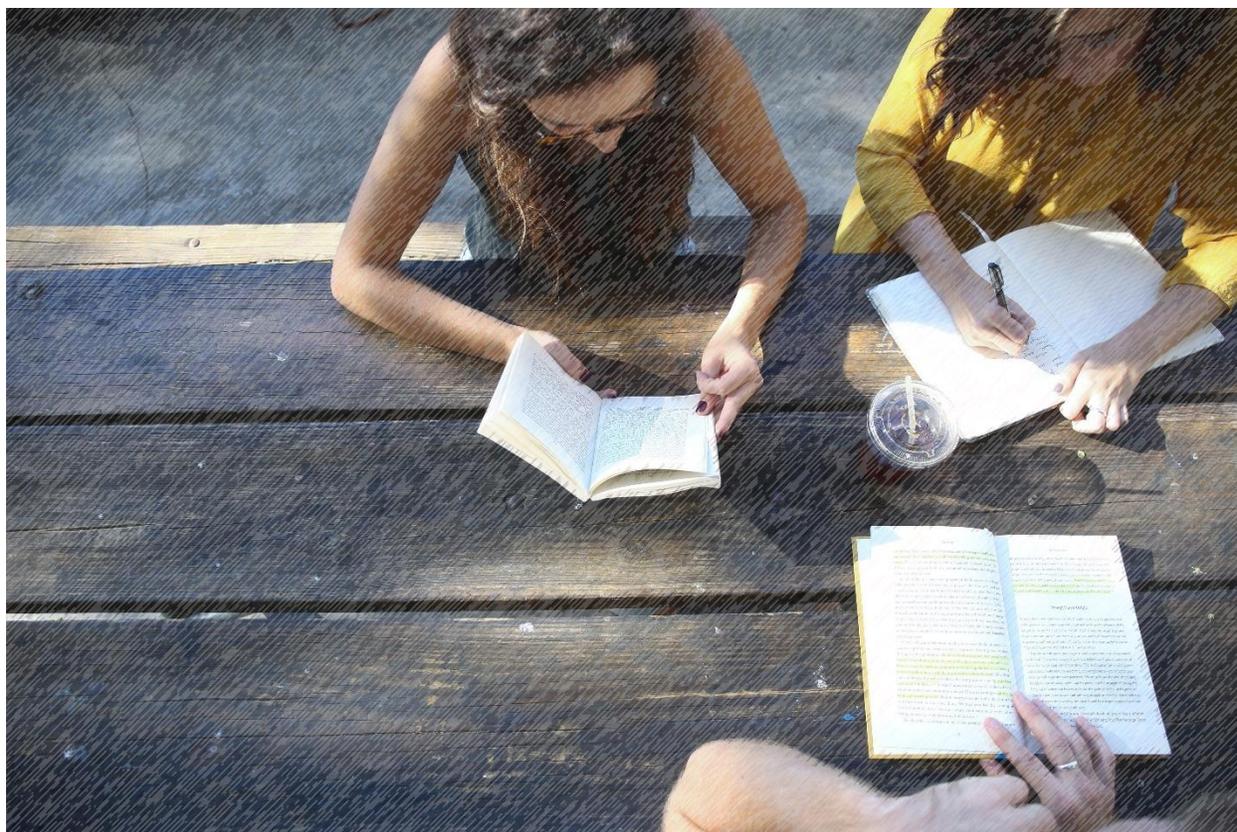


Maine Charter School Commission Graduate Study First Year Report

November 2019



Prepared by

Plimpton
RESEARCH

Table of Contents

About this Report	3
Executive Summary	4
Introduction	5
State of Maine Graduation Requirements	
The Charter School Graduating Class of 2018	
Transcript Analysis	7
College-Ready and Career-Ready Definitions	
National Context	
Results Overall and by School	
School –Level Analysis	
Mastery	
College Enrollment	12
Initial Enrollment Rates	
College Persistence findings	
College Enrollment and the College-Ready Benchmark	
Tracking Non-College Graduates	14
Literature Review	
Non-College 2018 Maine Charter Graduates	
Graduate Interview Plan	16
Rationale	
Methodology	
Proposed Interview Questions	
Recommendations	18
Data Appendix	20
All Graduate Data Received from Maine Charters	
2018 Maine Charter Graduates: Colleges	
Sources	22

About this Report

The Maine Charter School Commission (MCSC) was created in 2011 to authorize and oversee public charter schools in Maine. In 2018, to augment its annual school evaluation process, the Commission sought to initiate a study of charter school graduates. It contracted with Plimpton Research, an independent Maine-based consulting firm that specializes in policy-oriented research, to design this study and collect and analyze the data. This report provides a first look at the Maine charter school graduating class of 2018 and suggests next steps for further study.

Process

Our study is a product of collaboration with the MCSC and each of the six Maine charter schools that have graduated students. We met with staff at each school to learn about their graduate tracking efforts, student data capabilities, and transcripts. We worked with the Commission and the schools to create a secure, FERPA-compliant data collection and reporting process. The MCSC entered into a contract with the National Student Clearinghouse to obtain detailed information on charter school graduates' college enrollment patterns.

Appreciation

Many thanks to MCSC staff Amy Allen, Bob Kautz, and Gina Post for conceiving of this study and guiding our research. Special thanks to leaders and staff at the charter schools who took the time to meet with us and provide the data and transcripts that made this study possible.

Maine Charter Schools with Graduates

School	Year Opened	Grade Span	Enrollment Fall 2018	Graduating Class Years
Baxter Academy for Technology and Science	2013	9-12	404	2016-2019
Harpwell Coastal Academy	2013	6-12	200	2016-2019
Maine Arts Academy (MEAA)	2016	9-12	206	2018-2019
Maine Connections Academy (MCA)	2014	7-12	431	2015-2019
Maine Academy of Natural Sciences (MeANS)	2011	9-12	197	2013-2019
Maine Virtual Academy (MeVA)	2015	7-12	395	2016-2019

Executive Summary

The Maine Charter School Commission initiated this study to learn about graduates' experiences after high school and how their school experiences have contributed to their college and career outcomes. Plimpton Research gathered graduation data and student demographic data from the Maine Department of Education, collected and analyzed transcripts from each of the charter schools with graduates, and submitted graduate records to the National Student Clearinghouse for college enrollment information. This report presents our analysis of those data, examinations of “career-ready” and “college-ready” high school curricula and “mastery”, and a brief literature review about high school graduates who do not enroll in college.

Our working definitions of *college-ready* and *career-ready* high school transcripts were developed by the Education Trust and represent a high bar. Nationally, the Education Trust found that 39% of 2013 high school graduates completed a college-ready curriculum and 21% completed a career-ready curriculum. Only 8% of graduates nationwide completed both a college- and career-ready curriculum. **This is a standard to which other Maine public schools have not been held.** We do know that 87% of Maine public school students complete high school within four years, but only about 35% meet state math standards and 60% meet state reading standards when they are tested in 11th grade.

Key Findings

- Most Maine charter graduates (55% in the class of 2018) complete a career-ready curriculum, a college-ready curriculum, or both. Compared to the national sample of 2013 public high school graduates, Maine charter graduates were much more likely to complete a career-ready high school sequence, but less likely to complete a college-ready curriculum only.
- One benefit of standards-based or proficiency-based curricula is that all graduates have demonstrated mastery—defined as earning a cumulative GPA of 2.5 or higher on a 4.0 scale. At charter schools that are not standards based, 79% of graduating class of 2018 demonstrated mastery, compared with 100% at Baxter Academy, Harpswell Coastal Academy, and Maine Academy of Natural Sciences, charters with standards-based curricula.
- Offering career technical education courses within the school is associated with higher proportions of graduates meeting the career-ready benchmark. Baxter Academy offers a range of career technical courses in arts, computer science, and engineering, and 87% of its 2018 graduates completed three or more credits in the same career technical field, more than double the Maine charter school average of 40%.
- Among 2018 graduates of Maine charter schools who have not enrolled in college, nearly two in three (64%) did not complete a “career-ready” sequence of three or more career or technical education courses in the same field school *or* a college-ready curriculum while in high school. We present a plan to learn more about these students' post-graduation experiences.
- Another large national study found that graduates with stronger high school transcripts performed better in the labor market. “With more rigorous and focused high school courses, non-college goers are the greatest beneficiaries of a high-credentialed curriculum, attaining greater levels of economic success than even those who went to college but failed to graduate.”
- These findings taken together suggest that Maine educators and policymakers should engage in a conversation about how we define college-ready and career-ready high school courses of study, examine how many graduates are meeting these standards, and develop policies and practices to ensure that more students graduate well-prepared for success in college and/or the labor market.

Introduction

In 2011, Maine passed public charter school legislation, establishing the Maine Charter School Commission (MCSC) to authorize up to ten schools. The first public charter schools in Maine opened in the 2012-2013 school year, and there are currently nine charter schools operating in Maine. Charter schools are public schools of choice, meaning students can decide to attend a charter school as an alternative to the district public school to which they have been assigned. Charter schools are publicly funded but operate independently of the traditional public school system. They have more flexibility in curriculum and instruction, scheduling, staffing, and finance than public schools. The MCSC authorizes charter schools through multi-year contracts and holds the schools accountable to the terms of their contracts.

By 2016, five Maine charters graduated students, and in 2018, six Maine charter schools graduated students: Baxter Academy, Harpswell Coastal Academy, Maine Arts Academy (MEAA), Maine Connections Academy (MCA), Maine Academy of Natural Sciences (MeANS), and Maine Virtual Academy (MeVA). Cornville Regional Charter School in Skowhegan began serving grades K-6 in 2012, then opened a high school in 2017; it will be the next Maine charter to graduate students. This year, the MCSC has approved a tenth charter school that will likely begin graduating students in 2023.

State of Maine Graduation Requirements

Graduation requirements vary at Maine's public charters, but the authorizing legislation requires them to, at a minimum, meet the Maine state standard. The Maine Department of Education lists state graduation standards as:

- English--4 years or the equivalent in standards achievement;
- Social studies and history, including American history, government, civics and personal finance--2 years or the equivalent in standards achievement;
- Mathematics--2 years or the equivalent in standards achievement;
- Science, including at least 1 year of laboratory study--2 years or the equivalent in standards achievement; and
- Fine arts, which may include art, music, forensics or drama--1 year or the equivalent in standards achievement.

The Charter School Graduating Class of 2018

For our college and career readiness and college enrollment analysis, we focus on the Maine charter school graduating class of 2018. We received the most complete data (records and transcripts from five of the six charters in the study) for this class. These 240 graduates have been out of school for more than a year, so they have had time to start college or career. They are also good subjects for our next study phase, since we will need contact information to invite them to participate in interviews.

Overall, 65% of the charter class of 2018 graduated within four years of entering high school. By school, 2018 graduation rates ranged from 96% at Baxter Academy to 49% at Maine Virtual Academy (MeVA). For comparison, the Maine public school graduation rate was 87%, with school rates ranging from 100% to 64%.

Student characteristics are key factors that contribute to school outcomes, and these vary considerably across charter schools, as shown in the following table. Another factor where we observed substantial differences among the schools is the length of time students were enrolled. 2018 graduates were enrolled at MeVA for an average of only 2 years, while Baxter’s 2018 graduates were enrolled for an average of 3.8 years. The transcript analysis showed that, at the schools with shorter average enrollment periods, many graduates transferred in after one, two, or even three years of study at one or more other Maine public schools. At Baxter and Harpswell, however, the vast majority of graduates were enrolled for all four years of high school.

Graduating Class of 2018: Student Characteristics by School

School	2018 Graduation Rate	2018 Graduates	Average Years Enrolled	Female/ Male	FRPL Eligible*	Students with disabilities
Baxter	96%	73	3.8	30%/70%	16%	25%
Harpswell	67%	23	3.6	52%/48%	39%	16%
MEAA	87%	18	2.5 ¹	67%/33%	9%	17%
MCA	57%	52	2.9	73%/27%	58%	13%
MeANS	69%	35	3.1	45%/55%	59%	24%
MeVA	49%	57	2.0	69%/31%	67%	19%
6 Maine Charters	65%	258	2.9	54%/46%	43%	20%

Source: Maine Department of Education

*FRPL (free and reduced-price lunch) National School Lunch Program eligibility is a common measure of economic disadvantage (signaling family income at or below 185% of the federal poverty level).

The schools’ graduates differ substantially on several demographic and educational measures:

- 54% of 2018 Maine charter graduates are female and 46% are male. Baxter’s graduating class was 30% female and Maine Connections Academy (MCA)’s was 73% female. Harpswell Coastal Academy and Maine Academy of Natural Sciences (MeANS) had the closest proportions of female and male graduates.
- More than two in five charter graduates (43%) were economically disadvantaged, measured by free and reduced-price school meal (FRPL) eligibility. The proportions ranged from 9% at Maine Arts Academy (MEAA) to 58% at MCA and 59% at MeVA, the two virtual charters.
- Student disability rates among graduates were more comparable, averaging 20% and ranging from 13% at MCA to 24% at MeANS and 25% at Baxter.
- The race/ethnicity of Maine charter graduates is 0 American Indian/Alaska Native, less than 1% Asian/Pacific Islander, 2% black, 2% Hispanic, 1% two or more races, and 94% white.
- 1% of charter graduates were designated as English Learners during high school.

¹ Class of 2019 average

Transcript Analysis

We set out to examine the transcripts of recent Maine charter school graduates. Five of the six charter schools with 2018 graduates provided all or a sample of their transcripts; Maine Arts Academy provided transcripts for their 2019 graduates only.

Career-Ready and College-Ready Definitions

A recent report by the national education advocacy group Education Trust lays out a comprehensive definition of the courses that identify college-ready, career-ready, and college- and career-ready high school transcripts:

Education Trust Definition: College-Ready and Career-Ready High School Transcript

What Comprises a College-Ready Curriculum?		
Subject	Credits	Specific Courses
 English	4	N/A
 Math	3	Algebra II
 Science	3	Biology and Chemistry or Physics
 Social Studies	3	U.S. or World History
 Foreign Language	2	Same Language Study
What Comprises a Career-Ready Curriculum?		
Subject	Credits	Specific Courses
 Career Technical Education	3	In the Same Field

Source: Education Trust, <https://edtrust.org/resource/meandering-toward-graduation/>

The college-ready definition exceeds Maine state graduation requirements with an additional year in math, social studies, and science, and the inclusion of two years of foreign language study. Maine's

graduation requirements do not include career technical education courses, while the Education Trust definition of career-ready is completion of three or more career technical education courses in the same broad field of study.

Achieve, another national nonpartisan education reform organization, states, “For high school graduates to be prepared for success in a wide range of postsecondary settings, they need to take at least three years of challenging mathematics — covering the content generally found in an Algebra II or an integrated third-year math course — and four years of rigorous English aligned with college- and career-ready standards. While readiness depends on more than knowledge and skills in English and math, these core disciplines undergird other academic and technical courses and are considered essential by employers and colleges alike. For students to truly graduate ready for college and careers, however, they need to complete a rigorous, robust and well-rounded curriculum that exposes them to a wide range of academic and technical knowledge and skills.”

National Context

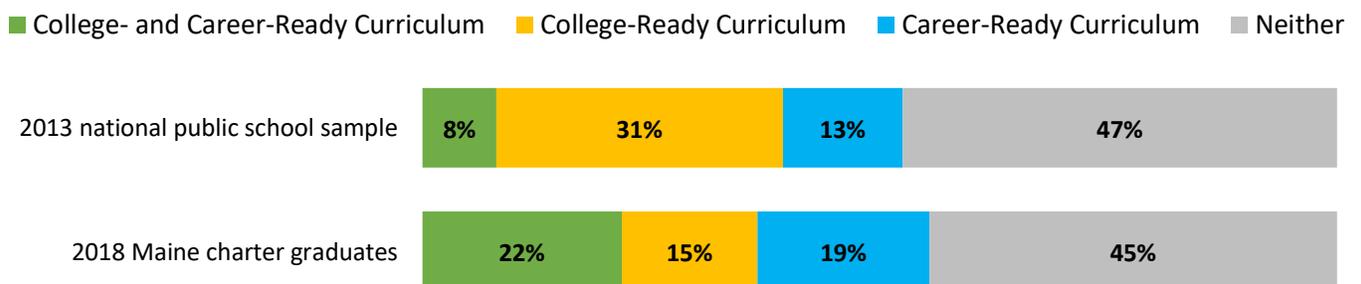
The Education Trust studied the transcripts of a large, nationally-representative sample of 2013 public school graduates and found, based on the definition described above:

- 8% of U.S. high school graduates completed a college-ready and career-ready curriculum.
- 31% completed a college-ready high school curriculum only.
- 13% completed a career-ready curriculum only; and
- 47% of graduates did not complete either a career-ready or a college-ready curriculum, which the Education Trust calls “no cohesive curriculum.”

Results Overall and by School

We examined 198 Maine charter school graduates’ transcripts and developed a coding scheme to compare courses completed with the Education Trust benchmarks. Overall, Maine charter graduates were slightly more likely than the national sample to graduate career- and/or college-ready, as shown in the chart below. 22% of Maine charter graduates complete a career- *and* college-ready high school curriculum, more than double the rate found in the 2013 national sample. Another 15% of Maine charter graduates completed a college-ready curriculum only, and 19% complete a career-ready curriculum only, for a total of 55% of Maine charter graduates meeting the career- and/or college-ready benchmark, compared with 53% in the national sample.

Curriculum Completed: Maine Charter Graduates vs. National Public School Sample



Baxter Academy graduates were the most likely to complete college-ready (69%) and career-ready (87%) curricula, and most (57%) graduated with a career- *and* college-ready transcript. At the

charters with lower college-ready transcripts rates, lack of foreign language or laboratory science course offerings most often prevented students from meeting the Education Trust benchmarks. Career-readiness is much more likely at Baxter, where career courses in arts and technology are offered within the school, than at any of Maine’s other charter schools.

Maine Charter Class of 2018: Transcript Analysis Results by School

School	2018 Graduates	Met Maine Graduation Requirements	College-Ready	Career-Ready	College- & Career-Ready	Neither
Baxter	73	100%	69%	87%	57%	1%
Harpwell*	23	100%	0	45%	0	55%
MCA	52	100%	32%	20%	4%	50%
MeANS	35	100%	4%	13%	4%	88%
MeVA	57	100%	16%	5%	2%	82%
5 Maine Charters	240	100%	35%	40%	22%	45%

*Figures based on the sample of student transcripts provided. Further analysis of Harpswell courses is needed to definitively categorize laboratory science courses.

Overall, 100% of public charter graduates completed four or more English credits, 84% completed 3 math credits including Algebra 2 or higher, 78% completed 3 social studies credits including U.S. or World History, 73% completed 3 science credits including laboratory Biology and either Chemistry or Physics, and 54% completed 2 or more credits in the same foreign language (including American Sign Language). Results by school varied, primarily based on the mix of courses offered.

School by School Analysis

Maine’s charter schools range substantially in their student composition, location, size, course offerings, and methods of course delivery. This variation is reflected in the results of our transcript analysis.

Baxter Academy

- Because Baxter offers career courses in arts, computer science, and engineering within the school, its graduates have by far the highest completion of career-readiness transcripts of any of the charters—87%—and more than one-half of graduates (57%) met the career- and college-ready benchmark.
- All Baxter graduates met the math and science college-ready benchmarks.
- Graduates who didn’t meet the college-ready benchmark most commonly had fewer than three social studies credits (28%) or fewer than two years of study in the same foreign language (13%).

Class of 2018: Transcript Details by School

School	2018 Graduates	4 English credits	3 math/ Algebra 2+	3 social studies/ U.S. or World History	3 science/ Lab Bio & Lab Chem or Physics	2+ years same foreign language
Baxter	73	100%	100%	72%	100%	87%
Harpswell*	23	100%	82%	73%	0	73%
MCA	52	100%	82%	100%	62%	54%
MEANS	35	100%	100%	100%	100%	4%
MEVA	48	100%	52%	50%	45%	25%
5 Maine Charters	240	100%	84%	78%	73%	54%

*Figures based on the sample of student transcripts provided

Harpswell Coastal Academy

- Harpswell reformatted their transcript, implementing electronic transcripts, only last year. They provided transcripts for about one-half of the 2018 class, and our findings are based on that sample.
- Harpswell offers a wide range of short, hands-on exploration courses that create a lot of variety in student transcripts.
- 45% of Harpswell graduates met the career-ready benchmark, the second highest rate among the schools, but none met the college-ready benchmark because we were unable to determine whether any of their courses qualify as laboratory science.
- The lack of recognized laboratory science courses is the main reason Harpswell graduates did not complete college-ready transcripts. All Harpswell graduates met the English benchmark and the vast majority met the math benchmark. About one-quarter of graduates didn't earn three social studies credits (27%) or completed fewer than two years of foreign language study (27%).

MEAA

Maine Arts Academy provided transcripts only for the graduating class of 2019 (38 students). While we do not have college enrollment data yet for 2019 graduates, we did code their transcripts.

- 2019 graduates averaged 2.5 years of enrollment at MEAA; many students transferred in from other public high schools.
- 74% met the career-ready benchmark with three or more career technical education courses in arts.
- 26% met the college-ready benchmark. The most common reason students didn't meet the benchmark was not completing two or more years of foreign language (61%).
- 21% of students had career- and college-ready high school transcripts.
- 21% of graduates met neither the career- nor the college-ready benchmark.

MCA

- About one in three Maine Connections Academy graduates (32%) met the college-ready transcript benchmark; all met the English and social studies course criteria.

- 20% of MCA graduates met the career-ready benchmark by completing three or more career courses in the same field: computer/engineering (3), arts/communication (2), business (2), health science (2), and trades (1).
- 36% of MCA graduates participated in dual enrollment courses and earned college credits while in high school. 80% of these graduates enrolled in college after graduation.
- Graduates who didn't meet the college-ready benchmark most often did not complete two years of the same foreign language (46%) or had not taken both biology and chemistry or physics (38%).
- MCA has developed an exemplary format for its student transcripts.

MeANS

- The Maine Academy of Natural Sciences does not offer foreign language classes, so graduates typically don't meet the college-ready transcript benchmark (the one graduate who did completed two years of Spanish at another school before transferring into MeANS). MeANS students can take dual enrollment Spanish or Sign Language at Kennebec Valley Community College.
- In all the curriculum areas other than foreign language, virtually all MeANS graduates met the college-ready benchmark.
- 13% of MeANS 2018 graduates met the career-ready benchmark by completing three or more career courses in the same area of study.

MeVA

- Maine Virtual Academy serves the highest proportion of economically disadvantaged students (67%) of these five charter schools, and on average the class of 2018 spent only two years enrolled at MeVA.
- The transcript analysis showed that the 2018 class included many transfer students who struggled academically at one or more other public high schools before enrolling in MeVA.
- All 2018 MeVA graduates completed four or more English courses, 52% met the math college-ready benchmark, and 50% met the social studies benchmark.
- Only one-quarter of MeVA graduates completed two years of study in the same foreign language, and fewer than half (45%) completed a laboratory biology and a lab chemistry or physics course.

Mastery

To be truly college- and or career-ready, students need to not only complete the recommended courses, but to demonstrate mastery of the material. In the context of the high school transcript, The Education Trust defines *mastery* as earning a cumulative GPA of 2.5 on a 4.0 scale (about a B-) or higher. In its study, the Education Trust found that 86% of 2013 U.S. graduates who completed a college- or career-ready curriculum also demonstrated mastery.

Overall, 78% of 2018 Maine charter graduates demonstrated mastery. At the three charter schools that are proficiency-based or standards-based—Baxter, Harpswell, and MEANS—all graduates achieve mastery, because students do not earn credit for courses until they meet the standards. At these schools, some students meet the standards for graduation in less than the typical time; for example, students may meet the standards for four English credits without studying English for four

full years. Proficiency, or meeting the standard, roughly translates to a 3.0 on a 4.0 scale, above the Education Trust benchmark for mastery. At the other two charters that provided 2018 transcripts, 84% of 2018 graduates at MCA and 66% at MeVA earned a 2.5 or higher GPA, demonstrating mastery. At Maine Arts Academy, 83% of 2019 graduates demonstrated mastery.

Dual Enrollment and Early College Courses

Many Maine charter students have the opportunity to take early college or dual enrollment courses, earning both high school and college credit. Of the 198 charter graduate transcripts we examined, 58 students (29%) completed at least one college course. Eleven students (6% of graduates) earned four or more college credits, the equivalent of one semester or more of college study before graduation.

College Enrollment

MCSC entered into a contract with the National Student Clearinghouse (NSC) to track charter graduates' college enrollment, persistence, and completion. The Clearinghouse's college enrollment database includes 99% of students enrolled in U.S. degree-granting two-year and four-year colleges and universities; all of Maine's institutions participate in the service. The NSC reports on college enrollment, persistence, and certificate and degree completion.

NSC data only includes workforce certificates awarded by degree-granting institutions, a small subset of all occupational credentials. The Clearinghouse states that "the collaboration of corporations to develop industry-specific credentials, such as manufacturing and cybersecurity, has turned tracking outcomes into a complex public-private data completion puzzle that cannot be captured by a state longitudinal data system and/or federal data collection... As the national source for accurate information on the effectiveness of educational pathways in America today, the Clearinghouse is working on a solution to create a better understanding of student success throughout the education-workforce continuum." The Lumina Foundation's *Stronger Nation* project estimates that 2% of Maine working-age adults without a postsecondary degree hold a workforce credential of value.

This report includes all 2018 Maine charter graduates except for MEAA's class of 18 graduates. Our results include college enrollment from fall 2018 to late summer 2019. 2018 graduates have been enrolled for up to three college terms.

College Enrollment and Persistence of the 2018 Graduating Class

School	Graduates	College Enrollment	College Persistence	Enrollers with College-Ready Transcript	Enrollers with Mastery
Baxter	73	70%	82%	65%	100%
Harpswell	23	30%	100%	0	100%
MCA	52	38%	95%	60%	100%
MeANS	35	43%	73%	7%	100%
MeVA	57	28%	81%	19%	81%
5 Maine Charters	240	45%	84%	44%	76%

Initial Enrollment Rates

45% of graduates in Maine charter class of 2018 have enrolled in college. College enrollment rates by school range from 70% of Baxter graduates to 28% of MeVA and 30% of Harpswell graduates. For comparison, the NSC reports that, nationally, 54% of graduates from high-poverty schools and 77% from low-poverty schools enrolled in college in 2017. 62% of the Maine public high school graduating class of 2018 enrolled in college.

Most 2018 charter graduates enrolled in Maine colleges and universities, as shown below. University of Maine, SMCC, and USM are the top three colleges, and Wentworth Institute of Technology in Massachusetts is the only out-of-state institution in the top nine colleges in which 2018 charter graduates have enrolled.

Top Colleges

College	Charter Grads Enrolled
University of Maine	13
Southern Maine Community College (SMCC)	12
University of Southern Maine (USM)	10
University of Maine at Farmington (UMF)	7
Central Maine Community College (CMCC)	5
Wentworth Institute of Technology	5
Husson University	4
Kennebec Valley Community College (KVCC)	4
University of Maine at Augusta (UMA)	3

College Persistence Findings

84% of charter graduates who enrolled in college persisted to the second or third term. Fewer than one-half of graduates (44%) who enrolled in college completed a college-ready curriculum, and 76% achieved mastery in their academic and career courses. The national average college persistence rate (measured at the third term of enrollment) is 74% and the latest Maine persistence rate is 83%. The latest National Student Clearinghouse rates show an overall six-year college completion rate of 58% for the high school graduating class of 2012, both nationally and in Maine.

College Enrollment and the College-Ready Benchmark

Combining the college enrollment data with our high school transcript review, we find that completing a college-ready curriculum is strongly associated with college enrollment and persistence for Maine charter school graduates. 79% of 2018 Maine charter graduates who completed a college-ready curriculum enrolled in college, and 88% have persisted. Only about one in three graduates (34%) who did not complete a college-ready curriculum enrolled in college, and these students have persisted in college at a slightly lower rate of 82%.

Tracking Non-College Graduates

Literature Review

Little data are available about the roughly 40% of high school graduates nationally and in Maine who do not enroll in college. The Center for Public Education used data from the National Center for Education Statistics on a nationally-representative sample of high school sophomores in 2002 and studied the students for the next ten years. Researchers found that 21% of the students who graduated from high school on time did not enroll in college by age 20, and only 12% had not enrolled by age 26. The vast majority of high school graduates ultimately enrolled in college.

- Non-college students were more likely to be male, lower-income, and have parents with no education beyond high school than peers who enrolled immediately in college. The two groups were comparable in terms of race/ethnicity and native language.
- When they were in high school, two-thirds of the non-college students expected to go to college, and at age 26, most of them still thought they would eventually enroll in college.
- The top factor in not enrolling in college was finances or cost, followed by wanting or needing to work and earn money, then family obligations.

The study also looked at high school transcripts, and it found that non-college students took an average of three fewer academic courses in high school, less rigorous courses, and had lower grades and test scores than students who did enroll in college. While non-college graduates in the study had lower rates of employment and lower wages than college enrollers, those with stronger high school transcripts performed better in the labor market. “With more rigorous and focused high school courses, non-college goers are the greatest beneficiaries of a high-credentialed curriculum, attaining greater levels of economic success than even those who went to college but failed to graduate.” Likewise, college-going graduates who earned vocational credits during high school had better employment and earnings outcomes ten years later than college peers who did not.

The authors’ definition of *high-credentialed* is similar to our college- and career-ready curriculum definition, with the addition of mastery and a professional certification or license.



Source: Center for Public Education, www.nsba.org/-/media/NSBA/File/cpe-the-path-least-taken-report-2014-26.pdf

In 2016, the KIPP network of charter schools reported on the challenge of college enrollment and completion for its graduates. Using NSC data plus its own tracking of students, KIPP found that one-third of the mostly black and Latino, low-income students who completed a KIPP middle school had earned a four-year college degree ten years later—a higher rate than in the overall

population. But this rate was well below KIPP's goal that 75% of its middle school graduates would complete bachelor's degrees.

KIPP found that college completion was associated with:

- Academic readiness for the intellectual challenge of college
- Character strengths including grit, self-control, social intelligence (including self-advocacy), zest, optimism, and gratitude
- The right match between a student and his or her college
- Social and academic integration—study groups, campus clubs, alumni contacts, and activities
- College affordability and financial understanding to help navigate the challenge of paying for college.

This year, the KIPP Foundation followed up with a report recommending evidence-based policy and practice changes needed in PreK-12 and higher education to ensure that more students—particularly students of color, first-generation college and low-income students—leave high school with strong connections to a career path and good chances for success in college. The report looks at factors associated with success for both college and non-college KIPP graduates.

KIPP's goal is for students to graduate with a postsecondary plan including a concrete, immediate next step, to get a strong first job, and to be well-prepared for lifelong learning. Graduates should have the information and the network to be able to pursue their dream career. The KIPP school network is working to improve career integration throughout school by helping students identify and commit to a post-graduate career pathway; connecting students with career-aligned job shadows and internships; offering high-quality career and technical education (CTE) courses and experiences in skilled trades, applied sciences, and modern technologies; providing all students with high-quality college counseling; and integrating financial literacy and executive functioning skills into the curriculum.

Non-College 2018 Maine Charter Graduates

In the Maine charter graduating class of 2018, the majority (131 of 240 students, 55%) have not enrolled in college. We collected and analyzed the details of 93 (71%) of their high school transcripts.

- 27% met the career-ready transcript benchmark of completing three or more career technical education courses in the same field. All but one of these students also demonstrated mastery on their transcript.
- 14% met the college-ready curriculum benchmark and also demonstrated mastery.
- 9% have transcripts that are career- and college-ready and demonstrate mastery.
- 64% did not complete a career-ready or a college-ready curriculum, and the majority of these graduates (54%) also did not demonstrate mastery.

Comparison of College Enrollers and Non-College Maine Charter Graduates

	College Enrollers	Graduates who did not Enroll in College
Number	97	93
Gender	46% female 54% male	57% female 43% male
Economically Disadvantaged	29%	43%
Students with Disabilities	16%	23%
English Learners	1%	2%

Comparing the characteristics of 2018 Maine charter graduates who did not enroll in college with peers who did enroll, we find:

- A higher proportion of college enrollers are male (54%), while non-college students are more likely to be female (57%).
- Students who were economically disadvantaged in high school are less likely to enroll in college.
- Students with learning disabilities were less likely to enroll in college than non-disabled peers.

Graduate Interview Plan

While the information in this report is valuable in determining how well Maine charter schools are preparing graduates for college and careers, there are many unanswered questions about student experiences and insights. Over the next year, we plan to conduct qualitative interviews with graduates to fill in these gaps.

Rationale

We considered other research methods, including surveys and focus groups. A survey would allow us to collect information from a larger proportion of graduates. But because we lack contact information for these graduates, we are unlikely to reach enough subjects to get a satisfactory response rate. Further, a survey would not provide the type of in-depth information about school and life experiences we are seeking. We rejected focus groups as impractical for this population; the graduates are spread out and likely to have varying work and school schedules that would make arranging group meetings difficult.

Based on transcript analysis and college enrollment data, we have developed a list of graduates that we would like to interview about their high school experiences and current activities. Since so little is known about graduates who do not enroll in college, most of the proposed interview subjects (62%) are not in the NSC college enrollment data set. Our goal is to interview at least five graduates from

each school, at least three of whom have not enrolled in college. We envision completing interviews with about one-quarter to one-third of the identified interview subjects.

Potential Interview Subjects by School

School	Graduates	Interview List	Potential Subjects Not College Enrolled
Baxter	73	24	9
Harpswell	23	16	11
MEAA ²	38	17	17
MCA	52	24	12
MeANS	35	20	12
MeVA	57	24	16
6 Maine Charters	240	125	77

Methodology

We will use the following methods to track down graduates and request that they participate in a 30-minute telephone interview:

- Request that charter schools send an e-mail or text message to graduates on our behalf, letting them know how to get in touch if they are willing to participate in the study.
- Publicize the study on the charter schools' social media channels, and provide contact information for graduates willing to participate.
- Where contact information isn't available from school, use public databases to track down student contact information based on names, hometowns during high school, and latest college where applicable.
- Mail invitation letters to all interview subjects for whom we can obtain mailing addresses, and also attempt to contact college students via school e-mail addresses.

Interviews will be conducted by telephone at a convenient time for the subjects. We will budget for incentives for completed interviews (e.g., a \$50 gas card to thank interviewees for their time) and promote this in the request process to improve recruitment.

Proposed Interview Questions

1. Why did you decide to enroll in/transfer to [charter school]?
2. How did you select courses each semester? What kind of advice on course selections did you get at school? Did you consult with classmates, siblings, parents, and/or upperclassmen? Did you pay attention to your progress toward graduation requirements?
[In some cases, specific questions about the student's transcript.]
3. What was the career and college guidance like at school? Did you apply to college? How did you decide whether to apply, where to apply, which college to enroll in...?

² Due to transcript availability, MEAA graduates are from the graduating class of 2019. At all other schools, we will study the class of 2018.

4. What did you plan to do after graduation? How well prepared would you say you were you for the college or career that you wanted to pursue?
5. Were there any classes or experiences at school that were particularly useful for college/work/in life since graduation? Tell me a little bit about them.
6. Now that you've been out of school for a while, how would you rate your education at [school]? What were the best things about it? Do you feel that you sacrificed anything because you attended [school] instead of a traditional public school?
7. Would you recommend that other students attend [charter school]? What type of student would you say will get the most out of studying there?
8. What has your primary activity been since graduation? [Probe for details on college, job, or training: employer, promotions, training/certifications, school major, enrollment/transfer, internships...] How has this compared with what you wanted or planned to do?
9. Have your goals for the future changed since high school? How and why?
10. What advice would you give to staff and teachers at [charter school]? What about for students?

Recommendations

This report points to several areas in which schools—charter schools and district schools, within Maine and beyond—could improve their graduates' college and career readiness. The college-ready and career-ready transcript definitions used in this report were developed at the national level. There may be valid arguments for revising these definitions. Gaining agreement and understanding across Maine public schools about what courses students need to complete and master in order to graduate college- and career-ready would be valuable.

In the area of course offerings and sequencing, to ensure students graduate college-ready, schools should offer or provide access to and encourage students to enroll in:

- At least two years of foreign language (including sign language) courses, on campus and/or through dual enrollment with a postsecondary institution;
- Laboratory biology, chemistry, and physics courses.

To be college-ready, all high school students should master:

- Four credits in English;
- Three credits in Math, including Algebra 2;
- Three credits Science, including laboratory biology and chemistry or physics;
- Three credits in Social Studies, including U.S. or world history;

- Two credits in the same foreign language (including sign language).

To be career-ready, **students should master three career or technical education credits in the same field.** National research suggests that earning a professional certificate or license especially pays off for graduates who do not enroll in college.

For schools already offering these course options, **strengthening student advising in selecting and sequencing high school courses** can ensure that more students graduate ready for postsecondary education, training, and/or career-track employment.

More broadly, Maine educators and policymakers should engage in a conversation about **how we define college-ready and career-ready high school courses of study**, examine how many graduates are meeting these standards, and develop policies and practices to ensure that more students complete school well-prepared to meet the demands of postsecondary study and good jobs in the labor market.

Data Appendix

All Graduate Data Received from Maine Charters

School	Grad Year	Graduate Number	Clearinghouse records	Transcripts
Baxter	2016	57	57	
	2017	77	77	
	2018	74	74	69
	2019	75	n/a	
		275	200	69
Harpwell	2016	3	3	1
	2017	13	13	9
	2018	23	23	12
	2019	16	n/a	4
		55	39	26
MEAA	2018	18		
	2019	38	n/a	38
		38		38
MCA	2015	7	7	7
	2016	36	36	36
	2017	45	45	41
	2018	52	52	50
	2019	76	n/a	75
		216	140	209
MeANS	2013	11	11	
	2014	18	18	
	2015	21	21	
	2016	12	12	
	2017	29	29	
	2018	35	35	24
	2019	25	n/a	25
		151	126	49
MeVA	2016	16	16	16
	2017	52	52	48
	2018	57	57	44
	2019	62	n/a	55
		187	125	163
Totals		922	630	554

2018 Maine Charter Graduates: Colleges

College	Charter Grads Enrolled
University of Maine	13
Southern Maine Community College	12
University of Southern Maine	10
University of Maine at Farmington (UMF)	7
Central Maine Community College	5
Wentworth Institute of Technology	5
Husson University; Kennebec Valley Community College (KVCC)	4 each
University of Maine at Augusta	3
Thomas College; UMaine at Fort Kent (UMFK); Unity College	2 each
American Intercontinental University	1
Bard College; Bates College; Bennington	1 each
Clark University; Earlham College	1 each
Eastern Maine Community College	1
Green Mountain College; Hampshire College	1 each
Hobart & William Smith	1
Huntington University	1
Ithaca College; Juniata College; Landmark College	1 each
Lesley University	1
Maine Maritime Academy	1
Marlboro College	1
Maine College of Art	1
Mississippi State University	1
Mount Holyoke	1
Norwich University	1
Salem State	1
Santa Fe Community College	1
Smith College; Southern New Hampshire University; St. Anselm College	1 each
St. Joseph's College of Maine	1
St. Lawrence University	1
St. Louis University	1
Syracuse University; The New School	1 each
University of Maine at Presque Isle	1
University of Advancing Technology	1
Yale University	1
York County Community College	1
Student Transfers:	5
Stephens College transfer to UMA	1
University of Rochester transfer to UMA	1
Unity transfer to KVCC	1
UMF transfer to UMFK	1
UMFK transfer to UMA	1

Sources

Achieve (August 2019), *College- and Career-Ready Graduation Requirements*, www.achieve.org/graduation-requirements. See also *College- and Career-Ready Student Outcomes Data Explorer*, <https://highschool.achieve.org/college-and-career-ready-student-outcomes-data-explorer>

Bureau of Labor Statistics, U.S. Department of Labor (April 2019), *College Enrollment and Work Activity of Recent High School and College Graduates – 2018*, www.bls.gov/news.release/pdf/hsgsec.pdf

Center for Public Education (June 2016), *The Path Least Taken: High school that leads to success for non-college goers*, www.nsba.org/-/media/NSBA/File/cpe-the-path-least-taken-report-2014-26.pdf

Educate Maine (2018), *Education Indicators for Maine*, www.educatemaine.org/research-reports

Education Trust (2016), *Meandering Toward Graduation: Transcript Outcomes of High School Graduates*, <https://edtrust.org/resource/meandering-toward-graduation/>

KIPP Public Schools Foundation (May 2019), *The Promise of a Choice-Filled Life: Meeting Students' College and Career Need, from Classrooms to Congress*, www.kipp.org/wp-content/uploads/2019/05/Higher_Ed_Report_2019.pdf

Lumina Foundation (April 2019), *A Stronger Nation: Learning Beyond High School Builds American Talent*, <http://strongernation.luminafoundation.org/report/2019/#state/ME>

Maine Charter School Commission, www.maine.gov/csc/schools

Maine Department of Education (May 2018), *National Student Clearinghouse Student Tracker for High Schools*, www.maine.gov/doe/sites/maine.gov.doe/files/bulk/data/nsc/2018/State_Wide.pdf

Maine Department of Education, 2018 graduation data by school, www.maine.gov/doe/data-reporting/reporting/warehouse/graduation-dropout-data

Maine Legislature, Maine Revised Statutes, High School Diploma Standards, <http://www.mainelegislature.org/legis/statutes/20-a/title20-Asec4722.html>

National Student Clearinghouse Research Center (October 2018), *High School Benchmarks 2018*, <https://nscresearchcenter.org/hsbenchmarks2018/?hilite=%27charter%27>

(December 2018), *Completing College – National – 2018*, <https://nscresearchcenter.org/signaturereport16/>

(June 2018), *Persistence and Retention 2018*, <https://nscresearchcenter.org/snapshotreport33-first-year-persistence-and-retention>

(June 2016), *Industry-Based Credentials are Part of the Education Pathway* [blog post], <https://studentclearinghouse.org/nscblog/industry-based-credentials-are-part-of-the-education-pathway/>

(December 2014), *Using NSC StudentTracker for High Schools Reports: Considerations for Measuring the College Enrollment Rates of High School Graduates*, <https://nscresearchcenter.org/wp-content/uploads/Considerations-in-Using-NSC-STHS-Reports.pdf>

About Plimpton Research

Plimpton Research provides data collection and analysis services to help organization leaders refine policies, assess impacts, and improve strategies. We offer expertise in education and community, workforce, and youth development. www.plimptonresearch.com

About the Maine Charter School Commission

The Maine Charter School Commission was created by Public Law 2011, Chapter 414, to authorize and oversee public charter schools in Maine. A ten (10) school limit was placed on the number of schools the Commission could authorize in the first 10 years.

Maine's charter school law provides guidance for the Commission in the following areas:

- 1) Content of applications that must be filled by charter school founders;
- 2) Execution of charter school contracts with the charter school's governing boards;
- 3) Oversight of charter schools it has authorized, including academic and operational accountability;
- 4) Analysis of data provided to the Commission by the charter school; and
- 5) Monitoring to ensure legal compliance with all applicable state and federal laws, rules and regulations.

The Maine Charter School Commission consists of seven (7) members appointed by the State Board of Education for three-year terms. Three members must be members of the State Board of Education, and they nominate the other four (4) members from the public at large, who must be approved by a majority vote of the State Board of Education.

In addition to fulfilling its statutory obligations, the Maine Charter School Commission provides information to the public regarding charter schools in Maine.

www.maine.gov/csc/reports