

Six-Year Completion & Degree Attainment Rates

Executive Summary

This report is the final installment of our series regarding the postsecondary enrollment and completion of the Vermont High School Class of 2012¹. In this report we show the postsecondary outcomes of the Class of 2012 within six years of high school graduation².

We measure postsecondary outcomes in two ways. The first measurement, which we term **completion rate**, looks at a subset of the entire Class of 2012. It includes only students who enrolled immediately following high school graduation—that is, in the fall of 2012. The six-year completion rate among students who enrolled full-time in a four-year program was 77%. Among those who enrolled full-time in a two-year program, the six-year completion rate was 57%, while among those who enrolled part-time in a two-year program it was 20%.

The second measurement, **degree attainment rate**, looks at the entire Class of 2012 regardless of their postsecondary enrollment. It includes students who enrolled immediately after high school, those who delayed enrollment, and those who did not enroll at all. This is an important measurement because it tells us the percentage of all high school graduates who attained a degree within six years, not just the percentage of those who enrolled immediately after high school graduation.

TOLL FREE **800-642-3177**

BURLINGTON AREA **655-9602**

ONLINE vsac.org

EMAIL info@vsac.org



¹Previous reports looked at the Vermont High School Class of 2012 with respect to their postsecondary aspirations while they were seniors in high school; their fall 2012 enrollment and persistence; their completion within four years, among those who enrolled at a four-year school; and their completion within four years among those who enrolled at a two-year school. This report looks at enrollment and completion of the same cohort, the Vermont High School Class of 2012, six years after high school graduation.

²The data used in this report comes from two sources. Every two years, the Vermont Student Assistance Corporation (VSAC) conducts a nonrandom survey of Vermont high school seniors attending public and private high schools. In 2012, a total of 5,902 out of 6,958 seniors (85%) participated in the survey. Postsecondary enrollment data is based on the 5,853 usable records of the 5,902 participants that were submitted to the National Student Clearinghouse (NSC) and supplemented with information from VSAC's proprietary database for the Vermont State Grant Program. VSAC survey data and NSC enrollment and graduation data were merged and form the basis of the findings presented in this report (n=5,853).



The degree attainment rate of the Class of 2012 within six years of high school graduation was 46%. This is an increase of 12 percentage points from the four-year degree attainment rate (34%). While the increase in the degree attainment rate is good news, it is important to note that more than half of the Class of 2012 (54%) had not obtained a two- or four-year degree within six years of high school graduation.

Data contained in this report

Following the Class of 2012 for six years after high school allowed us to gain perspective on two specific enrollment strategies. The first strategy is planning a gap year after high school graduation; the second is starting at a two-year school and later transferring to a four-year school.

- Five percent of the Class of 2012 planned a gap year. Only about one-quarter of these students (24%) followed through with those plans and actually enrolled in the fall of 2013. A handful of others (11%) waited more than a year before enrolling, while 48% had not enrolled at all within six year of high school graduation. Among the students who planned a gap year and did enroll in the fall of 2013, 63% obtained a degree within four years of their initial enrollment.
- Six percent of the Class of 2012 who planned to continue their education after high school planned to enroll at a two-year school in the fall of 2012 and later transfer to a four-year school. Like students who planned a gap year, most students did not follow through with their plans: 38% did not enroll within six years of high school graduation; 28% started at a two-year school but did not transfer to a four-year school; and 13% opted to start at a four-year school instead of starting at a two-year school. The remainder, 20%, followed their plan to start their education at a two-year school and transfer to a four-year school. The six-year completion rate among these students was 70%.

The findings contained within this report are consistent with our previous findings regarding first-generation students, student gender, and those with more academic preparation in high school. Specifically, first-generation students were less likely to obtain a postsecondary degree than second-generation students, and males—especially first-generation males—were less likely to obtain a degree than females.

Additionally, students who had higher levels of academic preparation, as indicated by obtaining an overall high school GPA of "A" or completion of Algebra II while in high school, were more likely to obtain a degree than students who had not achieved those levels of academic preparation.

Specific findings in this report include:

- Among all high school graduates, first-generation males did not fare well with respect to obtaining
 a degree. The six-year degree attainment rate of all first-generation males from the Class of 2012
 was 26%, while the degree attainment rate of second-generation males (55%) and second-generation
 females (68%) were significantly higher.
- Among students who enrolled full-time in a four-year program in the fall of 2012, second-generation students had a higher completion rate (81%) than first-generation students (70%)—which represents an 11-point gap.
- Females had a higher completion rate than males. Among students who started full-time in a four-year program, there was a gap of 4 percentage points: 79% for women compared to 73% for men.



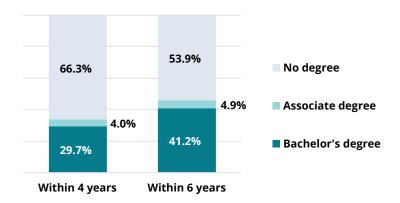
- First-generation males had lower completion rates than men who grew up with college-educated parents. The completion rate among first-generation males who started full-time in a four-year program was 66%, 11 percentage points lower than second-generation males (77%).
- Our data suggests that academic preparation was a positive factor with respect to postsecondary completion. The completion rate among students who started full-time in a four-year program and completed Algebra II was 78%, 36 percentage points higher than among students who did not complete Algebra II (42%). The completion rate among students who attained an overall high school GPA of "A" was 88%, 22 percentage points higher than students who had an overall high school GPA less than "A" (66%).
- Students who enrolled full-time in a four-year program had a higher six-year completion rate (79%) than those who enrolled full-time in a two-year program (57%) or those who enrolled part-time in a two-year program (20%).
- Among students who enrolled full-time in a four-year program, those who transferred schools or stopped out (that is, they left school for a semester or more and later returned to school) had lower completion rates (76% and 56% respectively) than students who remained continuously enrolled. The six-year completion rate among students who both transferred schools and stopped out was 40%, about half the rate of students who did not transfer schools or stop out (86%).

Six-year outcomes of the Vermont Class of 2012

Figure 1 shows the four- and six-year degree attainment rates of the entire Class of 2012. This figure includes all graduates from the Class of 2012: whether they enrolled immediately after high school, delayed their education by a year or more, or did not enroll within six years at any two- or four-year postsecondary institution.

Four years after high school graduation, 34% of the 2012 graduates had obtained either a two- or four-year degree. Six years after high school graduation, this increased by 12 percentage points, to 46%. Among those who obtained a degree within six years, most (92%) had enrolled immediately after high school. The remainder (8%) delayed their education for a semester or more.

Figure 1. Degree attainment rate, four- and six-year outcomes, Vermont High School Class of 2012 (all graduates)





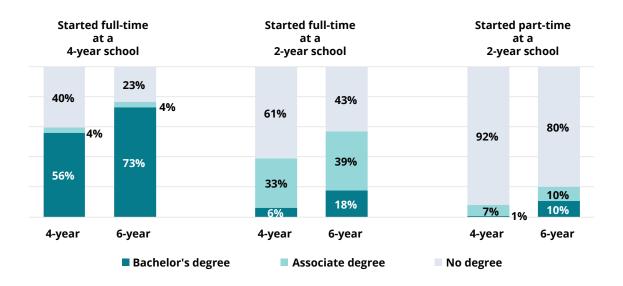
Completion by program length and enrollment intensity

While Figure 1 shows the six-year outcome of the entire Class of 2012, Figure 2 shows the six-year outcome of students who enrolled in the fall of 2012. As we found in our previous reports, students who started full-time in a four-year program in the fall of 2012 had the highest completion rate among the groups studied. The six-year completion rate among those who started full-time in a four-year program immediately after high school was 77% (Figure 2).

The six-year completion rate among those who started full-time in a two-year program was 57%; while among those who started part-time in a two-year program, it was 20%³.

Interestingly, students who started part-time in a two-year program in the fall of 2012 were as likely to obtain an associate degree within six years (10%) as to obtain a bachelor's degree (10%). Among the students who obtained a bachelor's degree, 95% started at the Community College of Vermont (CCV). Of these, almost three out of four obtained a bachelor's degree from a school with which CCV had an articulation agreement⁴.

Figure 2. Class of 2012 four- and six-year completion rates, by starting intensity and school length⁵



³ Among students who enrolled in the fall of 2012, most (78%, n=2,742) enrolled full-time in a four-year program. Seven percent (n=251) enrolled full-time in a two-year program, while 6% (n=227) enrolled part-time in a two-year program. One percent (n=46) enrolled part-time in a four-year program. Seven percent (n=259) were unassigned, as the enrollment intensity was not provided.

⁴ Articulation agreements, also known as transfer agreements or pathway agreements, help students ensure that the credits earned at CCV are transferred efficiently to other schools, saving them time in the completion of their degree.

⁵ Vermont Technical College (VTC) is a public institution that offers both associate degrees and bachelor's degrees. In this paper, data referring to students enrolled in a two-year program includes VTC students who were pursuing a two-year degree, while data referring to students enrolled in a two-year school does not include VTC students. Student responses from the Senior Survey were used to determine whether students at VTC were pursuing an associate degree or a bachelor's degree. Among students who enrolled in the fall 2012 at VTC, 48% planned to obtain a bachelor's degree (and were included in the group of students enrolled in a four-year program), while 52% planned to obtain an associate degree (and were included in the group of students enrolled in a two-year program). Additionally, students' enrollment intensity was not provided to NSC by VTC. Student responses from the Senior Survey were used to determine students' enrollment intensity. Among the Class of 2012 graduates who enrolled fall 2012, 4% enrolled at VTC.



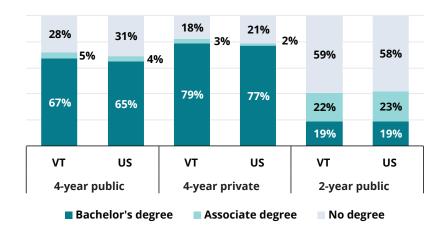
Figure 3 compares the six-year completion rates of the Class of 2012 to the national averages. The six-year completion rate of the Vermont Class of 2012 was higher than the national average among students who started at a four-year institution, while it was lower than the national average among students who started at a two-year institution. The differences in completion rates between Vermont and the national average were statistically significant both for students who started at a four-year public institution, as well as those who attended private four-year institutions. The difference in completion rates was not statistically significant for students who started at a two-year public institution.

The six-year completion rate of the Vermont Class of 2012 among those who started at a four-year public institution was 72%, three percentage points higher than the national average (69%). The six-year completion rate among the Class of 2012 who started at a four-year private institution was 82%, which was also three percentage points higher than the national average (79%).

The six-year completion rate of the Vermont Class of 2012 among those who started at a two-year public institution was 41%, one percentage point lower than the national average (42%).

Figure 3. Six-year outcomes of High School Class of 2012, Vermont and United States, by starting institution, degree-seeking students⁷





⁶ As discussed in our previous research, compared to national averages, Vermont high school graduates are more likely to enroll in four-year institutions and are less likely to enroll in two-year institutions. Among the Vermont Class of 2012 high school graduates, 53.0% enrolled at a four-year institution (compared to the national average of 37.5%), while 7.3% enrolled in a two-year institution (compared to the national average of 28.8%). In these calculations, all VTC students are considered enrolled at a four-year institution since that was the methodology used to calculate the national averages. If all VTC students were considered to be enrolled at a two-year institution, the percentages would change by about 2.5 percentage points: 50.6% would be considered enrolled at four-year institutions, while 9.9% would be considered enrolled at two-year institutions.

⁷ For this comparison, data from the Vermont High School Class of 2012 was compared to the National Student Clearinghouse (NSC) data. NSC uses only degree-seeking students in their analysis. In this chart, we adopted their criteria: "students who started at two-year institutions were excluded as non-degree-seeking students, if they failed to meet one of the following criteria: (1) one or more full-time enrollment before 8/11/2013; and (2) one or more three-quarter time status before 12/31/2013; and (3) two enrollment terms with half-time status before 12/31/2013." The Vermont data was limited only for the basis of this comparison. In all other portions of this paper, all students are considered in the analyses presented.



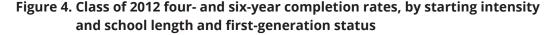
Completion by gender and parents' education

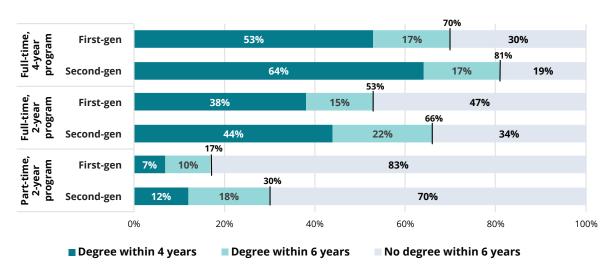
Earlier VSAC reports have showed the differences by students' gender and their parents' educational attainment in terms of postsecondary aspiration, enrollment, persistence, and completion. Our findings in this report suggest those gaps persisted and, in some cases, widened.

First-generation students were less likely to graduate within six years than were second-generation students (Figure 5). Students who leave school with no degree do not achieve the benefits that are typically associated with attaining a degree, such as higher earnings and lower unemployment rates (U.S. Bureau of Labor Statistics, 2020). Additionally, many have the added burden of student loan debt.

Second-generation students had higher six-year completion rates than first-generation students within every category studied (Figure 5). The gap in completion rates between first-generation and second-generation students who started full-time in a four-year program four years after high school graduation was 11 percentage points (53% compared to 64%). Two years later—or six years following high school graduation—the gap remained at 11 percentage points (70% compared to 81%). Even among students who had similar high school academic preparation, there were differences in completion rates. The completion rate among second-generation students who completed Algebra II and obtained an overall high school GPA of "A" was 91%, seven percentage points higher than similarly prepared second-generation students⁸.

The gap in completion rates between first- and second-generation students who started at a two-year program actually doubled between 2018 and 2020. Among those who started full-time in a two-year program, the gap in completion rates increased from six percentage points to 13 percentage points (53% compared to 66% in 2020). Among those who started part-time in a two-year program the gap increased from five percentage points to 13 percentage points (17% compared to 30% in 2020).



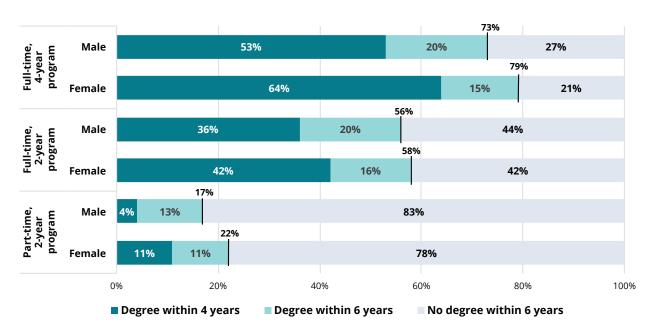


⁸ This is a statistically significant difference.



Females had higher six-year completion rates than males, regardless of program length or enrollment intensity (Figure 4). The difference in completion rates between females and males narrowed from four years after high school graduation to the six-year mark. For example, among students who started full-time at a four-year school, the difference in completion rates between males and females was 11 percentage points (53% compared to 64%) four years after high school graduation. Two years later, or six years after high school graduation, the completion rate of females (79%) was still higher than males (73%), but the difference decreased from 11 to six percentage points (79% compared to 73%).

Figure 5. Class of 2012 four- and six-year completion rates, by starting intensity and school length, by gender



When first-generation status and gender were combined, first-generation males had the lowest six-year completion rate among students who enrolled full-time in a four-year program (66%) (Figure 6), while second-generation females had the highest (85%). These results are consistent with VSAC's previous findings.



four- and six-year completion rates, by gender and first-generation status

First-gen males

46%

20%

34%

Figure 6. Immediate continuers who enrolled full-time in a four-year program, Class of 2012

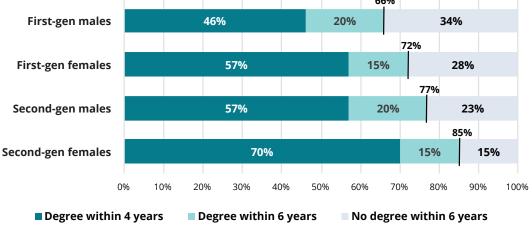


Figure 6 shows the six-year completion of students who started full-time in a four-year program. It is important to remember that first-generation students, especially first-generation males, were less likely to enroll in postsecondary education. Therefore, an analysis of the six-year outcomes of the entire class, not just those who enrolled in the fall of 2012, highlights the disparity in educational outcomes between first- and second-generation students as well as the disparity between males and females with respect to six-year educational outcomes (Figure 7).

The degree attainment rate of second-generation students was 29 percentage points higher than that of first-generation students (62% compared to 33%) (Figure 7a). The degree attainment rate of females was 13 percentage points higher than that of males (52% compared to 39%).

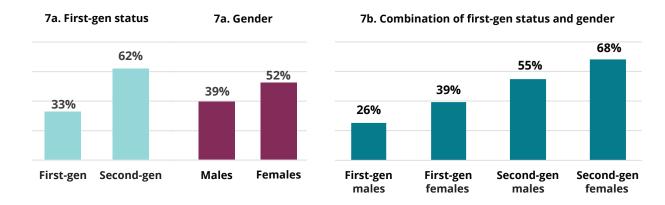
Figure 7b shows the degree attainment rates of the combination of first-generation status and gender. The degree attainment of all second-generation females from the Class of 2012 was 68%, two and one-half times the degree attainment rate of all first-generation males (26%).

8

⁹ The difference in degree attainment rates between first- and second-generation students was statistically significant, as was the difference in degree attainment rates between males and females.



Figure 7. Six-year degree attainment rate, entire Class of 2012, by gender and first-generation status



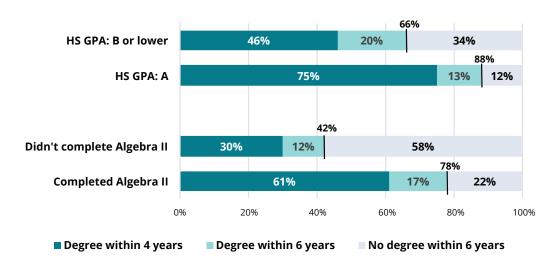
Completion by high school academic preparation

Students who graduated high school with a higher level of academic preparation were significantly more likely to obtain a degree within four years of high school graduation. They were also more likely to obtain a degree within six years of high school graduation. Among students who enrolled full-time in a four-year program and obtained an overall "A" high school GPA, 88% obtained a degree within six years (Figure 8). Among students who obtained an overall high school GPA of B or lower, 66% obtained a degree within six years, a difference of 22 percentage points.

Similarly, students who completed Algebra II while in high school were more likely to obtain a degree within six years of high school graduation than those who did not complete Algebra II. Among students who enrolled full-time in a four-year program and completed Algebra II while in high school, 78% obtained a degree within six years. Among students who did not complete Algebra II, 42% obtained a degree within six years, a difference of 36 percentage points.

Figure 8. Immediate continuers who enrolled full-time at a four-year school,

Class of 2012 four- and six-year completion rates, by academic preparation





It is important to note that the factors discussed in this paper are interrelated. Our previous research shows that parents who have obtained a bachelor's degree were more likely to encourage their children to pursue postsecondary education and take the necessary college preparatory classes, such as Algebra II, while in high school (VSAC, 2018). For example, 79% of first-generation high school graduates completed Algebra II while in high school compared to 93% of second-generation students.

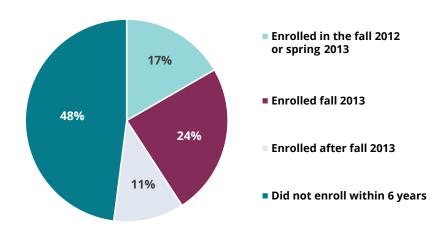
Outcomes of students who planned a gap year

Some students planned to take a year off after high school graduation before enrolling in postsecondary education, typically referred to as a gap year. Among the Class of 2012 high school graduates, five percent planned a gap year. About one-quarter of these students followed through with their gap year plans and enrolled in the fall of 2013, one year after high school graduation (Figure 9). Almost one-fifth (17%) enrolled immediately after high school graduation (fall 2012) or waited one semester. Almost half of the students (48%) who planned a gap year did not enroll within the timeframe of this study.

Students who reported that they had applied for admission to a college as a senior in high school were more likely to enroll after taking a gap year. Among students who followed through with their gap-year plans—that is, they took one year off, then enrolled in the fall of 2013—80% had applied for admission to a college. Among students who planned a gap year but had not enrolled within six years of high school graduation, only 40% had applied for college admission during their senior year in high school.

Gap-year students who enrolled full-time in a four-year program in the fall of 2013 had a slightly higher four-year completion rate than their peers who started immediately after high school graduation (63% versus 60%). However, the difference in completion rates was not statistically significant ¹⁰.





10

¹⁰ Gap-year students who enrolled fall 2013 were more likely to enroll in a private postsecondary institution than students who enrolled in the fall of 2012 (62% compared to 49%). This may have contributed to the difference in completion rates between these two groups, as our data suggests that students who enrolled at private institutions had higher completion rates than students who enrolled at public institutions (VSAC, 2020).



Stopping out versus transferring to a two-year school among students who started at a four-year school

During their postsecondary education journey, some students face difficulties so severe that they are confronted with the prospect of leaving college; or, among students who started at a four-year school, of transferring to a two-year school. Our data does not inform us of the exact nature of these difficulties, or the magnitude of the difficulties that different students face. However, we can observe the outcomes of students who leave college compared to those who chose to transfer to a two-year school. Our data suggests that students who remain enrolled by transferring to a two-year school are more likely to obtain a degree within six years than are those who leave school for a semester or more and later return, also called "stopping out."

Among those who started full-time at a four-year school, 15% left school within the following two semesters (spring or fall of 2013). More than one-third (36%) did not re-enroll within the timeframe of this study (Figure 10). The remainder (64%) returned to school, and 22% obtained a degree within six years, while 42% did not 11.

We also analyzed the enrollment patterns of students who started full-time in the fall of 2012 at a four-year school and transferred to a two-year school within the next two semesters (spring or fall of 2013). Fewer students chose this option, but our data suggests that these students were more likely to obtain a degree. Among students who transferred from a four-year school to a two-year school, 45% obtained a degree within six years; 29% earned a four-year degree, while 16% earned a two-year degree (Figure 10).

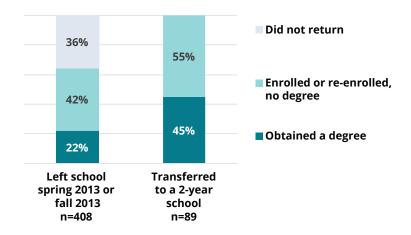
More than half of the students who transferred to a two-year school (56%) enrolled full-time at their new school. The completion rate among students who enrolled full-time was 56%.

The Community College of Vermont (CCV) played an important role in the educational plans of students who started in the fall of 2012 at a four-year school and transferred to a two-year school. Almost nine in ten (87%) of the students who transferred to a two-year school chose to transfer to CCV. Among those who started part-time at CCV, 30% obtained a degree within six years. Among those who started full-time at CCV, 61% obtained a degree within six years.

¹¹ Among students who started full- or part-time in a two-year program, 44% left school within the next two semesters (spring or fall of 2013). Most (58%) did not re-enroll within the timeframe of this study. Forty-two percent returned to school. This subset of students was comprised of two categories: the 9% who obtained a degree within six years, and the 33% who did not.



Figure 10. Students who left school within the first two semesters compared to students who transferred to a two-year school (among students who enrolled full-time at a four-year school)



Students who stopped out

Our data suggests that the most efficient way to obtain a degree is to remain enrolled continuously at the same institution. For example, among students who started full-time at a four-year school and remained enrolled continuously at the same institution, 86% obtained a degree within four years. However, not all students are able to remain continuously enrolled at the same school until they obtain a degree. Students encounter a variety of life circumstances that lead them to transfer schools or leave school, either temporarily or permanently.

Among all students who stopped out, more than half (56%) did not obtain a degree within six years. Students who started part-time in a two-year program were the most likely to stop out (42%) among the categories listed in Table 1. They were also the most likely not to obtain a degree after stopping out, and the most likely to leave school and not return within six years.

Our data showed that among students who enrolled full-time in a four-year program, there was a statistically significant difference in academic preparation between students who either stopped out or transferred schools and those who did not. Students who did not complete Algebra II while in high school were more likely to stop out or transfer schools (46%) than were students who completed Algebra II (31%). Similarly, students who obtained an overall high school GPA less than "A" were more likely to stop out or transfer schools (38%) than students who obtained an overall high school GPA of "A" (24%).



Table 1. Enrollment patterns among those who enrolled fall 2012

ENROLLMENT PATTERN	Full-time in a 4-year program	Full-time in a 2-year program	Part-time in a 2-year program	
Did not stop out prior to first degree	67%	45%	11%	
Stopped out, obtained a degree within 6 years	9%	11%	8%	
Stopped out, no degree within 6 years	10%	17%	34%	
Left school, did not return (no degree within 6 years)	13%	25%	47%	
Continuously enrolled for 6 years, no degree	1%	2%	0%	
Total	100%	100%	100%	

Among all students who stopped out, the majority (57%) stopped out for one semester before returning to school. Students who started in a four-year program were more likely to have their first stop-out be of shorter duration than students who started in a two-year program; that is, they tended to return to school more quickly after their first stop-out (Table 2).

Among students who started full-time in a four-year program and stopped out, 76% returned to school within one or two semesters, compared to 69% among "stop-out" students who started full-time in a two-year program, and 63% among "stop-out" students who started part-time in a two-year program.

Most students who stopped out did so once (75%), while the remainder, 25%, stopped out multiple times. Students who started full-time in a two-year program were less likely to have multiple stop-outs (16%) than either students who started full-time in a four-year program (25%) or students who started part-time in a two-year program (34%).

Our data shows that students who stopped out were more likely to do so early in their educational journey: 32% of all students who enrolled in the fall of 2012 and later stopped out did so after being enrolled just one semester (that is, their first stop-out occurred in the spring of 2013). One-half had stopped out after two semesters. This demonstrates the need to support students early in their educational journeys.



Table 2. Students who stopped out among those who enrolled fall 2012

STUDENTS WHO STOPPED OUT	Full-time in a 4-year program	Full-time in a 2-year program	Part-time in a 2-year program		
Length of first stop-out					
1 semester	59%	41%	54%		
2 semesters	17%	28%	8%		
More than 2 semesters	24%	31%	38%		
Total	100%	100%	100%		
Number of stop-outs					
1 stop-out	75%	84%	66%		
2 or more stop-outs	25%	16%	34%		
Total	100%	100%	100%		
When students first stopped out					
After being enrolled 1 semester (spring 2013)	33%	25%	35%		
Within 2 semesters (fall 2013)	49%	42%	59%		
Within 3 semesters (spring 2014)	59%	53%	76%		

Students who transferred schools

Almost one-quarter (23%) of students who enrolled full-time in a four-year program transferred schools, while 34% of students who started in a two-year program did so (Table 3). The transfer rate of the Vermont Class of 2012 was lower than the national average, which was 39% among those who started at a four-year institution and 37% among students who started at a two-year school (NCES, 2018).

Our data shows that, like students who stopped out, students who transferred schools are more likely to do so early in their educational journey. Half of all students who enrolled in the fall of 2012 and later transferred schools did so within the first two semesters (that is, by the fall of 2013). Among students who enrolled full-time in a four-year program and transferred schools before receiving a degree, 65% did so within the first three semesters (Table 3).

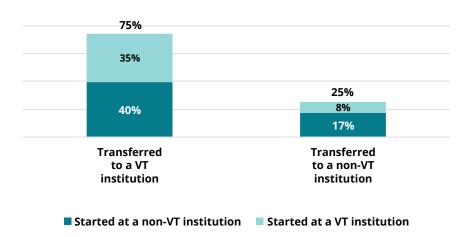


Table 3. Students who transferred schools among those who enrolled fall 2012

TRANSFER PATTERN	Full-time in a 4-year program	Full-time in a 2-year program	Part-time in a 2-year program		
Students who transferred schools	23%	34%	34%		
When students first transferred schools					
After being enrolled 1 semester (spring 2013)	15%	14%	5%		
Within 2 semesters (fall 2013)	52%	39%	50%		
Within 3 semesters (spring 2014)	65%	46%	58%		
Students who did not transfer schools	77%	66%	66%		
Total	100%	100%	100%		

Among students who transferred within the first three semesters, most (75%) transferred to a Vermont school (Figure 11) either from a non-Vermont school (40%) or from a different Vermont school (35%). The schools that students most frequently transferred to were the Community College of Vermont (25%), followed by the University of Vermont (17%).

Figure 11. School location of students who transferred schools

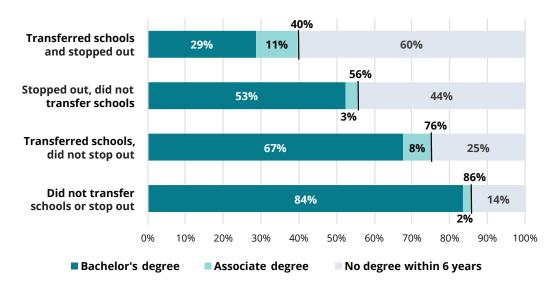




Among students who enrolled full-time in a four-year program, 32% either transferred schools or stopped out. Among students who stopped out and/or transferred schools, 30% stopped out but did not transfer schools, while 38% transferred schools but did not stop out. The remainder (32%) both stopped out and transferred schools.

Figure 12 compares the six-year completion rates of students who transferred schools or stopped out to those students who did not. Students who transferred schools and stopped out had the lowest completion rate (40%). The completion rate of students who stopped out but did not transfer was 56%, while the completion rate of students who transferred schools but did not stop out was 76%. Students who did not transfer schools or stop out had the highest completion rate (86%).

Figure 12. Six-year completion of students who transferred schools or stopped out, students who enrolled full-time in a four-year program, fall 2012



Plans to enroll at a two-year school and transfer to a four-year school

Six percent of the Class of 2012 planned to continue their education in the fall of 2012 at a two-year school and later transfer to a four-year school. Table 4 shows the actual enrollment patterns of the students who, as a senior in high school, had that specific plan. The largest percentage among this subset of graduates (38%) did not enroll in the fall of 2012¹², while 32% enrolled in the fall of 2012 at a two-year school but did not transfer to a four-year school.

¹² This is a portion of the "summer melt" phenomenon of Vermont high school graduates. For the Vermont Class of 2012, 16% of students who planned to enroll in the fall of 2012 did not. For a more detailed discussion of summer melt of this cohort, see "Follow-up: The Vermont High School Class of 2012 Postsecondary Enrollment & Completion of Students Enrolled at a Two-Year School" (VSAC, 2020).



One in five students (21%) followed through on their plans; that is, they enrolled in the fall of 2012 at a two-year school and then transferred at some later point to a four-year school. The six-year completion rate among these students was 70%: 15% obtained a two-year degree, while 55% obtained a four-year degree.

Nine percent of students deviated from their plan slightly: instead of starting at a two-year school in the fall of 2012 and later transferring to a four-year school, they instead enrolled directly in a four-year school in the fall of 2012. The six-year completion rate among these students was 56%. This group had a higher two-year degree completion rate (by five percentage points) and a lower four-year degree completion rate (by 19 percentage points) than those students who enrolled at a two-year school and later transferred to a four-year school.

Table 4. Fall 2012 enrollment and six-year completion among students who planned to enroll in the fall of 2012 at a two-year school and transfer to a four-year school

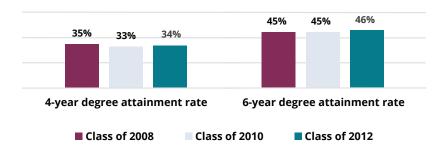
ACTUA	AL ENROLLMENT PATTERN	Completion within 6 years							
		2-year degree	4-year degree	No degree	Total				
38%	Did not enroll in the fall of 2012	3%	4%	93%	100%				
32%	Enrolled at a 2-year school, did not transfer to a 4-year school	21%	0%	79%	100%				
21%	Enrolled at a 2-year school, transferred to a 4-year school	15%	55%	30%	100%				
9%	Enrolled at a 4-year school	20%	36%	44%	100%				

Trend data: 2008-2012

Four years after high school graduation, 34% of the graduates from the Class of 2012 had obtained a two- or four-year degree (Figure 13). This includes all graduates, whether they enrolled in the fall of 2012, delayed enrollment, or did not enroll at all. Six years after high school graduation, the percentage of all graduates that had obtained a two- or four-year degree increased to 46%. Both the four- and six-year degree attainment rates have remained relatively stable since 2008.

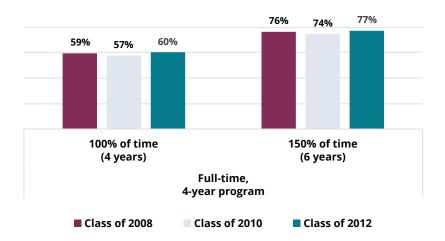


Figure 13. Trend data: Class of 2008–2012 four- and six-year degree attainment rates, all high school graduates



The completion rate among students who started full-time in a four-year program has remained relatively stable for the cohorts studied, the Classes of 2008, 2010, and 2012 (Figure 14). Among graduates of the Class of 2012, 60% obtained a degree within four years (within 100% of time). The six-year completion rate (or within 150% of time) among students in the Class of 2012 who started full-time in a four-year program was 77%, or three percentage points higher than students from the Class of 2010.

Figure 14. Trend data: Class of 2008–2012 within 100% and 150% of time among those who enrolled in the fall immediately after high school graduation in a four-year program

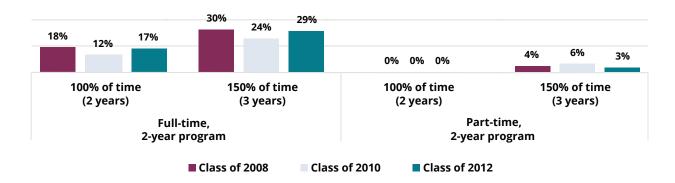




Completion rates among students who enrolled in a two-year program were lower than among students who enrolled in a four-year program (Figure 15). For example, 17% of students from the Class of 2012 who started full-time in a two-year program attained a degree within 100% of time (two years), while three percent attained a degree with 150% of time (three years).

Among the Class of 2012 students who started full-time in a two-year program, the completion rates within both 100% and 150% of time were higher than the Class of 2010 rates, but lower than the Class of 2008 rates. Among the Class of 2012 students who started part-time in a two-year program the Class of 2012 completion rate within 150% of time was lower than either the Class of 2010 rate (6%) or the Class of 2008 rate (4%)¹³.

Figure 15. Trend data: Class of 2008–2012 within 100% and 150% of time among those who enrolled immediately after high school graduation in a two-year program



County-level data

There was variation in six-year degree attainment rates by county (Figure 16). Chittenden and Washington counties had the highest overall six-year degree attainment rates—54% and 51%, respectively—followed by Windsor and Bennington counties, which both reported 47%.

Lamoille and Orange counties had the lowest degree attainment rates—34% and 36%, respectively—while Caledonia and Orleans counties were slightly higher—38% and 39%, respectively. Students from these counties had the lowest rates of high school graduates who enrolled in the fall of 2012: Orange (49.8%), Lamoille (50.2%), Orleans (53.2%), and Caledonia (55.4%). In comparison, Chittenden (66.7%), Addison (61.5%), and Washington (61.4%) counties had the highest enrollment rates (VSAC, 2015).

Chittenden county had the highest percentage of students who obtained a four-year degree (51%) and had among the lowest percentage of students who obtained a two-year degree (3%). Orange county had the lowest percentage of students who obtained a four-year degree (29%) and among the highest percentage of students who obtained a two-year degree (8%). Orleans county had similar six-year completion rates to Orange county: 31% had obtained a four-year degree within six years, while eight percent had obtained a two-year degree.

¹³ The six-year completion rate among students from the Class of 2012 who started full-time in a two-year program was 57%; among students who started part-time in a two-year program, it was 20%.



Figure 16. Six-year degree obtainment rates by Vermont county

Note: Due to low sample sizes, data of Essex and Grand Isle counties are not presented.

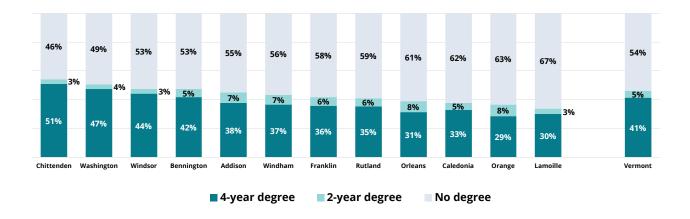


Table 5 compares the completion-rate data of the Class of 2012 to the educational attainment rate of residents who are at least 25 years of age (Census Bureau, 2020). The statewide percentage of graduates from the Class of 2012 who had obtained at least an associate degree was 46%, four percentage points higher than the state-wide population of those age 25 years and up. The state-wide percentage of graduates from the Class of 2012 who had obtained at least a bachelor's degree was 41%, four percentage points higher than the statewide population of those age 25 years and up.

The educational attainment rate of those age 25 years and up was similar, for the most part, to the Class of 2012. Residents from Chittenden and Washington counties had the highest percentage of residents who had attained an associate or bachelor's degree, while Orleans and Franklin counties were among the lowest.

Lamoille county data was an exception; while Lamoille residents 25 and older ranked third-highest in comparison to other counties with respect to obtaining an associate degree (48%), it ranked last with respect to graduates from the Class of 2012 who had obtained an associate degree (33%). Similarly, it ranked in the top half in comparison to other counties with respect to residents 25 and older who had obtained a bachelor's degree (rank = 5), while it ranked next to last (rank = 11) with respect to graduates from the Class of 2012 who had obtained a bachelor's degree.



Table 5. Education attainment by Vermont county, Class of 2012 and all citizens age 25 and up

Educational attainment	Population	Chittenden	Washington	Windsor	Bennington	Addison	Windham	Franklin	Rutland	Orleans	Caledonia	Orange	Lamoille	Vermont
	Class of 2012	54%	51%	47%	47%	45%	44%	42%	40%	39%	38%	37%	33%	46%
Associate degree or higher	Rank	1	2	3	3	5	6	7	8	9	10	11	12	
	Age 25 & up	59%	50%	45%	41%	46%	46%	34%	39%	30%	36%	39%	48%	42%
	Rank	1	2	6	7	4	4	11	8	12	10	8	3	
Bachelor's degree or	Class of 2012	51%	47%	44%	42%	38%	37%	36%	35%	31%	33%	29%	30%	41%
	Rank	1	2	3	4	5	6	7	8	10	9	12	11	
higher	Age 25 & up	51%	42%	36%	36%	37%	39%	24%	30%	22%	28%	29%	37%	37%
	Rank	1	2	6	7	4	3	11	8	12	10	9	5	

Note: Due to low sample sizes, data of Essex and Grand Isle counties are not presented.

Conclusion

VSAC tracked the educational journey of the Vermont High School Class of 2012, starting with their postsecondary aspirations before high school graduation, and followed them for six years after their high school graduation. Figure 17 summarizes that journey and illustrates how students are lost at each step along the way towards completion of a postsecondary degree.

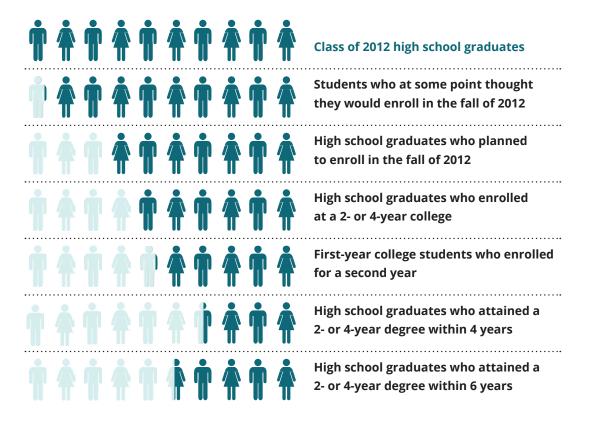
We found that most students (91%) at one time thought they would enroll in postsecondary education. However, in the spring of their senior year of high school, that percentage had dropped 70%. In the fall of 2012, six months following high school graduation, 60% had enrolled in a two- or four-year school. Within four years of high school graduation, 34% had obtained either a two- or four-year degree. Two years later, six years following high school graduation, less than half (46%) of the Class of 2012 had obtained either a two-or four-year degree.

While it is a positive sign that the degree attainment rate increased between the four-year and six-year mark, it is also important to acknowledge the cost associated with being enrolled for those additional years. For example, students who obtain a four-year degree in five or six years may accumulate additional debt and, at the same time, forego the income that they would have earned had they entered the job market a year or two earlier.



According to the Census Bureau (Census Bureau, 2020), the percentage of Vermonters 25 or older with at least an associate degree was 47%, which is about the same as the six-year completion rate of the Class of 2012 (46%). Advance Vermont has proposed a goal that by 2025, 70% of Vermonters will attain a credential of value¹⁴. To achieve this goal, we must increase the educational attainment of Vermonters.

Figure 17. Education pipeline of the Vermont High School Class of 2012



Our findings in this report confirm and support the findings of our previous reports. Specifically, there is variation in aspiration, enrollment, and completion with respect to gender, parents' education, and academic preparation while in high school.

Gender and parents' educational attainment

As we discussed in our previous reports, males were less likely than females to aspire to enroll in post-secondary education, to actually enroll, and to obtain a degree. Similarly, first-generation students were less likely than second-generation students to aspire to enroll in postsecondary education, to actually enroll, and to obtain a degree.

¹⁴ Credential of value includes all postsecondary credentials, including non-degree credentials. In 2018, 53% of Vermonters held a credential of value. In this paper, we are limited to students who achieved a two- or four-year degree. In the future, we hope to be able to include all postsecondary credentials in our analysis.



In this report, we found that those trends continued. Six years after high school graduation, males had lower completion rates than females: six percentage points lower among those who started full-time in a four-year program, two percentage points lower among those who started full-time in a two-year program, and five percentage points lower among those who started part-time in a two-year program. Similar to the findings in our previous reports, first-generation students had lower completion rates than second-generation students: 11 percentage points lower among those who started in a four-year program and 13 percentage points lower among those who started in a two-year program. This means that first-generation students are more likely to leave postsecondary education without a degree and to forego the higher-paying jobs that a college degree typically affords, while still carrying the burden of student loan debt.

We found that among students who started full-time in a four-year program, first-generation males had lower six-year completion rates than second-generation males and females, whether first- or second-generation. The completion rate of first-generation males was 66%, compared to 85% for second-generation females.

The disparity between first-generation males and second-generation females becomes more pronounced when the entire Class of 2012 is taken into view. This is because first-generation students were less likely to enroll in postsecondary education in the fall of 2012. Looking at the six-year outcome of the entire Class of 2012, 68% of all second-generation females had obtained a degree within six years of high school graduation, which is two and one-half times the degree attainment rate of first-generation males (26%). The overall six-year degree attainment rate of the entire Class of 2012 was 46%.

Academic preparation

High school students who were academically prepared for postsecondary work, as evidenced by achieving an overall high school GPA of "A" or completion of Algebra II, had higher six-year completion rates than students who had not achieved those same levels of academic preparation. For example, among students who started full-time in a four-year program, the completion rate was 22 percentage points higher among students who had an overall high school GPA of "A" than among those who had an overall high school GPA lower than "A" (88% compared to 66%). Students who completed Algebra II while in high school had a completion rate 36 percentage points higher than those who did not complete Algebra II (78% compared to 42%).

Further, we found differences in completion rates between first- and second-generation students who had received similar academic preparation while in high school. The completion rate among second-generation students who completed Algebra II and obtained an overall high school GPA of "A" was 91%, seven percentage points higher than similarly-prepared second-generation students (84%).



Specific enrollment strategies

Following the Class of 2012 for six years after high school graduation has allowed for analysis of specific enrollment strategies that have gained popularity in recent years. The first of these strategies is taking a gap year—that is, not enrolling in postsecondary education immediately following high school graduation, but rather taking a year for personal enrichment, work, or other opportunities. Our data suggests that there may be disadvantages in this strategy. The main disadvantage we found was that, among the students who planned a gap year after high school graduation, almost half did not enroll in college within six years of high school graduation. However, students who applied to a college while still in high school were more likely to enroll after taking a gap year. This suggests that this strategy requires careful planning.

A different strategy that students employ is to begin at a two-year school and later transfer to a four-year college. While this may be a good strategy, it too has disadvantages. Our data found that among the students who planned this strategy, only 20% followed through with those plans. A larger percentage (28%) enrolled at a two-year school, but never transferred to a four-year school. The largest percentage among this subset of students (38%) did not enroll in the fall of 2012. This not to say this is a poor strategy, only that it is a strategy that does not necessarily yield the desired outcome. It is a strategy that, like the gap-year strategy, requires thoughtful planning.

Community College of Vermont (CCV)

This report includes interesting findings with respect to CCV, both as a stand-alone institution and as a partner to other colleges and universities. As Vermont's only public community college, CCV has 12 locations throughout Vermont, supplying unparalleled access to postsecondary education and training in many communities. Further, our findings highlight CCV's role as a partner as both a sending school and a receiving school. Among students who started part-time in a two-year program, 10% obtained a bachelor's degree within six years. Among the students who started in a two-year program and obtained a bachelor's, 95% started at CCV.

We also found that CCV played an important role for students who enrolled at a four-year school in the fall of 2012 and later transferred to a two-year school. Most students (87%) who transferred from a four-year school to a two-year school transferred to CCV. Among those who enrolled full-time at CCV when they transferred, 61% obtained a degree within six years.

Final thoughts

This series of reports followed the Vermont High School Class of 2012, starting with the post-high school plans that they made during their senior year, checking in with them periodically throughout their post-secondary journey, and ending with a final checkpoint six years after high school graduation.

Our analysis showed that some subgroups were less likely to complete a degree within six years of high school graduation, specifically first-generation students and males. The degree attainment of second-generation females from the Class of 2012 was 68%, two and one-half times the degree attainment rate of first-generation males (26%). It is important to address this discrepancy by encouraging and helping these subgroups to enroll in postsecondary education and to persist until they obtain a degree.



Students who were academically prepared for the rigors of postsecondary education fared better than those who were not as academically prepared. Among students who enrolled full-time in a four-year program and completed Algebra II while in high school, 78% obtained a degree within six years. Among students who did not complete Algebra II, 42% obtained a degree within six years, a difference of 36 percentage points.

We found that students who left postsecondary education did not fare well with respect to obtaining a degree. Among students who left postsecondary education, almost half (48%) did not re-enroll. Among those who did re-enroll, less than one third (31%) obtained a degree within six years of high school graduation.

We also found that students who transferred schools were more likely to make that switch within the first three semesters of initial college enrollment. Similarly, among students who left school, either on a temporary or permanent basis, most left within the first three semesters. This indicates that students may benefit from additional support, especially early in their postsecondary enrollment.

There are several ways to optimize the postsecondary attainment of our high school seniors. Each of these efforts may increase the degree attainment rate of Vermont high school graduates.

- The first is in the area of career planning. By counseling students early in their educational careers, they may be better able to plan for a career, which may include completing the appropriate high school classes, such as Algebra II.
- A second way to optimize postsecondary educational attainment is to reach out to students who
 are currently lagging their peers in attaining postsecondary degrees: specifically, males and firstgeneration students.
- A third way is to ensure that more students who want to pursue postsecondary education are able to do so. Every year, about 13%-18% of high school seniors plan to enroll in a two- or four-year program the fall after high school graduation but do not.
- Finally, another way to optimize educational obtainment is to find ways to keep students enrolled in postsecondary education until they obtain a degree. Thirty percent of the students who enrolled in the fall of 2012 had not obtained a degree within six years. The Lumina Foundation estimates that there are 55,000 working-age Vermonters who have some college but not degree.

Each of these recommendations would require additional counseling and support for our high school students, both while they are in high school and immediately following their high school graduation. While these efforts require planning and investment, the return for the state of Vermont is clear.

Finally, we plan to continue to analyze different cohorts of Vermont high school graduates and their postsecondary educational journeys. We plan to follow the Class of 2018 to determine the challenges and successes of this group of Vermonters, how they are similar to the Class of 2012, and how they are different. Our goal is to determine how we can help future Vermont high school graduates pursue and achieve their post-high school goals.



References

Lumina Foundation. 2017. *A stronger nation: Learning beyond high school builds American talent.* Accessed January 5, 2021. https://www.luminafoundation.org/stronger-nation/report/2021/#nation

National Student Clearinghouse. 2018. *Signature Report 16 – Completing College: A National View of Student Completion Rates – Fall 2012 Cohort*. Accessed August 28, 2020. https://nscresearchcenter.org/wp-content/uploads/SignatureReport16.pdf

Vermont Student Assistance Corporation. 2014. *Gaps in postsecondary education aspiration: A report on disparities among Vermont's high school graduates.* Accessed July 30, 2020. https://www.vsac.org/sites/default/files/uploads/Research/2014-special-report-4-15.pdf

Vermont Student Assistance Corporation. 2015. *Vermont's Class of 2012: Highlights and challenges for pursuing a postsecondary education.* Accessed July 30, 2020. https://www.vsac.org/sites/default/files/uploads/Research/SPECIAL-REPORT-Vermont%E2%80%99s-Class-of-2012-Highlights-and-challenges-for-pursuing-a-postsecondary-education(2).pdf

Vermont Student Assistance Corporation. 2018. *Follow-up: The Vermont High School Class of 2012: Postsecondary Enrollment & Completion within Four Years of Graduation.* Accessed September 15, 2018. https://www.vsac.org/sites/default/files/uploads/Research/USE%20-%20Class%20of%202012%20 Completion%20within%204%20years.pdf

Vermont Student Assistance Corporation. 2020. *Follow-up: The Vermont High School Class of 2012: Post-secondary Enrollment & Completion of Students Enrolled at a Two-Year School.* Accessed September 15, 2018. https://www.vsac.org/sites/default/files/uploads/Research/Class%20of%202012%20Completion%202%20 year%20school%20FINAL.pdf

U.S. Bureau of Labor Statistics. 2020. *Career Outlook - Learn more, earn more: Education leads to higher wages, lower unemployment.* Accessed January 5, 2021. https://www.bls.gov/careeroutlook/2020/data-on-display/education-pays.htm