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# Redesigning High School

Local Perspectives From Schools and Districts

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By Samantha Batel, Erin Roth, and Neil Campbell

October 2018

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# Introduction and summary

Oyster reefs, once covering more than 220,000 acres of the Hudson River estuary, are functionally extinct in New York Harbor. The Billion Oyster Project (BOP) intends to turn the tide by restoring 1 billion live oysters to the harbor by 2030.<sup>1</sup> Its method is student engagement.

As of last year, more than 1,200 students throughout the five New York City boroughs have engaged in urban marine ecosystem restoration through BOP. These students are involved in efforts to “grow, monitor, and research oysters and their habitats through internships, volunteer work and their CTEs [career and technical education].”<sup>2</sup> The program began and is based at the Urban Assembly New York Harbor School, which offers students seven career and technical education (CTE) programs with a focus on marine science, technology, and policy.<sup>3</sup> Students learn from experts in the field and engage in work-based learning with dozens of partners.<sup>4</sup> Last school year, student attendance at the New York Harbor School outpaced the city average at 91 percent, and teacher attendance was near perfect at 97 percent.<sup>5</sup>

New York Harbor School is one of the more than 200 small New York City high schools designed to stimulate innovation across the city, provide schools with additional resources, and leverage community partnerships.<sup>6</sup> Research finds that these smaller learning communities have improved high school graduation rates, particularly for disadvantaged students of color, and fostered meaningful relationships between educators and students.<sup>7</sup> At New York Harbor School, which serves a student body that is 44 percent Hispanic and 19 percent black, the majority of students are graduating prepared for college and career. In 2017, for example, more than half of seniors enrolled in college or another postsecondary program within six months of graduating, on par with the city average.<sup>8</sup> A third of the seniors that graduated in 2017 earned a CTE diploma.

Engaging students in their learning is no easy feat but is critical to students’ success beyond high school. Students who are engaged in their work at school often are more likely to have plans for after high school and ideas about their future. However,

national surveys have shown that as students approach graduation, they are about as likely to be detached, discouraged, and absent from school as they are to be looking forward to their next steps. Gaps in engagement, similar to achievement gaps, compound this problem, with white students more likely than students of color to be engaged.<sup>9</sup>

Across the United States, schools and districts are redesigning high school toward the goal of better engaging and preparing students for success after graduation. This report highlights four innovation schools and districts—Noble High School in Maine; International High School at Langley Park in Maryland; the Science and Math Institute and Tacoma Public Schools in Washington; and Hampton City Schools in Virginia—all of which are taking unique approaches to prepare students for college and career within their local context. Importantly, what makes these programs successful goes beyond their focus on college and career readiness. Each school or district emphasizes the importance of small learning communities to connect with and support students; organizes learning based on the skills and knowledge students should have as members of the workforce and their community; emphasizes hands-on project-based learning; and/or embeds social and emotional learning or other student supports into the school day. These schools can serve as models for other communities working toward high school redesign.

**TABLE 1**  
**Highlighted school or district**

School or district	Locale	Title I school	Student population	Why they were selected as a redesign model
Noble High School	Rural	Yes	1,107	A comprehensive high school that serves three towns, using small learning academies and a proficiency-based system of teaching and learning.
International High School	Suburb	No	336*	A high school that meet students where they are and prepares English language learners for college and career through a competencies-based approach and project-based learning.
Science and Math Institute	City	Yes	486	One of three innovative high schools in Tacoma Public Schools focusing on math and science through a strong partnership with the local zoo.
Hampton City Schools	City	No**	6,218***	The district implements 16 career academies and 44 career pathways across its four high schools.

Notes: \* Indicates the student population as of fall 2018. \*\*Hampton City Schools' four high schools—Bethel High School, Hampton High School, Kecoughtan High School, and Phoebus High School—are not Title I schools. \*\*\*This student population figure is the total number of students across Hampton City Schools' four high schools. The entire district has more than 20,000 students.

Source: Data for International High School from personal communication with Carlos Beato, principal at International High School, July 12, 2018; Data for remaining schools from the 2015-16 and 2016-17 school years available at National Center for Education Statistics, "Common Core of Data: America's Public Schools Data Files," available at <https://nces.ed.gov/ccd/schoolsearch/index.asp> (last accessed October 2018).

This report examines each school's or district's approach to high school redesign, including what they are doing differently and how they are measuring success. The authors build on a previous report from the Center for American Progress, "High Schools of the Future: How States Can Accelerate High School Redesign," which focused on the four key levers for states to encourage high school redesign:

1. Make room for innovation through policy flexibility.
2. Update policies related to high school graduation, credits, and funding.
3. Adopt high school assessment and accountability systems with redesign in mind.
4. Solicit and support local initiatives to redesign high schools through strategies such as seed grants and pilot programs.<sup>10</sup>

Ultimately, the CAP's goal is to encourage policymakers to invest in—both financially and through policy changes—redesigning high schools to create stronger local economies and promote community engagement. After highlighting the schools and districts engaged in this work, the report makes several recommendations for how states and districts can pursue successful high school redesign.

# College and career readiness are a key part of high school redesign

One step schools and districts can take to address this challenge of declining student engagement is redesigning the high school experience. High-quality CTE programs, as well as opportunities to take college courses for credit, are foundational elements to this strategy. Comprehensive CTE programs and college opportunities are more than one-off programs or courses; they are integrated into high schools and shape the learning experience to improve outcomes for students.

Indeed, research finds that high school CTE programs are associated with higher future employment and earnings.<sup>11</sup> A study in Massachusetts found that participation in the state's regional vocational and technical high schools, where students split time between the classroom and technical programs, significantly increases the likelihood of graduating on time.<sup>12</sup> An analysis of CTE coursework in Arkansas, too, found that students with greater exposure to CTE were more likely to graduate from high school, enroll in a two-year college, gain employment, and earn higher wages.<sup>13</sup> Notably, students taking more CTE classes were just as likely as their other peers to pursue a four-year college degree, and both state studies found particularly positive effects of CTE for low-income students.

Opportunities to earn college credit while still in high school have similar positive effects on high school achievement and graduation; college access and enrollment; and college degree attainment.<sup>14</sup> A study in Minnesota, for example, found that participation in acceleration programs, such as Advanced Placement (AP), dual enrollment, and International Baccalaureate courses, was associated with higher rates of college readiness, enrollment in state colleges, and college persistence.<sup>15</sup> In addition, a nationally representative study found that students who took dual enrollment courses were 10 percent more likely to complete a bachelor's degree, with greater benefits for first-generation college students.<sup>16</sup>

But CTE and opportunities to take college courses are only part of the equation. High school redesign efforts should drive toward key learning goals to help students gain robust knowledge and skills; become independent, lifelong learners who are

critical and creative thinkers; develop a sense of self-agency; and grow to be civically and socially engaged citizens. High-quality college- and career-ready experiences should also support students to identify their individual interests and create a plan for after high school. Innovative educational models have the potential to not only improve academic outcomes and narrow opportunity gaps, but also drive toward stronger local economies. Indeed, a growing proportion of today's jobs, in industries such as health care and computer science, require some postsecondary training or college degree.<sup>17</sup> To prepare students for this workforce, schools must expand student access to modern coursework and experiences, often to meet the needs of local communities. The following examples illustrate the various ways in which states, districts, and schools can redesign their high schools to engage students and help them achieve both short- and long-term goals.

# Noble High School in North Berwick, Maine

Noble High School (NHS) is a comprehensive public high school that serves three towns in southern Maine. In a community where attending college has not been the default expectation for graduates, NHS’ goal is to increase postsecondary uptake by pairing rigorous academics with significant student supports. The school’s design blends together elements of small learning communities, proficiency-based teaching and learning, and flexible learning pathways to create a collaborative, equitable, and personalized learning environment for students in eighth through 12th grade.<sup>18</sup>

**TABLE 2**  
**Demographic breakdown at Noble High School**

Percentage of students, by demographic

Students eligible for free and reduced price lunch	Students with disabilities	English-language learners	White students	Black students	Hispanic students	Asian students
32%	22%	1%	95%	0%	1%	3%

Note: The author rounded the percentages to the nearest whole number.  
Source: National Center for Education Statistics Common Core of Data, “Noble High School: Enrollment Characteristics (2015-2016 school year)” available at <https://nces.ed.gov/ccd/schoolsearch/index.asp> (last accessed October 2018); U.S. Department of Education Civil Rights Data Collection, “Noble High School: Summary of Selected Facts,” available at <https://ocrdata.ed.gov/DistrictSchoolSearch> (last accessed October 2018).

## Small learning environments

At its core, NHS uses vertical learning academies—or schools within a school—to create small-school learning environments where students develop connections with teachers and peers.<sup>19</sup> Students are split between two five-year academies of approximately 550 students each. Within each academy, students are grouped into five teams of about 110 students who share teachers and locker space, among other elements of the school day. The goal of these smaller teams is to reduce the feeling of anonymity and help students build relationships and connections with their respective team’s teachers.<sup>20</sup> Mirroring the research on small-school models, NHS has seen improvements in academic performance, increased attendance, and reduced disciplinary concerns.<sup>21</sup>

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## Flexible support systems

In addition to small learning academies, NHS employs a range of supports to help students succeed in school. NHS has a response to intervention (RTI) program to create strong relationships between students and teachers.<sup>22</sup> For eighth- and ninth-graders, NHS uses the Building Assets, Reducing Risks (BARR) model to provide students with academic, leadership, and motivational support.<sup>23</sup> This program allows teachers across subjects to hold data-driven conversations about student progress, serve in an advisory role for students whose performance they monitor, and communicate with students' parents.<sup>24</sup> Students also meet weekly with an adviser, which can be their BARR or RTI adviser, to review academic progress and set weekly and long-term goals.<sup>25</sup> Alison Kearney, assistant principal of NHS, stated in a phone interview that as a result of these initiatives, "Teachers are very intimately aware of what the kids have going on in each one of their classes, across all of the content areas." She added, "I don't know that [students] know how unique that is."<sup>26</sup>

NHS' approach to continuous improvement and multiple learning pathways also makes the school unique. NHS uses heterogenous grouping to create classrooms where students of differing abilities learn together. Students have the opportunity for revisions and reassessments to demonstrate proficiency and, if needed, can participate in standards recovery classes for an additional opportunity to demonstrate that they have learned the material.<sup>27</sup> Students struggling in classroom settings can also participate in NHS' Multiple Pathways Program, which gives students the opportunity to demonstrate graduation standards in more creative ways, including an outdoor adventure education component and volunteer work at a local farm.<sup>28</sup> "We see learning as flexible," Kearney said in an interview. "We've created a very complex system of supports so that we know that if a student interacts with or is receptive to what we provide at the school, it is going to be OK, they are going to be successful."

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## Proficiency-based learning

These supports and flexibility pair with rigorous academics and high standards.<sup>29</sup> Unlike traditional school models, where students put in seat time and earn passing grades to graduate, students at NHS must demonstrate they have mastered specific, clearly defined learning goals to earn a diploma. The school's 21st Century Learning Expectations define these learning goals and identify what students should know and be able to do upon graduation. Along with these expectations, students must meet additional NHS graduation standards within each content area.<sup>30</sup>

## NHS' 21st Century Learning Expectations

These are the expectations NHS outlines:<sup>31</sup>

### Academic Expectations

A1. *Effective Communication*: Communicates clearly and effectively in a variety of formats

- i. Written communication
- ii. Presentations

A2. *Critical Thinking*: Creatively and accurately applies content knowledge and critical thinking skills to solve novel problems

A3. *Creative Use of Resources*

- i. Research – Uses books, other library resources, interviews, and technology effectiveness to perform research; integrates and applies information across disciplines
- ii. Technology – Uses technology to research, solve problems, and design presentations, documents and other products in a legal and ethical fashion
- iii. Design and Professionalism – Creates neat, well-designed, and professional products

A4. *Work Habits*: Demonstrates that he or she is a self-directed learner by completing work on time and maintaining an effective organizational system

### Social Expectations

S1. *Collaboration*: Interacts, collaborates, and communicates effectively with others

S2. *Social Responsibility and Awareness*: Manages personal behavior effectiveness with consideration for the community

### Civic Expectations

C1. *Informed Citizenship*: Exemplifies the characteristics of an informed voter by demonstrating an understanding of governmental processes, global issues, the challenges and opportunities associated with diversity, and the impact of personal actions on the wider community

NHS implemented its proficiency-based system of teaching and learning in response to a 2012 state law requiring schools to grant high school students proficiency-based diplomas by the 2016-17 school year in eight academic subjects.<sup>32</sup> In 2016, the state delayed full implementation until the 2024-25 school year.<sup>33</sup> NHS, however, took this work on early and with intention, implementing a proficiency-based curriculum and grading system in the 2014-15 school year. As a result, the school was one of the first to award proficiency-based diplomas to students in all required content areas, excluding world language, in the 2017-18 school year.<sup>34</sup>

Notably, to gain buy-in from the community, NHS maintained letter grades—atypical of pure proficiency-based systems—to continue to make progress reports, report cards, and transcripts accessible for parents. These grades map to the three levels of proficiency—distinguished, advanced, and basic—that NHS defined to measure student performance. (see Table 3) Additionally, students receive two grades in each class. The first is a grade based on the cumulative average of each graduation standard, which is specific to each academic department. For example, the NHS English department has six graduation standards based on students’ analytical, written, and verbal abilities. The second grade relates to students’ work habits—one of the 21st-century learning competencies.<sup>35</sup>

**TABLE 3**  
**Noble High School grading system**

Level of proficiency	Letter grade	Number grade	Performance descriptor
Distinguished	A+	99%–100%	The student has mastered the targeted skills and knowledge for the grade level. They understand and apply key concepts and skills with sophistication, consistency, and independence, using challenging texts, sources, or materials.
	A	96%–98%	
	A-	93%–95%	
Advanced	B+	91%–92%	The student has consistently demonstrated the targeted skills and knowledge for the class and can apply them at the advanced level as described by the class’ rubrics using grade-level or higher texts, sources, or materials.
	B	88%–89%	
	B-	85%–87%	
Basic	C+	83%–84%	The student has demonstrated the targeted skills and knowledge at a basic level and can apply them at an acceptable level as defined by the class’ rubrics/scoring guides.
	C	79%–82%	
	C-	75%–78%	
Does not meet	NM	0%–74%	

Source: Noble High School, “Noble High School Grading System: A Guide to Standards and Proficiency-Based Grading at Noble High School,” available at [https://docs.google.com/document/d/1WW8UEN7HJ14FM\\_kLwo1OtJc3xvaqHay8EDZeym5p6PY/edit](https://docs.google.com/document/d/1WW8UEN7HJ14FM_kLwo1OtJc3xvaqHay8EDZeym5p6PY/edit) (last accessed September 2018).

The school's policy of late start Thursdays, where students arrive to school two hours late, was critical for the development of NHS' proficiency-based system. Teachers use this time to design the graduation standards, articulate learning targets, and design unit frames to ensure that students have equitable experiences across academies. Teachers review tuning protocols for units, lessons, and common assessments. This window also provides time for regular, weekly professional development.<sup>36</sup>

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## Accessible CTE and college-level courses

To prepare students for college and career, NHS offers a multitude of courses and programs both on and off campus. Students can choose from 25 CTE education fields of study from the Somersworth Career Technical Center and the Sanford Regional Technical Center, including computer and network systems, emergency medical services, and pre-engineering.<sup>37</sup> They can select from 14 AP courses at NHS across a variety of subjects or opt into an honors challenge within a course for more rigorous learning opportunities. In addition, students have several options to earn college credit, either by enrolling at the local community college, York County Community College; participating in an early-college distance education program through the University of Maine; or earning college credits through NHS from Great Bay Community College in New Hampshire.<sup>38</sup>

Additionally, as part of their NHS experience, students in grades nine through 11 participate in end-of-the-year roundtable conferences where they present their findings from year-long portfolios of work to parents, teachers, and peers. The goal of these benchmark assessments is for students to demonstrate that they have met the academic, social, and civic expectations of NHS. At the end of senior year, students show mastery of NHS graduation standards through an in-depth exhibition, where they present on a research topic and demonstrate essential skills to a panel of three teachers and a peer.<sup>39</sup>

## Measuring success

One of the main concerns of implementing this new system at NHS was that success was going to be unattainable. Students must earn a 75 percent on a 100-point grading scale to meet basic proficiency. This high mark, combined with rigorous Common Core State Standards and Next Generation Science Standards, as well as the requirement that students earn a passing average in each of the graduation standards associated with a course, created rigorous expectations for students.<sup>40</sup> However, as Kearney reasoned, “The first mark of success is that, given the level of expectation that we hold for kids, they’re going to get a diploma that they’ve really earned.”<sup>41</sup>

NHS will need several cohorts to move through and graduate from the new school model in order to assess their success. In a community in which postsecondary education has not been the default expectation, the school hopes to see reductions in college attrition rates and decreases in referrals to remedial education. “Getting a consistent warehouse of that information [from the state] would be helpful,” Kearney said. Fundamentally, NHS aims to graduate students who understand their strengths and weaknesses when entering postsecondary education or the workforce, which many of the school’s students do directly. The emphasis on work habits is foundational to this approach.

NHS’ efforts to craft a schedule and system with multiple layers of supports for students, dedicated time for teachers to collaborate, and a proficiency-based diploma highlight a path for how schools can successfully redesign their curricula while retaining some elements of a traditional high school experience.

# International High School at Langley Park in Bladensburg, Maryland

International High School at Langley Park lives up to its namesake, with students representing 24 countries and one U.S. territory in the 2017-18 school year. Nearly two-thirds of students were born in El Salvador or Guatemala, and the majority speak Spanish as their first language.<sup>42</sup> It is one of two international high schools in Prince George’s County Public Schools (PGCPS), the other being International High School at Largo, designed to specifically address the needs of English-language learners and ultimately improve graduation rates for this population of students in the district. Both schools require that students apply to a lottery program, and to be eligible, they must be English-language learners or have recently exited the English-language learners program.<sup>43</sup> In addition, spots are added for late-arriving students who missed the lottery. After being accepted, students are matched with the school that more closely aligns with their geographic location. This focus on family location helps the schools stay rooted in their communities, intentionally address community needs, and access community resources.

**TABLE 4**  
**Demographic breakdown at International High School**

Percentage of students, by demographic

Students eligible for free and reduced price lunch	Students with disabilities	English-language learners	White students	Black students	Hispanic students	Asian students
93%	0%	98%	2%	13%	83%	2%

Note: The author rounded the percentages to the nearest whole number.  
 Source: National Center for Education Statistics Common Core of Data, "International High School @ Langley Park: Enrollment Characteristics (2015-2016 school year)" available at <https://nces.ed.gov/ccd/schoolsearch/index.asp> (last accessed October 2018); U.S. Department of Education Civil Rights Data Collection "International High School @ Langley Park: Summary of Selected Facts," available at <https://ocrdata.ed.gov/DistrictSchoolSearch> (last accessed October 2018).

According to a phone interview with Carlos Beato, the principal of International High School at Langley Park, the school serves a diverse mix of English-language learners—from newcomers to the United States, to students who have solely been educated in American schools. International High School at Langley Park serves primarily first-generation immigrants.<sup>44</sup> This difference results from the strategy to place students at the school nearest to their home and the fact that immigrant

communities and networks vary across the physical landscape of Prince George’s County. Each school is intentionally designed around meeting the needs of these students and families and ensuring they fully participate in their education and school community.

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### Supports designed to fit a diverse community

To serve its students well, International High School at Langley Park uses a variety of design strategies. Importantly, the goal is to be a full-fledged community school—a strategy that involves assessing holistic student and family needs and incorporating community resources using the school as a hub for this work. International High School at Langley Park partners with CASA, an immigrant services and advocacy organization, to identify and meet student and family needs.<sup>45</sup> Chief among these needs is often immigration legal services. Currently, both of Prince George’s County’s International High Schools are in temporary sites; International High School at Langley Park will offer even more community supports when the new school building in the Langley Park community is complete.<sup>46</sup>

Beato said he organized focus groups with families and students to understand what a school designed to meet their needs should look like. Both International High Schools in the county have full-time social workers on staff, and the Langley Park campus starts and ends earlier than most high schools in the district—from 7:45 a.m. to 2:25 p.m.—reflecting the need of many students to work after school or take care of siblings. The school also devotes one period each day for homework help or to allow meetings for extracurricular activities that would otherwise happen after school, such as the debate team or yoga.

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### Competency- and project-based learning

International High School at Langley Park’s academic program uses a competency-based approach and project-based learning. To start, the school focuses on four skill areas: content knowledge, critical thinking, social-emotional development, and language learning.<sup>47</sup> The competency-based approach and project-based learning are leveraged to increase and facilitate the rigor of coursework in which English-language learners can participate and show mastery. These design strategies intentionally focus on involving their students in academic opportunities in which English language learners typically do not participate in traditional high schools. “Students are able to participate in their communities in ways they may not have before. They leave here every day feeling empowered about the things that they do and learn about,” Beato said.<sup>48</sup>

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The competency-based approach allows teachers to offer students flexibility regarding at what level they start any given topic and how they demonstrate mastery. Students can demonstrate their mastery in a variety of ways, such as in a written product, a student-produced film, a drawing, or PowerPoint presentation—depending on what level the student enters and reaches upon completion. Recently, students read *Romeo and Juliet*, and their mastery project focused on the concept of love. Students used the text as a lens to present and research a specific question related to the universal topic of love.<sup>49</sup> This choice to focus on a universal phenomenon is an intentional method of student engagement, social-emotional learning, and a competency-based approach—all of which are specifically designed to ensure that students’ English-language level is not a detriment to their learning.

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### Focus on college readiness

The school’s leadership team is focused on ensuring that students participate in academic and nonacademic opportunities they may not otherwise have joined in a traditional high school environment. International High School at Langley Park is working on enrolling students in AP courses, as well as dual enrollment opportunities at a local university, Bowie State University. To ensure that all students can participate in dual enrollment courses, students are matched with either elective courses or regular college courses depending on their score on the ACCUPLACER exam, which determines their readiness for credit-bearing work. The school provides transportation to the Bowie State campus to facilitate and encourage participation. In the 2017-18 school year, 15 students dually enrolled at Bowie State.

International High School at Langley Park is designed to require all students to take an AP course by the end of their junior year, with placements in AP courses based on each student’s English language facility. If an AP world history course, for example, is not appropriate, the school will find an AP course that works for each student, such as an AP world language course. Beato notes that it is challenging to incorporate a competency-based approach and project-based learning into AP courses. This challenge is met by teachers who work together to continually reflect on and refine their strategies to effectively merge all three goals. “There is a culture of love, empowerment, and collaboration. You walk out feeling like kids aren’t afraid to try, teachers aren’t afraid to try, and collaboration is key,” Beato said.<sup>50</sup>

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## Connect with local community partners

International High School at Langley Park's strong belief in student engagement also means intentionally connecting with partners to facilitate student involvement in after-school activities. These activities are designed to both address family need for after-school care and ensure students are engaged in productive activities throughout the day. For example, International High School partners with Soccer Without Borders and a local health organization to offer soccer and a future doctor's club as after-school programs year-round.<sup>51</sup> The school also supports and maintains an active student government with representatives from multiple countries. Beato notes that in his experience, student government is an activity that English-language learners would not typically join in a more traditional high school.<sup>52</sup>

### Measuring success

While International High School at Langley Park has not yet had a graduating class—the first class of seniors will graduate in the 2018-19 school year—it does have several other methods for measuring success in the interim. English-language growth is a critical area for measurement and International High School carefully watches and assesses student progress in this area using the WIDA's ACCESS for English-language learners assessment, among other tools.<sup>53</sup> According to Beato, for the past two years, International High School at Langley Park has shown the most language growth for English-language learners out of all high schools in PGPCS on the WIDA ACCESS assessment, despite the assessment becoming more rigorous during this time to better align with Common Core State Standards.<sup>54</sup>

In addition, International High School is currently working with the Maryland State Department of Education and PGPCS to develop and implement alternative assessment options and other opportunities for students to demonstrate subject mastery. Currently, the school is exploring a portfolio assessment system and working to refine and align this process. Importantly, students still need to pass traditional Partnership for Assessment of Readiness for College and Careers exams in algebra, English language arts, government, and biology in order to graduate in PGPCS.

Social-emotional learning goals are measured both throughout lessons and during students' advisory period, at the beginning of every other school day. Educators worked together to figure out how to best restructure the advisory period so that they could successfully measure social-emotional learning during this time. The advisory period is also leveraged to implement restorative justice practices, and Beato credits this approach with a sharp decline in the school suspension rate and overall rare use of suspensions in the school.<sup>55</sup>

TABLE 5

**Example of International High School's social-emotional learning tasks**

All activities in tasks 6–11 are required

Mastery project	Task description	Skill assessed
Task 6: Unlocking the prompt	Students will unlock the prompt of their English literacy task by gathering information about key elements of the project.	Gather information
Task 7: Reading for the gist	Students will read for the gist of Dr. Martin Luther King Jr.'s "Beyond Vietnam" speech by summarising key ideas in images and the source text.	Summarize
Task 8: Close reading	Students will close read Dr. King's "Beyond Vietnam" speech a second time to break down his argument.	Argument reading
Task 9: Constructing the essay	Students will write their English literacy task essay in order to analyze Dr. King's argument in "Beyond Vietnam."	Argument writing

Note: Students will have a socio-economic check-in for responsible decisions, self-management, and relationships skills after tasks 2, 5, and 9.

Source: Materials from International High School's curriculum provided to authors by International High School Principal Carlos Beato.

Like NHS, International High School at Langley Park will need to have several cohorts graduate in order to more comprehensively evaluate the school's success. But in a phone interview reflecting on what has allowed the school to adapt to students' needs and foster an effective learning environment, Beato prioritizes local partnerships, hiring and budget flexibility, and the innovative approaches educators take to assess students' mastery.<sup>56</sup> He also notes that creating new rubrics and assessment systems is a challenge, as ultimately, students must still receive traditional letter grades that are more easily understood and align with district policies. None the less, Beato said he feels that allowing students to demonstrate mastery in multiple ways and understand and see their learning process reflected in how they are assessed outweighs any obstacles. Ultimately, the school's biggest focus remains what educators there believe will lead to successfully graduating students who are ready for college and career—and who feel empowered and fully engaged in their education and community.

# Science and Math Institute in Tacoma, Washington

Founded in 2009, the Science and Math Institute (SAMi) is one of nine public high schools and one of three innovation high schools in Tacoma, Washington.<sup>57</sup> As its name suggests, SAMi is a learning community that focuses on math and science. Its location is one of its main draws and sets it apart from other schools, both literally and figuratively.

Situated next to the zoo in Point Defiance Park, SAMi leverages community partners to create unique opportunities for hands-on learning. School leaders and Metro Parks Tacoma, the agency that oversees parks and recreation services in the city of Tacoma, sought to increase student utilization of the 700-acre park, zoo, and waterfront, using the park as the lens for learning.

Out of this collaboration came SAMi, which started with portable classrooms in a gravel parking lot at Point Defiance Park. Students now attend classes in an open floor plan building as well as outdoor learning spaces situated between the zoo’s animal exhibits. Students engage in projects throughout the park—from observational research to designing enriching environments for zoo animals—and interact with practitioners, including conservationists, zoologists, and environmental scientists, through both fieldwork and classroom instruction.<sup>58</sup> “The big takeaway is that we’re doing high school differently,” said Kristin Tinder, innovation high schools co-director.<sup>59</sup>

**TABLE 6**  
**Demographic breakdown of the Science and Math Institute**

Percentage of students, by demographic

Students eligible for free and reduced price lunch	Students with disabilities	English-language learners	White students	Black students	Hispanic students	Asian students
39%	10%	1%	68%	11%	9%	8%

Note: The author rounded the percentages to the nearest whole number.  
 Source: National Center for Education Statistics Common Core of Data, “Science and Math Institute: Enrollment Characteristics (2015-2016 school year)” available at <https://nces.ed.gov/ccd/schoolsearch/index.asp> (last accessed October 2018); U.S. Department of Education Civil Rights Data Collection, “Science and Math Institute: Summary of Selected Facts,” available at <https://ocrdata.ed.gov/DistrictSchoolSearch> (last accessed October 2018).

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## Passion-driven curriculum

The school's setting is only part of what makes its approach unique; its vision and structure are also integral. At its core, SAMi is built on four school tenets: community, empathy, balance, and thinking.<sup>60</sup> To live these values, SAMi wants its students to graduate with more than deep content knowledge. Graduates should enter their communities as empathetic learners and balanced individuals with good critical thinking skills. Ultimately, meeting graduation requirements is a must, but students should also leave SAMi with a passion.<sup>61</sup>

To find this passion, freshman and sophomore students take exploratory classes from Monday through Thursday to help them identify the pathway—similar to a college major—they will pursue during their junior and senior years. For example, before taking zoo conservation, ornithology, or marine ecology in the natural science pathway, students start by taking introductory biology. Juniors and seniors can also participate in community-based internships as one or more class periods to gain career experience and learn employability skills.<sup>62</sup>

On Fridays, academic classes take a back seat as students meet in 20-person, multi-grade advisory groups with a mentor teacher, which research has shown increases the likelihood of graduation and postsecondary success.<sup>63</sup> Together, students work on being successful in school by connecting with their peers; identifying strategies to improve attendance and achieve mastery on learning standards; and creating a post-high school plan related to their passion area. Internship experiences with community partners also help to inform students' future education or training decisions.<sup>64</sup> "Community partnerships are the bread and butter of this work," Tinder said.

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## Community partnerships and local support systems

Community partnerships were integral to the inception of SAMi. Staff with Metro Parks Tacoma approached Tacoma school leaders with whom they had an existing relationship with an idea to create a new school. The goal was to improve student access to Tacoma's 700-acre park, zoo, and waterfront, using the park as the lens for student learning. With buy-in from the school district—and engagement with the community, including with eighth-grade students and their teachers and families—SAMi received three times as many applications as there were seats available when it opened in 2009.<sup>65</sup>

Community partnerships are the bread and butter of this work.

The application lottery process involves basic student questions, including why the student wants to attend SAMi and what the student would find valuable about the school experience. Students also describe one piece of work that they have put together for their eighth-grade portfolio. Students then present their application to a SAMi teacher and student as an opportunity to discuss their work and ask questions, meet a current SAMi student, and experience being part of the school community firsthand. With this process complete, students enter a regional lottery based on middle-school attendance zones.<sup>66</sup>

Throughout the application process, school leadership offers prospective students support, hosting outreach sessions at the district's middle schools, running application workshops, and providing transportation for the campus conversations. SAMi also follows up with students who express interest in the school but do not apply in order to help them through the process. Additionally, the school works with the Black Collective, a local leadership organization; local church youth groups; the Boys and Girls Club; and home-school cooperatives to extend their reach throughout the community.<sup>67</sup>

SAMi aims for its incoming class to be reflective of the community, both socio-economically and ethnically. According to an email from Kristin Tinder, a co-director of Tacoma Public Schools' three innovation high schools, community outreach during the application process has led to increases in applications from black and Hispanic students over the past two years.<sup>68</sup> In the 2016-17 school year, SAMi served about 450 students, one-third of whom qualified for free or reduced price meals. The district serves nearly 30,000 students and averages about 60 percent free or reduced price meal-eligible students. SAMi's student population is 64 percent white, 11 percent Hispanic or Latino, 12 percent black or African American, and 8 percent Asian. The district overall is 40 percent white, 20 percent Hispanic or Latino, 17 percent black or African American, and 10 percent Asian.<sup>69</sup>

## Measuring success

SAMi leaders measure the school's success in myriad ways. According to Tinder, demand for the school is an important proxy for its performance. To date, the school receives two to three times as many applications as there are seats available. Waning demand, she says, would be an indication that the school is no longer meeting the needs of the community. Similarly, teacher retention is an important barometer for the health of the organization, and according to Tinder, many teachers stay at SAMi for the longevity of their career.

More formally, the school strives for a 98 percent—if not 100 percent—graduation rate and to meet state assessment goals. The class of 2016, for example, boasts a 99.2 percent graduation rate, and in the 2016-17 school year, SAMi students outperformed the district in English language arts, math, and biology.<sup>70</sup> New metrics are also on the horizon, including how to measure the soft skills that students acquire at SAMi in addition to students' postsecondary outcomes, including enrollment and completion. As Tinder said, "If our students are going through a pathway, they've identified a passion and they have an internship in that area of passion. . . . We want to track what happens to them after that and how successful are they being, say, five years from high school graduation."

Stable school partnerships and steady school leadership have contributed to the success of SAMi's model. This stability, coupled with a local grow-your-own attitude, has helped to seamlessly drive the school's mission and vision and maintain SAMi's public partnerships.<sup>71</sup>

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## Other examples from Tacoma

SAMi is not the only Tacoma school implementing a unique model. The district has two other innovation high schools: the School of the Arts (SOTA)—after which SAMi was modeled—and its newest addition, the School of Industrial Design, Engineering and the Arts (iDEA).

SOTA opened in 2001 with the goal of increasing student exposure and access to arts instruction. SOTA began as a summer program in partnership with several local museums and one of Tacoma Public School's comprehensive high schools. Community interest, seed money from the Bill and Melinda Gates Foundation Model Schools Program, and district support facilitated the creation of SOTA as Tacoma's first innovation high school.<sup>72</sup> The strong partnership between Metro Parks Tacoma and SOTA—Metro Parks runs SOTA's arts programming—spurred the creation of SAMi, whose students are also able to take classes at SOTA.<sup>73</sup>

Most recently, SAMi and SOTA leadership—in partnership with the nonprofit Elements of Education—launched iDEA after the district identified a need to expand its menu of options in South Tacoma, an area with generally lower median household incomes than other areas in Tacoma.<sup>74</sup> In the 2016-17 school year, iDEA chose six local businesses as community partners.<sup>75</sup> Professionals, such as computer engineers, teach students in exchange for workspace in the school. Co-located businesses are also open to the public: the bike shop located at iDEA, for example, will be available to the community for bike repairs.<sup>76</sup>

An operating agreement between the schools and the district, as well as school board policy, give all three innovation high schools the flexibility and autonomy comparable to that of a charter school in Washington state.<sup>77</sup> Schools have the flexibility to make decisions about staffing, curriculum, and budgeting, among others. SAMi, for example, uses its innovation status to reduce teacher-to-student ratios to 1-to-21, compared with 1-to-26 or 1-to-27 at the district level. According to Tinder, the school leverages “innovative policies with the school district that govern our funding [to] allocate more dollars towards teachers and less dollars in other areas of the budget.”<sup>78</sup>

In return for these flexibilities, innovation high schools must meet a series of benchmarks tied to strategic goals around academic excellence, partnerships, and safety. Benchmarks include performance on state assessments, graduation rates, rates of post-secondary acceptance and industry certification, response rates on a climate survey, change over time in the number of community-based partnerships, and percentage of students with no exclusionary discipline.<sup>79</sup>

Community connections are key to the success of Tacoma’s innovation high schools. Co-locating businesses at iDEA bring the school resources that it would otherwise go without given its geographical location. At SOTA, adjunct artists teach higher-level courses, such as jazz improvisation, akin to a college experience. And at SAMi, local professionals teach students more rigorous coursework, such as biotechnology. As a result, students learn from experts while earning industry-recognized credentials or certificates in their respective pathways, and internships with local partners can lead to apprenticeship opportunities in the field.<sup>80</sup>

Tacoma schools’ partnerships with the Metro Parks Tacoma, artists teaching higher-level courses at SOTA, businesses co-located at iDEA, and other organizations highlight how larger districts can incorporate a range of innovation school models into their portfolio of high schools.

# Hampton City Schools in Hampton, Virginia

Hampton City Schools in Virginia are on a mission to revitalize education in the district and graduate students who are college- and career-ready. Just more than a decade ago, the district initiated a communitywide effort to reform high schools by providing rigorous and relevant academic instruction, offering real-world experiences, and cultivating 21st-century skills. To achieve this vision, in 2011 the district began implementing college and career academies, which blend small learning communities with college preparation and career-related curricula in partnership with local businesses and colleges.<sup>81</sup>

**TABLE 7**  
**Demographic breakdown of Hampton City Schools**

Percentage of students, by demographic

Students eligible for free and reduced price lunch	Students with disabilities	English-language learners	White students	Black students	Hispanic students	Asian students
55%	12%	2%	25%	60%	6%	2%

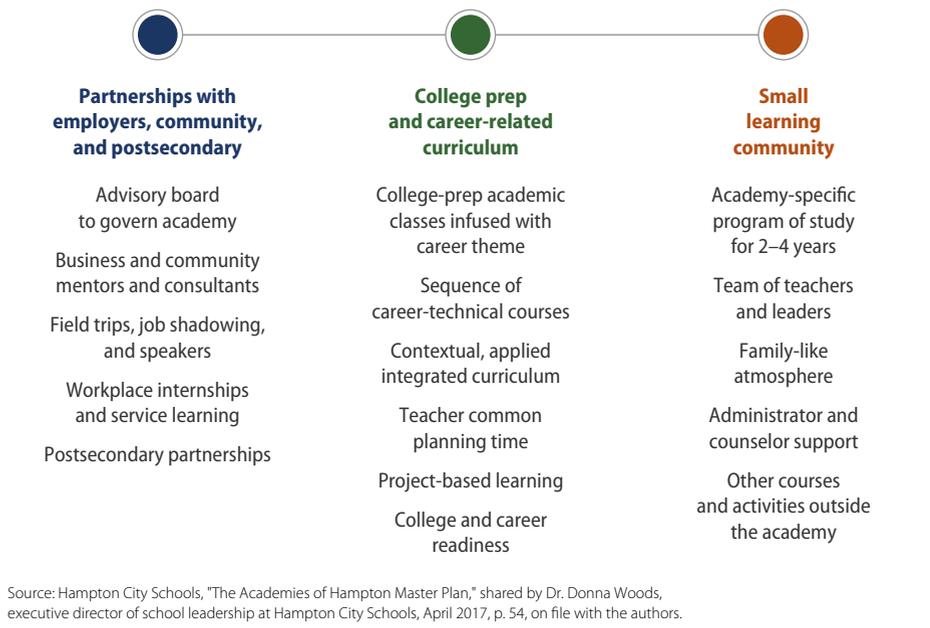
Note: The author rounded the percentages to the nearest whole number. Percentages reflect the total for Hampton City Schools' four high schools—Bethel High School, Hampton High School, Kecoughtan High School, and Phoebus High School.

Source: Enrollment characteristic data for the 2015-16 school year at Bethel High, Hampton High, Kecoughtan High, and Phoebus High accessible at National Center for Education Statistics, "Common Core of Data: Search for Public Schools," available at <https://nces.ed.gov/ccd/schoolsearch/index.asp> (last accessed October 2018); U.S. Department of Education Civil Rights Data Collection, "Hampton City Public Schools," available at <https://ocrdata.ed.gov/DistrictSchoolSearch> (last accessed October 2018).

## Focus on college and career readiness

Hampton is nearing its goal of having four academies at each of the district's comprehensive high schools—Bethel, Hampton, Kecoughtan, and Phoebus—for a total of 16 academies and 44 career pathway options by the 2018-19 school year. With guidance from teachers and counselors, students select an academy and career pathway based on their interests and follow a progression of courses that become increasingly focused as students near graduation. Students also gain direct experience in their chosen field of study by engaging in internships and work-based learning opportunities with local business, industry, postsecondary, and community partners.<sup>82</sup>

**FIGURE 1**  
**College and career academy model**



Mirroring research on CTE, career academies have been shown to improve outcomes for students during and after high school, including improving academic achievement, increasing graduation rates, reducing dropout rates, and increasing labor market earnings.<sup>83</sup> Students in Hampton’s original four academies—described below—experienced similar gains, motivating the district to expand access to all students. During the 2015-16 school year, for example, academy students outpaced those in traditional learning experiences in attendance, ninth-grade credit earning, industry-recognized credentialing, and on-time graduation rate. Students enrolled in the career academies were comparable with nonacademy students in terms of race and ethnicity—around 60 percent black and 25 percent white—but were significantly less likely to be enrolled in free and reduced meal programs.<sup>84</sup>

Students first participate in a freshman academy in their zoned high school before enrolling in an academy from across the district’s four high schools in 10th grade. Freshman academies are designed to support students in small learning communities as they familiarize themselves with high school expectations, routines, and standards. Each student joins a team of teachers, a school counselor, and an administrator and participates in Success 101, a course where they explore their interests through college tours, workplace visits, and career speakers. Ninth-grade students also craft 10-year academic and career plans that guide their high school coursework—including dual-credit courses and industry certifications—and postsecondary aspirations.<sup>85</sup>

TABLE 8

### The original four Hampton academies and their career pathways

School	Academy	Pathways
Hampton High School	Aerospace and Information Technology Academy	Aerospace engineering, U.S. Air Force Junior Reserve Officers' Training Corps, information technology, and information management
Kecoughtan High School	Architecture and Applied Arts Governor's STEM Academy	Design and construction, architectural engineering, graphic design, and fashion design
Phoebus High School	Information Design and Engineering (iDEA) STEM Academy	Engineering and manufacturing, programming and cyber security, and video media production
Bethel High School	Governor's Health Science Academy	Health informatic and support services, diagnostic and therapeutic services, biotechnology research and development, and physical training and nutrition

Source: Hampton City Schools, "The Academies of Hampton Master Plan," shared by Dr. Donna Woods, executive director of school leadership at Hampton City Schools, April 2017, pg. 54, on file with the authors.

"If you look at the progression of a student that comes into high school at the age of 14, over the next decade, they're going to make some pretty important life decisions about their future," said Donna Woods, executive director of school leadership at Hampton City Schools. "So, there are 90 minutes, every other day, where [in Success 101] you're focused on—'my interests, my talents, my current skills, where I would like to be.'"<sup>86</sup>

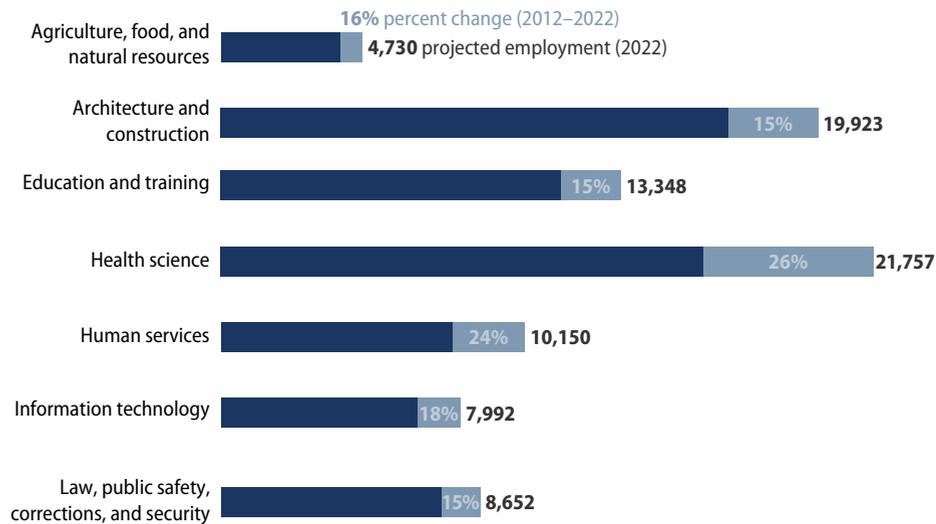
At the end of ninth grade, students select a career academy for the remainder of their high school experience. Hampton aims to have major career clusters in each of its four high schools—including creative studies; business and information technology; public service; and technology and engineering—to minimize transitions between schools.<sup>87</sup> For students who choose an academy at a different high school—about 25 percent of students—the district provides shuttles between a student's zoned and selected high school and partners with local public transportation to offer students free bus passes.<sup>88</sup>

In their chosen academy, students in 10th through 12th grade engage in independent and collaborative projects in addition to work- and community-based learning opportunities, building relationships with mentors and coaches in their field of study. Teachers, who work in teams to support cohorts of students, similarly gain experience in the workforce through industry-supported professional development to deepen the connection between classroom learning and the field. Importantly, regional need guides student learning and support, as Hampton built on economic and workforce projections to design academies and pathways that prepare graduates for local high-wage, high-demand careers.<sup>89</sup>

FIGURE 2

## Local employment data projections for the Hampton, Virginia, area

Projections built by Hampton City Schools in partnership with the Peninsula Council for Workforce Development and Peninsula Chamber of Commerce



Source: Hampton City Schools, "2018 Academies of Hampton Annual Report," draft provided by Dr. Donna Woods, executive director of school leadership at Hampton City Schools, p. 8, on file with the authors.

Key to this work is the Peninsula Council for Workforce Development and the Virginia Peninsula Chamber of Commerce, both of which identified business partners and industry leaders that were interested in the redesign of the region's public education systems and were crucial to the expansion of Hampton's academies. Through conversations with industry councils, for example, it became clear that Hampton had overlooked a major local employment field: ship-building. As a result, the district added the Maritime Academy to Hampton High School.<sup>90</sup>

Robust advisories enhance students' experiences at the district's academies. For example, members of law enforcement; assistant chiefs of police and fire; emergency management and emergency telecommunications personnel; and city and commonwealth attorneys provided guidance on curricula for the Academy of Law and Public Safety at Bethel High School.<sup>91</sup> Professionals also directly engage with students in the classroom, with judges co-teaching law classes and advising criminal justice courses, for example. Recently, 12 students became internationally certified emergency telecommunicators after participating in a course taught by a former Hampton police major.<sup>92</sup>

Additional partners in the district’s work include the city of Hampton, the Hampton Economic Development Authority, and Thomas Nelson Community College, which offers Hampton students dual enrollment opportunities. Between the 2015-16 and 2016-17 school years, the district increased dual enrollment credit hours by 430 percent and graduated students who concurrently completed associate degrees through dual enrollment.<sup>93</sup> The district also has an ongoing partnership with Ford Next Generation Learning to help guide their redesign implementation.<sup>94</sup>

Altogether, Hampton’s 16 industry, 207 business, and eight higher education partners support business and industry tours; guest speakers; job shadowing; pathway and career mentors; internships and youth apprenticeships; teacher externships; and dual enrollment opportunities, among others. In addition, more than 150 active business leaders serve a multitude of advisory roles for the district.<sup>95</sup>

## Measuring success

Hampton has selected six measures to track over time to determine whether students are adequately prepared for success after high school, including:

1. College-ready PSAT scores
2. College credits, nationally recognized professional certifications, or both
3. A 10-year plan for postsecondary learning or career
4. An internship, work-based learning, or service learning experience, and/or capstone research project
5. Completion of at least one virtual course
6. A professional portfolio aligned with 21st-century employability skills.<sup>96</sup>

## Portrait of a graduate

In addition to choosing performance metrics, Hampton convened leaders—including more than 80 business, industry, higher education, pre-K-12, and community leaders—to define what a high school graduate should know, do, and understand to be ready for postsecondary learning and work. The district’s “Portrait of a Graduate” identifies the employee competencies and skills the region will need to sustain and grow the local economy, including:

1. Content knowledge: Achieves and applies appropriate academic and career-focused knowledge
2. Career and life skills: Integrates and applies classroom knowledge to navigate the real world
3. Communication, collaboration, and leadership: Builds connections and works with individuals and diverse communities
4. Positive sense of self and purpose: Demonstrates mindfulness of self, others, and personal journey<sup>97</sup>

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## Local funding

Hampton funds its districtwide redesign process through a combination of local funding and grants from the city of Hampton; the Virginia Department of Education, including the department's high school innovation grants; partner organizations that are facilitating specific project-based learning opportunities for students; and local companies that support the district's work. Hampton also redirects existing funds, repurposing staffing positions to fund academy coaches for each high school and other key positions throughout the district.<sup>98</sup>

Teacher compensation and curriculum innovation, in particular, are main funding priorities for Hampton City Schools. Not only is the district using new funds to increase compensation for teachers who are engaged in redesign work after hours, but it is also using new dollars to train teachers to write career-relevant curricula, develop project-based learning experiences, and vet materials with industry partners. In doing so, teachers create curricula with career connectiveness and authenticity that engage students in rigorous and relevant coursework.<sup>99</sup>

The district also uses grant funds to extend student learning time over the summer. Students in the Academy of Digital Video Production at Phoebus High School, for example, will engage in STEM activities in partnership with the National Institute of Aerospace, creating short video clips that dispel scientific myths. Students in the Governor's STEM Academy of Architecture, Environment, and Engineering at Kecoughtan High School will engage in oyster replenishment in partnership with the Virginia Seafood and Agricultural Research and Extension Center. The district's goal is to integrate career-connected learning with hands-on, project-based experience.<sup>100</sup>

Hampton City Schools' comprehensive effort to align academies in their high schools with employment needs and projections in the region highlight how engaging the business community and regional nonprofits can deepen those partnerships and engender support for high school redesign.

# Conclusion and recommendations

There is no one way to redesign high school, but successful models typically have these four aspects in common: They are focused on engaging students in their education and plans for the future and incorporate those goals into the school day and year; they emphasize college and career readiness through rigorous CTE and dual enrollment opportunities; they offer a unique blend of school design elements, often including small learning communities, competency-based education, project-based learning, and/or social-emotional learning and other student supports; and they have an eye toward student and institutional success, identifying how they intend to track the progress of students and schools on key goals and metrics in high school and beyond. As more schools and districts engage in redesign, the Center for American Progress proposes the following recommendations.

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## Local and state leaders must invest attention and funding for high school redesign

Raising awareness of successful and motivating approaches to high school redesign is important for increasing the profile of this work and creating opportunity for districts and schools to engage in redesign efforts. However, support from the top should not stop at momentum building. Governors, state chiefs, and state legislators should also commit to supporting high school redesign through grant programs, connecting districts with matching efforts from business and philanthropy, or other financial incentives.

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## States should target outreach to districts and schools with lower capacity for redesign

Districts and schools engage in high school redesign because of leadership, community, or other interest in those efforts. However, just because an entity is not engaging in high school redesign does not mean that it does not have an interest. Rather, limited capacity may hamstring a local educational agency or school from taking on this work.

As a result, states should work toward raising awareness of high school redesign—both conceptually and through exemplars—so that all districts and schools, regardless of capacity, have an opportunity to engage in this work. States should also target outreach to districts and schools with limited capacity and provide support to those that identify an interest, from connecting them with other redesign leaders in the state work to providing financial support as applicable. These financial investments should also align with the state’s postsecondary and workforce funding streams and outcomes.

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### Districts must equitably allocate resources and provide budgeting and flexibility for high school redesign

Like most new initiatives, redesigning high school requires sufficient financial investment. While it is likely that school systems may have to seek state or philanthropic funding to design and launch new programs, ensuring that schools are starting from an equitable playing field is crucial. On the whole, poorer schools continue to receive less state and local funding than wealthier schools in the same district. Equitable district funding and flexible use of resources at the school level will improve opportunity for schools to change their high school model in response to community needs.

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### Community voice should drive high school redesign

There is no one formula for what a redesigned high school should look like or path for how to get there. Effectively engaging and supporting students will require, however, a wide range of perspectives to understand a community’s challenges, resources, and assets. As such, redesign efforts will be more likely to succeed if they welcome a range of local perspectives to understand the challenge, design new schools, build strong partnerships, and measure success.

School redesign efforts should also be responsive to local community and economic needs. School and district leaders must engage with business, industry, and postsecondary leaders, as well as parents, teachers, students, and other stakeholders, to create an educational experience that prepares students to be good citizens and effective contributors to their community.

Faced with declining high school student engagement, today's state and local leaders must grapple with how to do a better job graduating students who are fully prepared to succeed in college and throughout their careers. As demonstrated by the efforts in places such as Tacoma and Hampton, there are partners beyond school systems that can provide financial support, internship opportunities, and programming expertise to strengthen new school models. This work requires connecting the dots between what happens inside the classroom to what happens beyond its walls, creating a link between students' academic success and preparation for life beyond high school

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## Methodology

The authors identified the school and district case studies through internal research and by soliciting ideas from participants who attended the Center for American Progress' first convening on high school redesign. Selection criteria included, in no particular order: diversity based on race, income, geography, and locale; populations of English-language learners and student with disabilities; school academic performance; school models that focused on equity, as defined by the individual school or district; data availability; motivational approaches to redesign; varied approaches to redesign at the district and school level; and replicable approaches to redesign. In addition to these criteria, the authors interviewed a school or district leader for each case study and supplemented interviews with materials from the school or district, publicly available documents, articles, and school performance data.

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