohort experience	<ul style="list-style-type: none"> ▶ Worcester Public Schools is focusing on course failure as a key warning indicator. The district has built a network of secondary school leaders who meet every other month to discuss intervention strategies for students who experience this indicator; this practice has now spread to the middle schools as well. ▶ Malden Public Schools’ freshman guidance counselor is also focused on making sure that EWI data is addressed and that students receive timely supports to help them succeed.
Possible additional district actions	<ul style="list-style-type: none"> ▶ Similar to the types of data protocols suggested for the prior two findings, districts can work to monitor students who are either failing a course, or at risk of failing a course, particularly in the critical ninth grade year. ▶ Districts can invest in teacher professional development to give teachers the tools to intervene with students at the earliest possible point (i.e., when a student first fails a quiz, test or homework).

Part 5: Implications

<p>Key finding 4</p>	<p>Students – even those within the same district or school – have inconsistent access to academically rigorous and relevant learning experiences</p>
<p>District actions to date as part of the post-secondary success cohort experience</p>	<ul style="list-style-type: none"> ▶ Multiple districts are working to ensure that curricula meet a high bar of rigor and relevance. Malden Public Schools has completed a “portrait of the graduate” exercise that outlines what a graduate should be able to know, think and do upon graduation. The district has also established professional learning communities for teachers, which will help support the “portrait of a graduate” work and ensure that it is represented across the school’s curricula. ▶ Worcester Public Schools is encouraging high, middle and elementary schools within the district to work together to align on the level of rigor necessary to prepare students for post-secondary success as the outcome goal, rather than just focusing on high school graduation rates as a metric of success; this is helping to reduce differences in standards and expectations across the schools. ▶ Hartford Public Schools has also developed a “portrait of a graduate,” including characteristics such as “problem solver,” “skilled communicator” and “informed and engaged citizen.” This has then been translated to a clear instructional vision for schools to implement, which will help to ensure that students have access to the appropriate levels of rigor and relevance.
<p>Possible additional district actions</p>	<ul style="list-style-type: none"> ▶ Inconsistent rigor and relevance in classrooms is a significant, systemic issue, but one potential first step is for districts to develop a shared instructional vision that defines what rigor and relevance “looks like” for the community – i.e., what should graduates of District X know and be able to do when they graduate? ▶ Districts can then use this instructional vision, ideally developed in coordination with key stakeholders throughout the community, as the basis for improving pedagogy and creating more relevant learning experiences. ▶ Tactically, the shared vision can give principals and others who observe classrooms and evaluate teachers a basis upon which to judge whether lessons are appropriately rigorous.

5

Part 5: Implications

<p>Key finding 5</p>	<p>The type of higher education institution plays a critical role in outcomes, but student access to different types of institutions is uneven</p>
<p>District actions to date as part of the post-secondary success cohort experience</p>	<ul style="list-style-type: none"> ▶ Portland Public Schools has solidified a “district post-secondary plan,” which outlines post-secondary preparation plans for students in 9th, 10th, 11th, and 12th grade. ▶ Portland’s plan will also ensure that students across schools receive the learning experiences necessary to position them to apply for the type of higher education institution that best aligns with their goals and aspirations. ▶ Portland coupled this initiative with significant work to enhance post-secondary supports, such as more family engagement around the college application process, and ensuring that that support is available in multiple languages.
<p>Possible additional district actions</p>	<ul style="list-style-type: none"> ▶ Districts can invest to support their high schools in providing more meaningful connections to the purpose of college for students. ▶ Across the districts in the cohort, there were between 10% and 30% of students who the data indicated were “on track” to be successful in a four-year or two-year college but did not actually enroll in a post-secondary institution. Methods for using this data can help shape targeted college counseling to students. ▶ Districts and schools can develop targeted support systems and structures around college access that incorporate mechanisms for sharing and using available data as well as personal information about students (e.g., interests, talents, passions). Efforts can intentionally leverage available data to help students and families identify best-fit higher education institutions where students are most likely to thrive.



Conclusion

Post-secondary success remains an incredibly important issue in education. Especially as technology and innovation continue to shift the landscape of available jobs and careers in the United States, it will likely become increasingly critical to provide the kind of education that ensures that students are prepared for a rapidly evolving future. And yet, while post-secondary success (of some kind) is arguably the most important outcome for students graduating from districts across the country, it is not extensively tracked and evaluated in the way high school outcomes traditionally have been (e.g., high school graduation). In part, this is because there is a shared responsibility – students must be prepared for post-secondary opportunities, but it is also important for students to be supported once they enroll in post-secondary institutions. Undeniably, what makes it harder

for this joint responsibility to be shared effectively is that K-12 data systems and post-secondary data systems are still largely separate and it can be difficult to meaningfully link them.

In linking these data sets and analyzing a full cohort of students, this report attempts to show that there is real utility in tracking and extensively evaluating this type of data. Importantly, there are significant opportunities for developing effective interventions in response to data findings. Such data findings are likely common across many different types of districts, not just those in the cohort, and can inform and drive district strategies to aid in ensuring post-secondary success for all students.

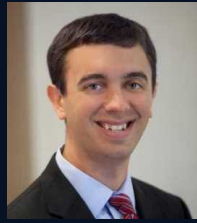
We hope that this report – its key findings and recommendations – will help advance this important conversation.

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