Report on Act 77 of 2013

16 VSA §944(j) Dual Enrollment Program, Reports

REPORT
January 2018

Report to the House and Senate Committees on Education

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Secretary of Education

VERMONT
AGENCY OF EDUCATION

Legislation

Act 77 of 2013. An Act Relating to Encouraging Flexible Pathways to Secondary School Completion.

Executive Summary of Findings and Recommendations for Further Analysis

Findings

1. The direct investment (exclusive of administrative costs) in Dual Enrollment (DE) vouchers increased from $961,872 in SY15 to $1,483,419 in SY17.
2. The total number of DE vouchers increased from 633 in SY13 to 2,660 in SY17.
3. In SY17, students who identified as female represented about 48% of the students in grades 11 and 12, but used about 60% of the DE vouchers.
4. In SY17, students who live in poverty (eligible for Free or Reduced hot Lunch, or "FRL") represented about 30% of the students in grades 11 and 12, but used about 23% of the DE vouchers. While the number of FRL voucher users is increasing, the number of more affluent users is increasing faster, so the equity gap is increasing.
5. In SY17, students with disabilities represented about 13% of the students in grades 11 and 12, but used about 3% of the DE vouchers. While the number of voucher users with disabilities is increasing, the number of users without disabilities is increasing faster, so the equity gap is increasing.
6. The number of DE vouchers used by English Language Learners (ELL) is low enough that it is difficult to evaluate trends. In addition, the AOE needs to figure out whether the analysis should only focus on students currently eligible for ELL services, or whether it should evaluate participation for all students who were ever eligible for ELL services.
7. Use of DE by students of color is consistent with their representation in the population.
8. For each group of students who graduated high school from SY09 through SY15, the proportion enrolled in college within a year has remained markedly stable (54-56%).
9. The proportion of each graduating group who both enrolled in college and used a DE voucher has increased each successive year. For example, in 2013, 6% of graduates who went on to college right away had used DE vouchers. Three years later, that number was 32%.
10. Females who use DE vouchers are slightly more likely to go on to postsecondary education than male users of vouchers.
11. Users of DE vouchers who live in poverty are less likely to go on to postsecondary education than more affluent users of DE vouchers.
12. Dual enrollment in VT may be playing a role, albeit an imperfect one, in creating opportunities for some less privileged Vermonters to enroll in postsecondary education.

Recommendations for Further Analysis

1. Determine how to account adequately for the effect of ELL status on access to DE.

2. Evaluate how and whether students who live in poverty who either do or do not participate in Dual Enrollment differ in other substantive ways (e.g., access to 529 plan, financial aid counseling, college-enrolled siblings, etc.).
3. Evaluate the relationship between the CTE Fast Forward dual enrollment program and postsecondary enrollment, and the relationship between the Fast Forward program and State-funded DE. In particular, evaluate the impact of college credits through Fast Forward as they compare to college credits earned through dual enrollment for different populations.
4. Evaluate why students at some high schools participate more fully in the state-run DE program than do students at other schools.
5. Evaluate if postsecondary enrollment rates are comparable for students who participate in DE at a college compared to DE on a high school campus (i.e., concurrent enrollment).
6. Track and evaluate the following additional indicators:
    - Student performance (i.e., grades) in dual enrollment coursework
    - Postsecondary retention (one-year) and persistence rates for students participating in dual enrollment, as compared to non-participating students

At present, the AOE does not have sufficient staffing to evaluate these questions.

Legislation

Act 77 of 2013. An Act Relating to Encouraging Flexible Pathways to Secondary School Completion.

Summary of Legislation

This Act creates a Flexible Pathways Initiative within the Agency of Education (AOE) to expand opportunities for secondary students to complete high school and achieve postsecondary readiness. Among other features, the act:

(1) provides the opportunity for each high school student to enroll in two Dual Enrollment (DE) courses at no tuition expense to the student,
(2) authorizes the development of additional Early College (EC) programs through which student's complete 12th grade entirely on a college campus, and
(3) removes the upper age limit for participation in the High School Completion Program. The Act includes multiple effective dates, beginning July 1, 2013.

For the purposes of this report, the Act specifically amends 16 VSA §944(j) to require the Secretary of Education to "report to the House and Senate Committees on Education annually in January regarding the Dual Enrollment Program, including data relating to student demographics, levels of participation, marketing, and program success."

The AOE received no additional funding or staff to support implementation of this work. Fifty percent of Dual Enrollment and all of Early College comes from the Education Fund, with the additional funding for Dual Enrollment coming from the Next Generation Initiative Fund. When students enroll in Early College, they dis-enroll from their high school and do not count towards the district ADM. This contributes to enrollment declines in high schools, but ensures that the education fund does not "double pay" for participating students. In order to receive their high school diplomas upon completion of Early College, students must re-enroll at their high school during the final weeks of the spring semester.

Please see Appendix A for a fiscal summary of both the Dual Enrollment and Early College programs.

Trends in Voucher Usage

School year 2017 (SY17), encompassing summer 2016 through spring 2017, was the fourth year of expanded dual enrollment opportunities under Act 77. We are now able to compare data across five years, as displayed in the tables below. For instance, Table 1 compares the number of dual enrollment vouchers used from baseline, Year 1 of implementation, Year 2 of implementation, to SY17. This historical information provides preliminary data on the impact of the program, specifically the student participation trend.

The total number of vouchers used has increased substantially over the life of the initiative (see Figure 1, Table 1). The total number of vouchers used in SY17 (2660) was more than four times the number used in SY13 (633).

Table 1. Number of vouchers used by year and semester.

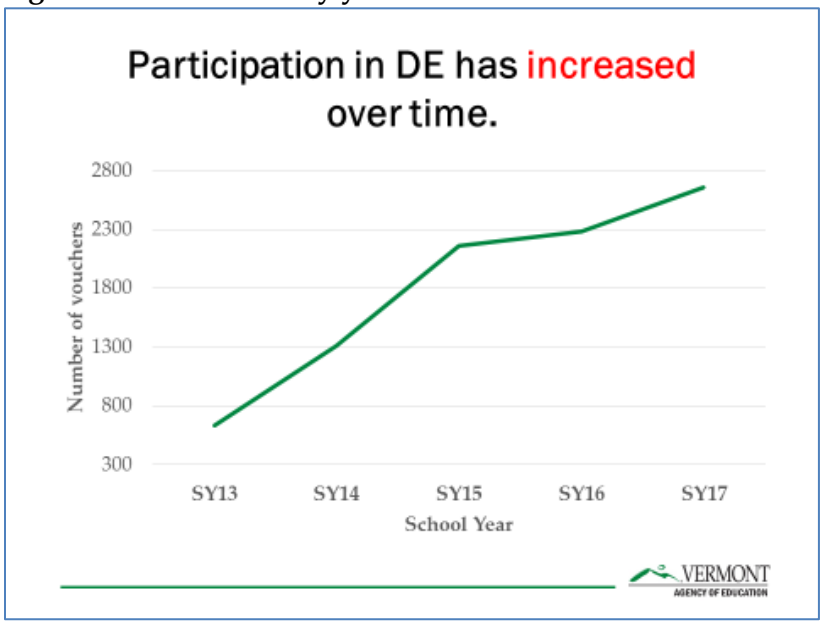
Semester	*SY13*[1]	*SY14*[2]	*SY15*	*SY16*	**SY17**[3]
Summer	409	474	529	530	599
Fall	31	249	722	720	810
Spring	193	585	913	1037	1202
TOTAL	633	1308	2164	2287	2660

[1]*Year preceding Act 77 implementation (baseline).*

[2]*Year one of Act 77 implementation.*

[3]*Includes 49 vouchers used for courses spanning the entire academic year (fall16 and spring 17), assigned to spring 17 semester.*

Figure 1. Voucher use by year.



We also compared data on voucher usage across different subgroups of students (see Table 2) to examine how student background factors relate to participation in the DE program.

Gender

As shown in Table 2 and Figure 2, voucher use by female students has far outpaced voucher use by males for every year of the Dual Enrollment initiative. Between SY15 and SY16, there looked to be a slight flattening of the gender disparity; but that proved an anomaly as the pronounced gender difference was present again between SY16 and SY17. Although participation in dual enrollment for *both* male and female students has increased over time, Vermont has a clear

equity gap when it comes to gender access. For SY17, the number of vouchers used by female students was 1.5 times greater than the number used by males. Figure 2 shows that, in order to achieve parity consistent with their actual proportion in the SY17 state population, 11th and 12th grade males would have had to use 339 more vouchers.

Table 2. Voucher use by student demographics and year.

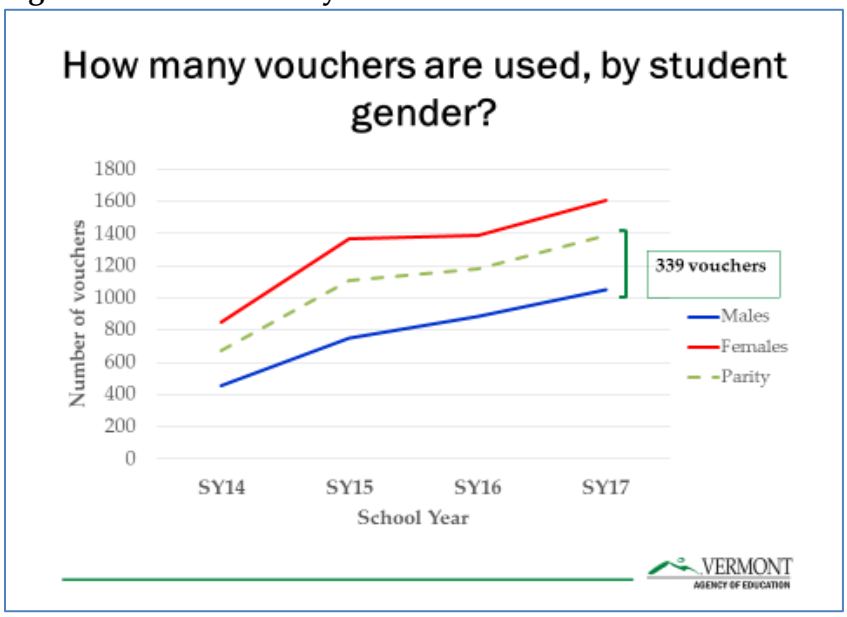
	SY13	*SY14*	*SY15*	*SY16*	*SY17*
Female	149	850	1371	1391	1609
Male	75	454	749	884	1051
Did not choose gender	--	*	44	12	0
FRL[1]	54	347	542	430	622
Special Education	*	41	76	60	83
Non-white	--	111	178	156	265
EL[2]	*	27	26	17	22

[1] *Students who qualify for free or reduced hot lunch*

[2] *English Language Learners*

**denotes < 11*

Figure 2. Voucher Use by Gender and Year.



Economic Disadvantage and Special Education

Voucher use by students qualifying for free or reduced lunch (FRL) and for students assigned to Individualized Education Plans (IEPs) under IDEA special education law have both increased over the life of the initiative (see Table 2; Figures 3 and 4). This is guardedly positive news in that participation rates for these historically underserved students have risen over time. However, Figure 3 indicates that the equity gap for economically disadvantaged students has *grown* during the past four years. Specifically, students qualifying for FRL would have had to use 186 more vouchers in SY17 in order to achieve parity in terms of their existing proportion in the statewide 11th-12th grade population. Actual voucher use (n=622) was 77% of parity. In SY14, actual voucher use was 85% of parity.

Figure 3. Voucher Use by Student Economic Disadvantage and Year.

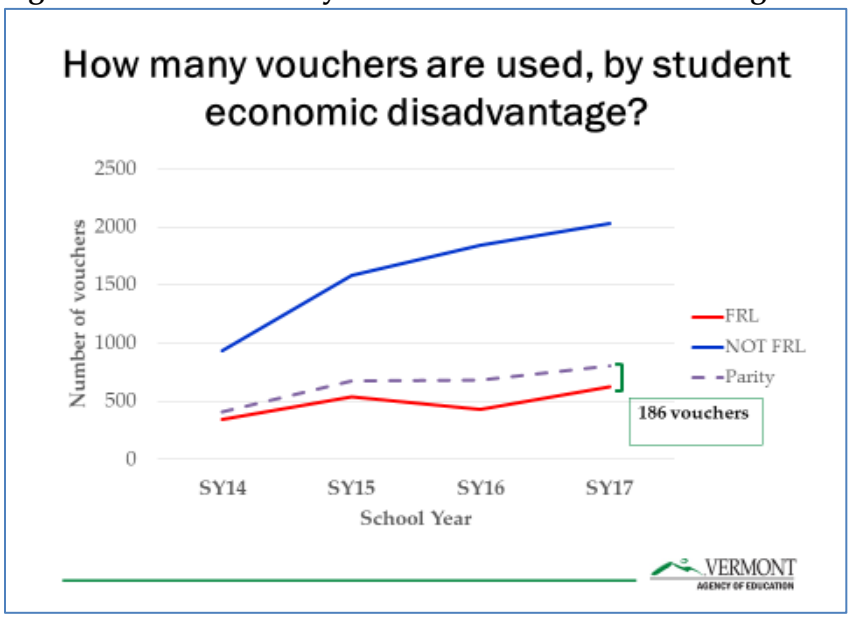


Figure 4. Voucher Use by Student IEP Status and Year.

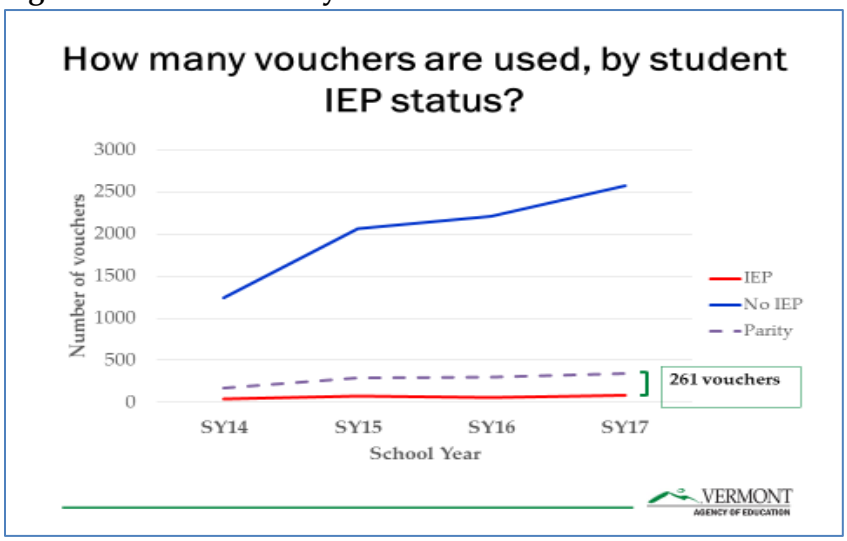
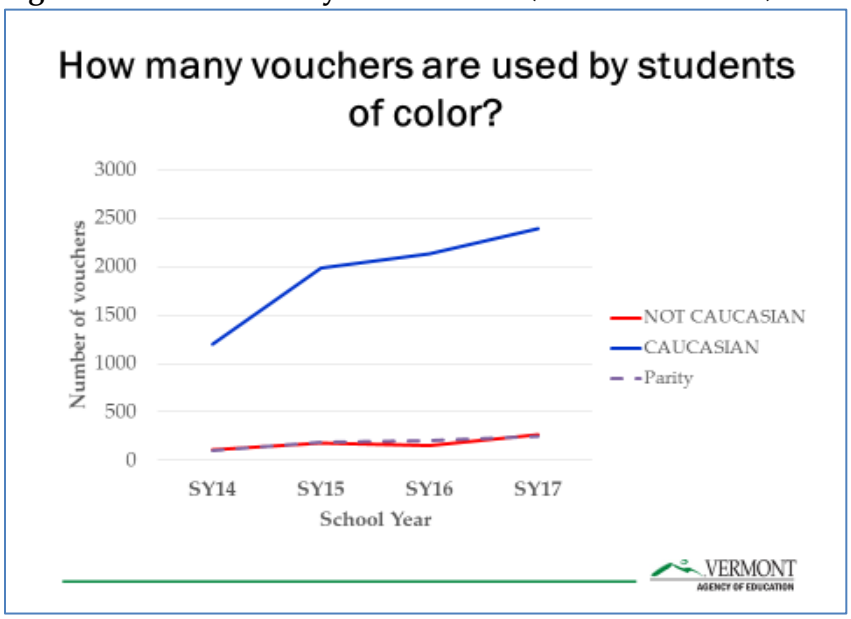


Figure 4 demonstrates that Vermont is not equitably serving its students on IEPs. In fact, in SY17 students qualifying for IEPs would have had to use 261 more vouchers in order to achieve population parity in dual enrollment participation. This is concerning, as colleges and universities offer a variety of learning supports for students in order to comply with the federal Americans with Disabilities Act (ADA). Historically, more students with special needs are now able to access and complete higher education than ever before.

Racial Disparity

Interestingly, Figure 5 indicates that Vermont has done well in serving students of color through the dual enrollment program, throughout its implementation. A much smaller number of students of color participate in dual enrollment than do white students, but the overall pattern for dual enrollment tracks strongly with the state's 11th and 12th grade population at large.

Figure 5. Voucher Use by Racial Status (White/Not White).



English Language Learners

The number of vouchers used by students designated as English Language Learners (EL) continues to be very low. Table 2 shows the number of students who simultaneously qualify for EL and enroll in dual enrollment in the same school year. Widening the timeframe to capture students after they test out of EL services may increase the number captured in our analyses. At present, the AOE is discussing the best timeframe to employ to meet requirements for the ESSA state plan.

Summary

Overall, the patterns depicted in Table 2 and Figures 2 through 4 are very troubling. They suggest considerable equity gaps in dual enrollment participation based on gender, economic disadvantage, and special education status. A critical goal of dual enrollment legislation was to

give students whose parents may not have attended college a successful college experience while still in high school, so that the students understand that they can do college-level work and realize some of the opportunities available in college. Ensuring that low income, "first generation" students, particularly males, and students with disabilities are accessing dual enrollment is critical to closing the opportunity gap and ensuring that all Vermont students can take advantage of postsecondary opportunities leading to higher skill, higher wage futures.

Significant work is needed to understand better why males, students qualifying for FRL and students with special education identification are lagging behind in terms of dual enrollment participation. **As a state, we have an obligation to ensure equity of access for all students, particularly when it comes to something as critical as state-funded dual enrollment.** In addition, we must ensure that all students are ready to participate in college level courses should they choose to and that they have the tools and resources to succeed.

Postsecondary Enrollment

An important indicator of the success of Vermont's state-funded Dual Enrollment program is whether it has an impact on actual postsecondary enrollment. After all, the primary reason for our investment in this program and other components of Act 77 is to bring about an increase in the percent of students who actually attain a postsecondary credential. Although we do not have the type of data nor the proper research design at initial implementation to determine a *causal* link between DE and postsecondary enrollment, we can look at expected associations in the data. How many students who participate in dual enrollment go on to enroll in college? How does this number change over time? In addition, how does this trend look when we break it down by student background factors (i.e., equity lens)?

To determine which students have enrolled in college (primarily two- and four-year programs) we use data from the National Student Clearinghouse (NSC). As stated on the NSC website, "more than 3,600 colleges and universities participate in the Clearinghouse, reporting enrollment and degree information…regularly throughout the year." In addition, 98% of all students in public and private U.S. postsecondary institutions participate in this clearinghouse.

Broken down by each semester of initial dual enrollment participation, between 61% and 76% of students who use DE vouchers enrolled in college within 12 months after graduating from high school. Table 3 (see below) summarizes semester-level data into school years, for ease of interpretation. These findings suggest that participation in dual enrollment is associated with actual postsecondary enrollment by the large majority of students who use the vouchers (see the shaded sections, Table 3). However, it is unclear from these data whether DE has a *causal effect* on the likelihood of enrolling, or whether students who use DE are simply those who are already more likely to enroll in college. Appendix B includes DE participation and postsecondary enrollment data by semester.

Table 3. Number and percent of students who participated in DE and enrolled in postsecondary education (as of Fall 16)[1].

1st semester in DE	Total # students in DE	Total # of DE students in NSC, 0-3 mos[2]	%	Total # of DE students in NSC, 0-12 mos[3]	%	Total # of DE students in NSC, 12+ mos	%
SPRING13	193	108	56%	118	61%	128	66%
SY14	1215	796	66%	849	70%	910	75%
SY15	1687	1124	67%	1200	71%	1238	73%
SY16[4]	1703	664	39%	678	40%	NA	NA

[1] *Postsecondary enrollment data obtained from National Student Clearinghouse Student Tracker (retrieved November 2016). Data include enrollment after high school graduation, between fall 2013 and fall 2016. Data represent students enrolled for at least 10 days, who did not withdraw from the postsecondary institution.*

[2] *Postsecondary enrollment within 0-3 months from high school graduation.*

[3] *Postsecondary enrollment within 0-12 months from high school graduation.*

[4] *Juniors who first participate in DE during SY16 not expected to enroll in postsecondary until Fall18.*

Table 4 (see below) presents the proportion of Vermont's population that enrolled in college and the proportion of those students who enrolled in college who had also participated in dual enrollment. For cohorts that graduated during SY13 through SY16, the proportion of graduates who enrolled in college within 12 months after graduation has changed little over time, with 54% to 56% postsecondary enrollment each year. However, the proportion of each cohort that enrolled in college who also used a DE enrollment voucher has increased each successive year. For example, of those students who graduated in SY13 and immediately (within 0-3 months) went on to college, 6% had used DE vouchers. Three years later, that number was 32%.

In other words, the proportion overall of Vermont's students enrolling in college has stayed the same despite an increasing investment in dual enrollment. Note that the state's investment in DE may reduce the cost of college for those who participate; however, this investment does not appear sufficient to increase the overall proportion of students enrolling in college. There are likely other macroeconomic factors, such as the high cost of tuition, that have a greater influence on college participation.

Table 4. Percent of VT graduation cohorts that are in NSC, by DE participation and length to enrollment.[1]

High School Grad Year	TOTAL # grads	# (%) in NSC, 0-3 months[2]	# (%) in NSC WHO PARTICIPATED IN DE	# (%) in NSC, 0-12 months[2]	# (%) in NSC WHO PARTICIPATED IN DE
2009	7199	3621 (50%)	--	3911 (54%)	--
2010	7188	3747 (52%)	--	4006 (56%)	--
2011	6913	3453 (50%)	--	3720 (54%)	--
2012	6876	3440 (50%)	--	3694 (54%)	--
2013	6531	3375 (52%)	203 (6%)	3635 (56%)	223 (6%)
2014	6403	3288 (51%)	489 (15%)	3492 (55%)	518 (15%)
2015	6315	3187 (50%)	937 (29%)	3510 (56%)	1015 (29%)
2016	6197	3212 (52%)	1030 (32%)	TBD	TBD

[1] *Postsecondary enrollment data obtained from National Student Clearinghouse Student Tracker (retrieved November 2016). Data include enrollment after high school graduation, between fall 2013 and fall 2016. Data represent students enrolled for at least 10 days, who did not withdraw from the postsecondary institution.*

[2] *Postsecondary enrollment within 0-3 months from high school graduation.*

[3] *Postsecondary enrollment within 0-12 months from high school graduation.*

[4] *Juniors who first participate in DE during SY16 not expected to enroll in postsecondary until Fall18.*

Gender and Economic Disadvantage

Students who use DE vouchers are also likely to go on to postsecondary education. This pattern remains when analyzed by student gender and FRL eligibility. As shown in Tables 5 and 6, a large majority of the students who identify as male or female and who use DE vouchers enroll in postsecondary education within 12 months of high school graduation. The data for males are particularly striking given that only 44-46% of *all* Vermont's 2013-2016 high school graduates who enrolled in college within 12 months were male (retrieved from Agency postsecondary data report).

During SY13 to SY16, the statewide percentage of graduates who enrolled in college and were female was 54-57%. Overall, the difference in percent postsecondary enrollment between male and female students statewide during this timeframe was about 8-13%. We see that about 2-6% more females who use DE vouchers go on to postsecondary education compared to male users of vouchers (see the shaded areas in Tables 5 and 6). These data are consistent with a beneficial effect of DE for males. Again, however, the data are *not* causal and we cannot rule out that those males already planning to go to college are those who participate in DE.

Table 5. Number and percent of males who participated in DE and enrolled in postsecondary education (as of Fall 16).

1st semester in DE	Total # students in DE	Total # of DE students in NSC, 0-3 mos	%	Total # of DE students in NSC, 0-12 mos	%	Total # of DE students in NSC, 12+ mos	%
SPRING13	68	30	44%	36	53%	41	60%
SY14	428	264	62%	289	68%	315	74%
SY15	606	405	67%	431	71%	446	74%
SY16	680	285	42%	290	43%	NA	NA

Table 6. Number and percent of females who participated in DE and enrolled in postsecondary education (as of Fall 16).

1st semester in DE	Total # students in DE	Total # of DE students in NSC, 0-3 mos	%	Total # of DE students in NSC, 0-12 mos	%	Total # of DE students in NSC, 12+ mos	%
SPRING13	125	78	62%	82	66%	87	70%
SY14	783	530	68%	558	71%	593	76%
SY15	1047	719	69%	769	73%	792	76%
SY16	1018	380	37%	388	38%	NA	NA

We see a similar pattern for students who come from limited economic means, with some caveats. As shown in Tables 7 and 8, 63-64% of students who qualify for FRL and participate in DE go on to enroll in college within a year, whereas 72-75% of students who do not qualify for FRL do. It is important to understand what is keeping our students from more economically disadvantaged backgrounds from enrolling at the same level as their less disadvantaged counterparts.

On the other hand, the rates of postsecondary enrollment for our FRL students who participate in DE are compelling as compared to trends for our overall FRL population. For instance, the 2017 NESSC Common Data Report shows that 36% of students qualifying for FRL in Vermont enrolled in college immediately after high school, whereas 58% of non-FRL students did. This represents a 22% difference in enrollment rates across FRL status, as compared to the 3-6% difference for Vermont's dual enrollment population (see Tables 5 and 6, values for 0-3 months enrollment). From this lens, dual enrollment in VT *may* be playing a role, albeit an imperfect

one, in creating opportunities for some less privileged Vermonters to enroll in postsecondary education. Again, we cannot draw any causal conclusions at this time. To evaluate better the potential effects of DE, we would need to understand more fully how and whether students who live in poverty who either do or don't participate in Dual Enrollment differ in other ways, such as better access to financial aid or having siblings enrolled in college.

Table 7. Number and percent of students eligible for FRL who participated in DE and enrolled in postsecondary education (as of Fall 16).

1st semester in DE	Total # students in DE	Total # of DE students in NSC, 0-3 mos	%	Total # of DE students in NSC, 0-12 mos	%	Total # of DE students in NSC, ever (thru fall 16)	%
SPRING13	193	108	56%	118	61%	128	66%
SY14	325	188	58%	208	64%	221	68%
SY15	415	246	59%	263	63%	266	64%
SY16	311	95	31%	97	31%	NA	NA

Table 8. Number and percent of students **not** eligible for FRL who participated in DE and enrolled in postsecondary education (as of Fall 16).

1st semester in DE	Total # students in DE	Total # of DE students in NSC, 0-3 mos	%	Total # of DE students in NSC, 0-12 mos	%	Total # of DE students in NSC, ever (thru fall 16)	%
SPRING13	193	108	56%	118	61%	128	66%
SY14	863	590	68%	622	72%	668	77%
SY15	1242	868	70%	927	75%	962	77%
SY16	1385	569	41%	581	42%	NA	NA

Participation by High Schools and Institutions of Higher Education

High Schools

Similar to the pattern for SY16, a mix of independent schools and public high schools participated in the program during SY17. In SY17, 77 high schools (including home study) participated in the program, as compared to 72 in SY15. Table 9 depicts the total number of vouchers used each school year for each high school with enough data to publically report. Table 10 summarizes, for SY17 only, the eligible head count for dual enrollment, the non-duplicated count for dual enrollment, the percent of eligible student participation in DE and the percent of students who took more than one dual enrollment course that year.

A striking finding is the wide variability across high schools in the rate of participation in dual enrollment (see Table 10). The data range from a high of 51% at West Rutland School to a handful of schools with numbers too small to report. In other words, whereas some of our high schools have upwards of ½ of their eligible students participating in the state-run dual enrollment program, a sizeable number have less than 15% participating. Additionally, there is widespread variability when it comes to the number of students who enroll in two dual enrollment courses, based on SY17 data. Table 10 shows that 50% of Danville's students who participated in the dual enrollment program during SY17 enrolled in more than one course, compared to 7% at Oxbow. It is also important to note that 14 schools had so few students participating each year that they could not be reported in these tables (see asterisks in Tables 9 and 10).

Moving forward, we need to understand better why students at some high schools participate more fully in the state-run dual enrollment program than students do at other schools. Does this have to do with curricular constraints or funding decisions at the local level? Does this reflect students' variable interest in these programs? We also need to understand why some students, although not a majority, take more than one course. The percentage of students taking advantage of the full, two-course tuition reimbursement has been rising each consecutive year of program implementation (7% in SY14 to 29% in SY17). Further, there is variability around the state with respect to how many students take two courses in the same year.

Higher Education

The number of colleges, universities and other institutions of higher education participating in dual enrollment has remained about the same over the past three school years, although participation has declined for Burlington College (now closed), Landmark College and Goddard. The mixture of both public and private institutions, as well as variability in size of campus and student body, provides a broad range of learning opportunities for students as well as expanded geographic reach for the dual enrollment program. As indicated in Table 11, the large majority of vouchers are used for dual enrollment courses at Community College of Vermont (58%), followed by the University of Vermont (19%), and the Vermont State Colleges (13%). Overall, 10% of the vouchers between SY14 and SY17 used were at private institutions of higher education.

Table 9. Number of vouchers used, by school and year.

SCHOOL	SY14	SY15	SY16	SY17	TOTAL (UNSUPPRESSED)
ARLINGTON MEMORIAL HIGH SCHOOL	*	*	*	13	27
BELLOWS FALLS UHS #27	*	*	32	40	88
BELLOWS FREE ACADEMY (ST ALBANS)	24	29	91	97	241
BELLOWS FREE ACADEMY HS (FAIRFAX)	19	29	41	55	144
BLACK RIVER US #39	*	*	14	*	34
BRATTLEBORO UHS #6	61	120	125	159	465
BURLINGTON SENIOR HIGH SCHOOL	85	67	83	96	331
BURR AND BURTON ACADEMY	17	53	53	48	171
CABOT SCHOOL	*	*	*	*	26
CANAAN SCHOOLS	*	*	*	15	27
CHAMPLAIN VALLEY UHS #15	48	104	121	117	390
CHELSEA ELEM HIGH SCHOOL	*	*	*	*	19
COLCHESTER HIGH SCHOOL	16	37	62	67	182
CRAFTSBURY SCHOOLS	*	12	*	11	32
DANVILLE SCHOOL	*	*	36	42	88
ENOSBURG FALLS MIDDLE-HIGH SCHOOL	11	31	43	41	126
ESSEX COMMUNITY ED CTR	69	59	115	94	337
FAIR HAVEN UHS #16	28	40	25	48	141
GREEN MOUNTAIN UHS #35	*	*	32	15	61
HARTFORD HIGH SCHOOL	15	17	17	64	113
HARWOOD UHS #19	34	36	51	34	155

HAZEN UHS #26	26	27	25	27	105
LAKE REGION UHS #24	45	55	36	71	207
LAMOILLE UHS #18	28	45	65	45	183
LELAND AND GRAY UHS #34	14	32	35	39	120
LYNDON INSTITUTE	26	72	14	29	141
MIDDLEBURY UNION HIGH SCHOOL	16	22	38	42	118
MILL RIVER US #40	25	22	35	35	117
MILTON HIGH SCHOOL	*	28	*	45	90
MISSISQUOI VALLEY UHS #7	22	46	37	57	162
MONTPELIER HIGH SCHOOL	16	31	15	30	92
MT ABRAHAM UHS #28	*	24	21	*	63
MT ANTHONY SR UHS #14	39	93	56	60	248
MT MANSFIELD USD #401B	50	48	36	46	180
NORTH COUNTRY UHS #22A	44	98	66	85	293
NORTHFIELD MIDDLE/HIGH SCHOOL	18	35	19	47	119
OTTER VALLEY UHS #8	*	*	22	26	78
OXBOW UHS #30	*	*	*	14	31
PEOPLES ACADEMY	23	52	44	47	166
POULTNEY HIGH SCHOOL	*	*	18	24	61
PROCTOR JR/SR HIGH SCHOOL	*	*	*	15	33
RANDOLPH UHS #2	18	43	42	27	130
RICHFORD JR/SR HIGH SCHOOL	*	*	30	28	65
RIVENDELL ACADEMY	*	*	*	*	21
ROCHESTER SCHOOL	*	*	*	*	19
RUTLAND HIGH SCHOOL	13	74	114	114	315
SO BURLINGTON HIGH SCHOOL	46	80	66	91	283
SO ROYALTON ELEM/HIGH SCHOOL	*	*	16	*	32
SPAULDING UHS #41	15	55	51	73	194
SPRINGFIELD HIGH SCHOOL	30	95	98	87	310

ST JOHNSBURY ACADEMY	*	*	*	*	20
STOWE MIDDLE/HIGH SCHOOL	*	13	*	16	48
THETFORD ACADEMY	*	*	12	17	36
TWIN VALLEY MIDDLE HIGH SCHOOL				28	28
TWINFIELD US #33	12	16	21	12	61
U32 UHS #32	18	53	38	39	148
VERGENNES UHS #5	12	42	38	40	132
WEST RUTLAND SCHOOL	14	19	31	45	109
WHITCOMB JR/SR HIGH SCHOOL	*	*	*		14
WILLIAMSTOWN MIDDLE/HIGH SCHOOL	*	*	*	*	31
WINDSOR HIGH SCHOOL	*	*	18	32	60
WINOOSKI HIGH SCHOOL	16	28	17	32	93
WOODSTOCK SR UHS #4	*	*	20	*	38

Notes:
High schools with information suppressed for all years not listed.
**denotes cell sizes <11 or complementary suppression of PII.*

Table 10. Eligible enrollment, % in dual enrollment, and % taking more than one dual enrollment course in SY17, by high school.

SCHOOL	SY17 11-12 ENROLLMT	SY17 # STUDENTS DE (non-duplicated)	% ENROLLED in DE	SY17 % >1 DE COURSE
ARLINGTON MEMORIAL HIGH SCHOOL	56	*	*	38%
BELLOWS FALLS UHS #27	125	25	20%	38%
BELLOWS FREE ACADEMY (ST ALBANS)	462	80	17%	18%
BELLOWS FREE ACADEMY HS (FAIRFAX)	152	43	28%	22%
BLACK RIVER US #39	50	*	*	*
BRATTLEBORO UHS #6	362	107	30%	33%
BURLINGTON SENIOR HIGH SCHOOL	476	67	14%	30%
BURR AND BURTON ACADEMY	301	37	12%	23%
CABOT SCHOOL	28	*	*	*
CANAAN SCHOOLS	36	*	*	*
CHAMPLAIN VALLEY UHS #15	613	91	15%	22%
CHELSEA ELEM HIGH SCHOOL	25	*	*	*
COLCHESTER HIGH SCHOOL	360	56	16%	16%
CRAFTSBURY SCHOOLS	41	*	*	*
DANVILLE SCHOOL	43	21	49%	50%
ENOSBURG FALLS MIDDLE-HIGH SCHOOL	168	30	18%	27%
ESSEX COMMUNITY ED CTR	634	78	12%	17%
FAIR HAVEN UHS #16	217	34	16%	29%
GREEN MOUNTAIN UHS #35	111	*	*	*
HARTFORD HIGH SCHOOL	265	53	20%	17%
HARWOOD UHS #19	246	22	9%	35%
HAZEN UHS #26	106	19	18%	30%

LAKE REGION UHS #24	194	46	24%	35%
LAMOILLE UHS #18	235	27	11%	40%
LELAND AND GRAY UHS #34	161	26	16%	33%
LYNDON INSTITUTE	238	19	8%	34%
MIDDLEBURY UNION HIGH SCHOOL	322	32	10%	24%
MILL RIVER US #40	171	26	15%	26%
MILTON HIGH SCHOOL	245	33	13%	27%
MISSISQUOI VALLEY UHS #7	266	38	14%	33%
MONTPELIER HIGH SCHOOL	147	27	18%	10%
MT ABRAHAM UHS #28	245	*	*	*
MT ANTHONY SR UHS #14	446	46	10%	23%
MT MANSFIELD USD #401B	199	34	17%	26%
NORTH COUNTRY UHS #22A	349	60	17%	29%
NORTHFIELD MIDDLE/HIGH SCHOOL	99	35	35%	26%
OTTER VALLEY UHS #8	174	19	11%	27%
OXBOW UHS #30	108	13	12%	7%
PEOPLES ACADEMY	117	31	26%	34%
POULTNEY HIGH SCHOOL	63	14	22%	42%
PROCTOR JR/SR HIGH SCHOOL	41	12	29%	20%
RANDOLPH UHS #2	124	20	16%	26%
RICHFORD JR/SR HIGH SCHOOL	67	18	27%	36%
RIVENDELL ACADEMY	54	*	*	*
ROCHESTER SCHOOL	20	*	*	*
RUTLAND HIGH SCHOOL	424	66	16%	42%
SO BURLINGTON HIGH SCHOOL	469	70	15%	23%
SO ROYALTON ELEM/HIGH SCHOOL	61	*	*	*
SPAULDING UHS #41	364	52	14%	29%
SPRINGFIELD HIGH SCHOOL	187	49	26%	44%
ST JOHNSBURY ACADEMY	306	*	*	*
STOWE MIDDLE/HIGH SCHOOL	121	13	11%	19%
THETFORD ACADEMY	124	15	12%	12%

TWIN VALLEY MIDDLE HIGH SCHOOL	82	17	21%		39%
TWINFIELD US #33	70	*	*		*
U32 UHS #32	287	28	10%		28%
VERGENNES UHS #5	312	30	10%		25%
WEST RUTLAND SCHOOL	49	25	51%		44%
WHITCOMB JR/SR HIGH SCHOOL	42	0	0%	NA	
WILLIAMSTOWN MIDDLE/HIGH SCHOOL	81	*	*		*
WINDSOR HIGH SCHOOL	115	20	17%		38%
WINOOSKI HIGH SCHOOL	97	22	23%		31%
WOODSTOCK SR UHS #4	173	*	*		*

Table 11 – Voucher Usage by Vermont Institutions of Higher Education.

INSTITUTION	SY14	SY15	SY16	S717	Grand Total	% total for all years	% total for SY17
Bennington College	*	21	17	15	55	1%	1%
Burlington College	40	16	13		69	1%	0%
Community College Vermont	723	1142	1410	1596	4871	58%	60%
Champlain College	12	15	*	11	47	1%	0%
College of St. Joseph	*	*	*	*	14	0%	0%
Castleton State Univ	17	119	102	85	323	4%	3%
Goddard College		15			15	0%	0%
Green Mountain College	11	13	*	*	32	0%	0%
Johnson State College	45	77	57	100	279	3%	4%
Landmark College		*	*		*	0%	0%
Lyndon State College	19	80	16	21	136	2%	1%
Marlboro College	22	42	27	69	160	2%	3%
New England Culinary Institute	37	50	31	14	132	2%	1%
Norwich University	12	36	17	24	89	1%	1%
Saint Michael's College		*	*	*	12	0%	0%
SIT Graduate Institute	30	40	44	45	159	2%	2%
Southern Vermont College		*	30	16	50	1%	1%
Sterling College		21	11	*	39	0%	0%
University of Vermont	317	401	390	450	1558	19%	17%
Vermont Tech College	17	61	100	195	373	4%	7%
Grand Total	1308	2164	2287	2660	8419		
% grand total	16%	26%	27%	32%			

In FY 16, several high schools collaborated with colleges to offer on-site dual enrollment opportunities (see Table 12), sometimes called "concurrent enrollment" nationally. When a college course is offered on the high school campus, the public postsecondary institution retains authority to determine course content and works with the high school to select, monitor, support, and evaluate instructors. On-site dual enrollment increased in FY16 with eight colleges and 27 high schools (as compared to FY15 with four colleges and 22 high schools) offering college courses at the high school. We will need to monitor student outcomes as they relate to location of dual enrollment course in the future, to ensure all students get the full benefit. In subsequent analyses, we also need to evaluate if postsecondary enrollment rates are comparable for students who participate in DE at a college compared to DE on a high school campus.

Table 12 – Voucher Usage, On-Site Dual Enrollment (fall 15 & spring 16)

	COLLEGE								
HIGH SCHOOL	**CCV**	**CSC**	**LSC**	**Marlboro**	**SIT**	**Sterling**	**SVC**	**VTC**	**Total**
BELLOWS FALLS UHS	64	-	-	-	-	-	-	-	64
BELLOWS FREE ACADEMY	53	-	-	-	-	-	-	-	53
BRATTLEBORO UHS	15	1	-	20	44	-	21	11	112
BURR AND BURTON	-	22	-	-	-	-	-	-	22
COLCHESTER HS	29	-	-	-	-	-	-	-	29
CHAMPLAIN VALLEY UHS	19	-	-	-	-	-	-	-	19
DANVILLE SCHOOL	41	-	-	-	-	-	-	-	41
ENOSBURG FALLS M/HS	6	-	-	-		-	-	-	6
FAIR HAVEN UHS	-	9	-	-	-	-	-	-	9
GREEN MOUNTAIN UHS	13	-	-	-	-	-	-	-	13
LAKE REGION UHS	11	-	-	-	-	-	-	-	11
LAMOILLE UHS	4	-	-	-	-	11	-	-	15
LELAND & GRAY UHS	31	-	--	-	-	-	-	-	31
LYNDON INSTITUTE	7	-	3	-	-	-	-	-	10
MISSISQUOI VALLEY UHS	14	-	-	-	-	-	-	-	14
NORTH COUNTRY UHS	14	-	-	-	-	-	-	17	31
NORTHFIELD M/HS	7	-	-	-	-	-	-	-	7
OTTER VALLEY UHS	-	14	-	-	-	-	-	-	14
PEOPLES ACADEMY	12	-	-	-	-	-	-	-	12
POULTNEY HS	3	4	-	-	-	-	-	-	7
RANDOLPH UHS	8	-	-	-	-	-	-	-	8
RICHFORD JR/SR HS	3	-	-	-	-	-	-	-	3
RUTLAND HS	-	28	-	-	-	-	-	55	83
SPRINGFIELD HS	105	-	-	-	-	-	-	-	105
U32 UHS	7	-	-	-	-	-	-	-	7
VERGENNES UHS	23	-	-	-	-	-	-	-	23
WEST RUTLAND SCHOOL	8	-	-	-	-	-	-	-	8
Grand Total	**497**	**78**	**3**	**20**	**44**	**11**	**21**	**83**	**757**

Moving Forward: Digging Deeper into Vermont's Return on Investment

In enacting Act 77, the legislature made clear that increasing access to dual enrollment opportunities for ALL Vermont students was a priority. As discussed here and in previous reports, the first full year of expanded access to the program resulted in more high schools, colleges and universities being involved and more students having access to college credit-bearing learning experiences. This expansion coincided with significant growth in student voucher usage during the same timeframe. **However, stark differences in student participation based on gender, FRL, and special education status cannot go ignored.**

In addition, increased access is not the only measure of import as we also care deeply that students are both ready for the experience *and* successfully complete the courses they enter. As we move forward in further implementing and evaluating Act 77 initiatives, the Agency of Education will track and report on the following additional indicators:

- Student performance (i.e., grades) on dual enrollment coursework
- Postsecondary retention (one-year) and persistence rates for students participating in dual enrollment, as compared to non-participating students

Contingent upon Agency staffing and bandwidth, we plan to run more sophisticated analyses to better understand the potential impact of dual enrollment participation in Vermont students' lives and choices after high school. Learning more about both the immediate and long-term outcomes associated with dual enrollment participation will paint a fuller picture regarding the success of this program, including how useful it is in the lives of Vermont students and the return on our state dollars with respect to increased postsecondary attainment, a more skilled workforce, and economic vitality statewide.

As the long-term data patterns regarding Dual Enrollment begin to emerge, it is now time to re-think the type and magnitude of outcomes that would signal successful investment of taxpayer dollars in this initiative. The Agency urges the General Assembly to consider adoption of a more stringent results-based accountability (RBA) framework with respect to both the Dual Enrollment and Early College programs.

Appendix A
Fiscal Summary

Dual Enrollment Summary					
Fiscal Year	EF	Next Gen (GF)	Total	Annual Change	% Difference
2015	480,936	480,936[1]	961,872		
2016	681,835	600,000	1,281,835	319,963	25%
2017	883,419	600,000	1,483,419	201,584	14%

Early College Summary					
Fiscal Year	EF	Next Gen (GF)	Total	Annual Change	% Difference
2015	306,012	0	306,012		
2016	1,252,012	0	1,252,012	946,000	76%
2017	1,276,950	0	1,276,950[2]	24,938	2%

[1]Not appropriated to AOE. Payments made by Vermont State Colleges.
[2] $628,225 of FY17 total cost was paid in FY18

Appendix B

DE Vouchers and Postsecondary Enrollment Data by Semester

Table B1. Number and percent of students who participated in DE and enrolled in postsecondary education (as of Fall 16).

1st semester in DE	Total # students in DE	Total # of DE students in NSC, 0-3 mos	%	Total # of DE students in NSC, 0-12 mos	%	Total # of DE students in NSC, 12+ mos	%
SPRING13	193	108	56%	118	61%	128	66%
SUMMER13	456	297	65%	321	70%	346	76%
FALL13	240	143	60%	159	66%	174	73%
SPRING14	519	356	69%	369	71%	390	75%
SUMMER14	420	296	70%	318	76%	329	78%
FALL14	634	434	68%	461	73%	478	75%
SPRING15	633	394	62%	421	67%	431	68%
SUMMER15	386	164	42%	167	43%	--	
FALL15	612	252	41%	261	43%	--	
SPRING16	705	248	35%	250	35%	--	

Table B2. Number and percent of males who participated in DE and enrolled in postsecondary education (as of Fall 16).

1st semester in DE	Total # students in DE	Total # of DE students in NSC, 0-3 mos	%	Total # of DE students in NSC, 0-12 mos	%	Total # of DE students in NSC, 12+ mos	%
SPRING13	68	30	44%	36	53%	41	60%
SUMMER13	176	110	63%	123	70%	135	77%
FALL13	91	53	58%	59	65%	65	71%
SPRING14	161	101	63%	107	66%	115	71%
SUMMER14	163	111	68%	119	73%	123	75%
FALL14	217	148	68%	157	72%	162	75%
SPRING15	226	146	65%	155	69%	161	71%
SUMMER15	148	75	51%	76	51%	--	
FALL15	254	102	40%	105	41%	--	
SPRING16	278	108	39%	109	39%	--	

Table B3. Number and percent of females who participated in DE and enrolled in postsecondary education (as of Fall 16).

1st semester in DE	Total # students in DE	Total # of DE students in NSC, 0-3 mos	%	Total # of DE students in NSC, 0-12 mos	%	Total # of DE students in NSC, 12+ mos	%
SPRING13	125	78	62%	82	66%	87	70%
SUMMER13	280	187	67%	198	71%	211	75%
FALL13	149	90	60%	100	67%	109	73%
SPRING14	354	253	71%	260	73%	273	77%
SUMMER14	257	185	72%	199	77%	206	80%
FALL14	399	286	72%	304	76%	316	79%
SPRING15	391	248	63%	266	68%	270	0%
SUMMER15	238	89	37%	91	38%	--	
FALL15	358	151	42%	156	44%	--	
SPRING16	422	140	33%	141	33%	--	

Table B4. Number and percent of students eligible for FRL who participated in DE and enrolled in postsecondary education (as of Fall 16).

1st semester in DE	Total # students in DE	Total # of DE students in NSC, 0-3 mos	%	Total # of DE students in NSC, 0-12 mos	%	Total # of DE students in NSC, 12+ mos	%
SPRING13	44	26	59%	29	66%	29	66%
SUMMER13	99	58	59%	66	67%	69	70%
FALL13	67	32	48%	41	61%	47	70%
SPRING14	159	98	62%	101	64%	105	66%
SUMMER14	97	66	68%	69	71%	70	72%
FALL14	129	83	64%	90	70%	92	71%
SPRING15	189	97	51%	104	55%	104	55%
SUMMER15	81	17	21%	17	21%	17	21%
FALL15	68	31	46%	32	47%	32	47%
SPRING16	162	47	29%	48	30%	48	30%

Table B5. Number and percent of students not eligible for FRL who participated in DE and enrolled in postsecondary education (as of Fall 16).

1st semester in DE	Total # students in DE	Total # of DE students in NSC, 0-3 mos	%	Total # of DE students in NSC, 0-12 mos	%	Total # of DE students in NSC, 12+ mos	%
SPRING13	145	81	56%	88	61%	98	68%
SUMMER13	349	233	67%	248	71%	270	77%
FALL13	167	108	65%	115	69%	123	74%
SPRING14	347	249	72%	259	75%	275	79%
SUMMER14	311	221	71%	240	77%	250	80%
FALL14	487	350	72%	370	76%	385	79%
SPRING15	444	297	67%	317	71%	327	74%
SUMMER15	305	147	48%	150	49%	150	49%
FALL15	542	221	41%	229	42%	229	42%
SPRING16	538	201	37%	202	38%	202	38%