



Colorado Community College System

Academic Year 2015-2016 High School Students Attending CCCS Colleges

(Concurrent, ASCENT, and Other Dual Enrollment Programs/Students)

April 2017



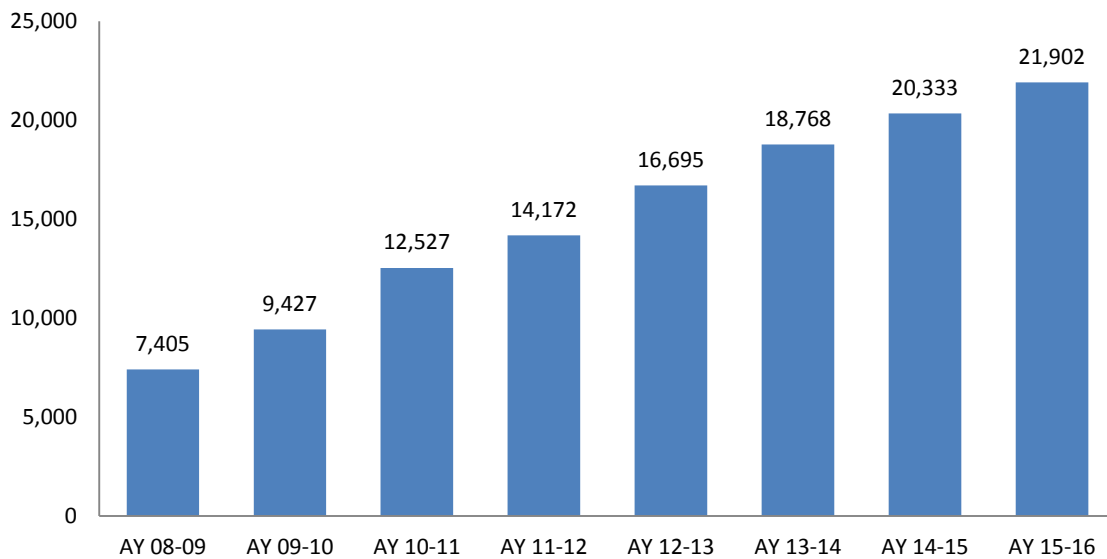
Dual or concurrent enrollment programs refer to programs in which students earn college-level credits from institutions of higher education while still enrolled in high school. In Colorado the term "concurrent enrollment" also refers to a specific program in state law that establishes parameters for high school students enrolling in institutions of higher education. However, high school students also earn college credits from higher education institutions, including Colorado Community College System (CCCS) institutions, outside the parameters of this law. This report first provides a broad overview of high school students enrolled in CCCS institutions at the system level and then delves into institution-level and academic outcome information. The report reveals the following about high school enrollment at CCCS institutions in 2015-16.

- 21,902 unique high school students enrolled in CCCS institutions in 2015-16 through either the state-created “concurrent enrollment” program, the state-created “Accelerating Students through Concurrent Enrollment” (ASCENT) program, third-party payer arrangements, individual registration and payment, or a combination of these avenues. When enrollment in multiple institutions by individual students is taken into account, CCCS institutions enrolled 22,117 students.
- High school enrollment at CCCS colleges increased 7.7 percent over last year compared to an increase of 2.5 percent in public high school enrollment.
- Of the various avenues for high school students to earn college credits at CCCS institutions, the state-created concurrent enrollment program accounted for the vast majority (97.1 percent) of CCCS high school students.
- High school students were awarded 1,406 credentials, including 1,126 certificates and 280 associate degrees, and the proportion of high school students earning a post-secondary credential increased from 5 percent last year to 5.4 percent.
- 92.9 percent of total course completions resulted in a successful outcome; the completion rate for career and technical education courses was 95.1 percent.
- High school students averaged 8.5 credit hours over the course of the academic year and took an average of 2.8 courses per student.
- By taking advantage of concurrent enrollment and ASCENT, Colorado families saved over \$22.5 million in tuition costs in 2015-16.

System Overview of High School Students

In 2015-16, 21,902 high school students enrolled in CCCS courses that award credit toward a college degree or certificate (Figure 1).¹ This number is an increase of 54.5 percent from the number of high school students enrolled five years ago and an increase of 7.7 percent over last year. In comparison, the number of students enrolled in public high schools increased 2.5 percent from Fall 2014 to Fall 2015. High school students attempted 4.6 percent more credit hours than last year and accounted for 12.3 percent of total credit hours at CCCS colleges.

Figure 1. Number of Unique High School Students Enrolled in College Courses at CCCS Institutions



High school students were responsible for 61,425 course enrollments in 2015-16 – an increase of 5.1 percent over last year – and averaged 2.8 courses per student. Thirty-

¹ When arrayed by CCCS institution, the number of high school students totals 22,117. The difference between the 21,902 and the 22,117 is enrollment at multiple institutions: 215 high school students were enrolled in more than one CCCS institution. The data source for numbers of high school students is college SURDS student course enrollment files submitted to the Colorado Department of Higher Education.

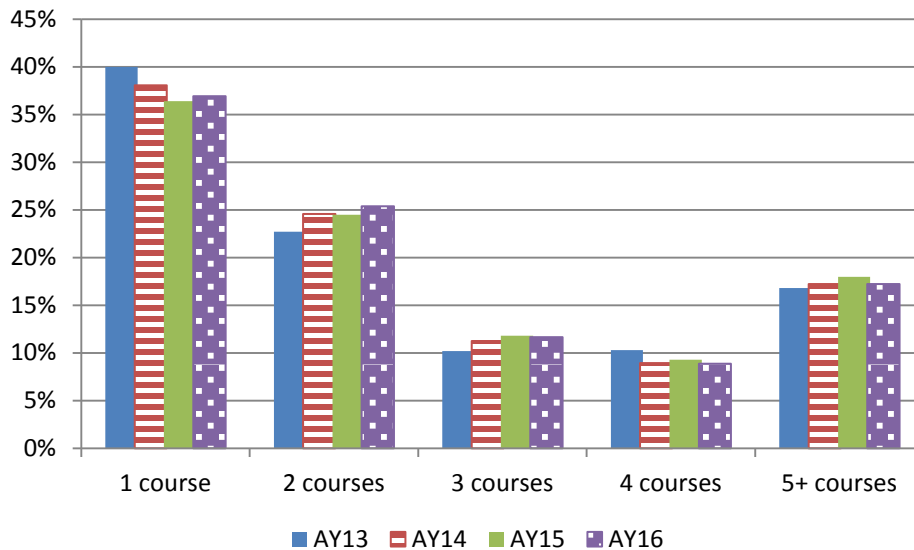


seven percent of high school students enrolled in one course, while 17.2 percent enrolled in five or more courses (Figure 2).

Figure 2. High School Students by Number of Courses Enrolled

	1 course	2 courses	3 courses	4 courses	5+ courses
# of high school students	8,083	5,558	2,553	1,941	3,767
% of high school students	36.9%	25.4%	11.7%	8.9%	17.2%

Figure 3. Course Enrollments by High School Students, AY 2013 through AY 2016



Participation by program. Colorado law provides two programs to pave the way for high school students to earn college credits from CCCS institutions while still attending high school: the concurrent enrollment program and the “Accelerating Students through Concurrent Enrollment” (ASCENT) program. High school students may attend CCCS institutions and earn college credits outside the parameters of these two programs as well.

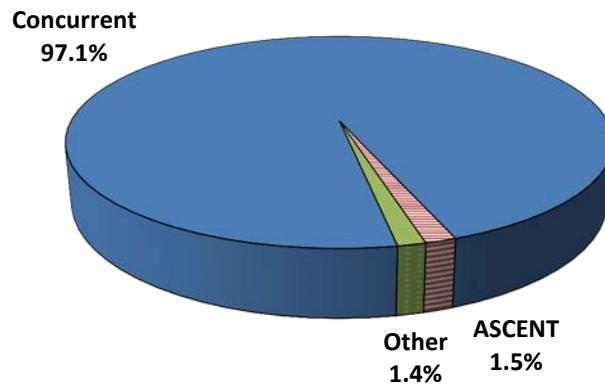


The ***concurrent enrollment program*** is the method most utilized by high school students, accounting for 97.1 percent of the high school students taking college-level courses for credit at CCCS institutions. In general, the program applies to students in public high schools and charter high schools. A student must receive permission from his or her local education agency to participate in the program. Local education agencies enter into agreements with colleges and pay the tuition associated with the courses at an agreed-upon rate. Colleges also receive state funding for these students. Thus, high school and charter high school students are able to earn college-level credits at little or no cost. Concurrent enrollment is available for both academic and career and technical education courses (CTE), and credits earned count toward high school graduation and a college degree or certificate.

The ASCENT program accounted for 1.5 percent of CCCS high school students in 2015-16. The parameters in law for this program are more prescriptive than the concurrent enrollment program because the state funds ASCENT students for an additional year of K-12 education. The number of participants in the ASCENT program is limited by the state. A student is eligible only if he or she will complete or is on schedule to complete twelve credit hours of course work by the end of the twelfth grade; eligibility is limited to the year immediately succeeding the year a student is enrolled in the twelfth grade. As with the concurrent enrollment program, both academic and career and technical education course credits can be earned through the ASCENT program.

The remaining 1.4 percent of high school students took courses outside of the auspices of the concurrent enrollment or ASCENT programs. Instead, this group of students independently registered and paid for courses at a community college or was involved in a program where there was a third-party payer.

Figure 4. High School Students by Program Type²



Credentials earned. During 2015-16, 1,180 high school students who were enrolled in a CCCS institution earned 1,406 credentials (Figure 5). The number of credentials is an increase of 24.8 percent over the 1,127 credentials awarded in 2014-15. Eighty percent of credentials awarded were certificates, and the vast majority of these certificates (94.9 percent) were in the one-year-certificate category. Of the 224 associate of arts and associate of science (AA/AS) degrees awarded, 36 were awarded with designation, including eight in math, seven each in business and psychology, five in history, two each in criminal justice and elementary education, and one each in anthropology, biology, economics, political science, and Spanish. The proportion of total high school students earning a credential increased from 4 percent in 2012-13 to 5.4 percent in 2015-16.

² The sum of the students who contributed to this chart is greater than the number of total high school students because some students participate through multiple programs. Students are counted in each program in which they participate.

Figure 5. Number and Type of Credentials Earned by High School Students

Award	2015-16 Number of Awards	2015-16 Percent of Total	2014-15 Number of Awards	% Change: AY15 to AY16
1-yr Certificate	1,069	94.9%	836	27.9%
2-yr Certificate	57	5.1%	64	-10.9%
Total Certificates	1,126	80.1%	900	25.1%
Associate of Applied Science (AAS)	15	5.4%	9	66.7%
Associate of General Studies (AGS)	41	14.6%	31	32.3%
Associate of Arts (AA)	142	50.7%	107	32.7%
Associate of Science (AS)	82	29.3%	80	2.5%
Total Degrees	280	19.9%	227	23.3%
Total Credentials	1,406	100.0%	1,127	24.8%

Most students earned one credential, but 12.4 percent earned more than one credential, as illustrated in Figure 6. The top five programs for credentials were nurse aide (18.3 percent of total credentials), business administration and management (10.2 percent), associate of arts degree (10.1 percent), welding technology (10.0 percent), and automotive mechanics (8.4 percent). These five programs accounted for 57 percent of credentials earned by high school students. Four of the five programs were also in the top five last year.

Figure 6. Number of Students by Number of Awards

	1 award	2 awards	3 awards	4 awards	5+ awards	Total
# of Students	1,034	109	15	10	12	1,180
% of Degree Students	87.6%	9.2%	1.3%	0.8%	1.0%	100.0%



Demographics. More female high school students enrolled in college courses than male students, although there were more males in public high schools in Fall 2015 (Figure 7). A higher proportion of high school enrollees at CCCS institutions were white (63.3 percent) than the overall population of public high school students (55.4 percent). Although students of color were underrepresented among CCCS high school students, the number of students of color increased 12.9 percent from a year ago, with Hispanic high school students increasing 16.4 percent, and the proportion of students of color increased one percentage point.³ Figure 7 compares gender and the racial/ethnic background of students in Colorado public high schools with that of high school students in CCCS colleges, while Figure 8 provides a more detailed comparison of race/ethnicity between the two.⁴

Figure 7. CCCS High School Students by Gender and Race/Ethnicity

	Fall 2015 Public HS Students	AY 2016 CCCS HS Students
Gender		
Female	49.0%	53.9%
Male	51.0%	46.1%

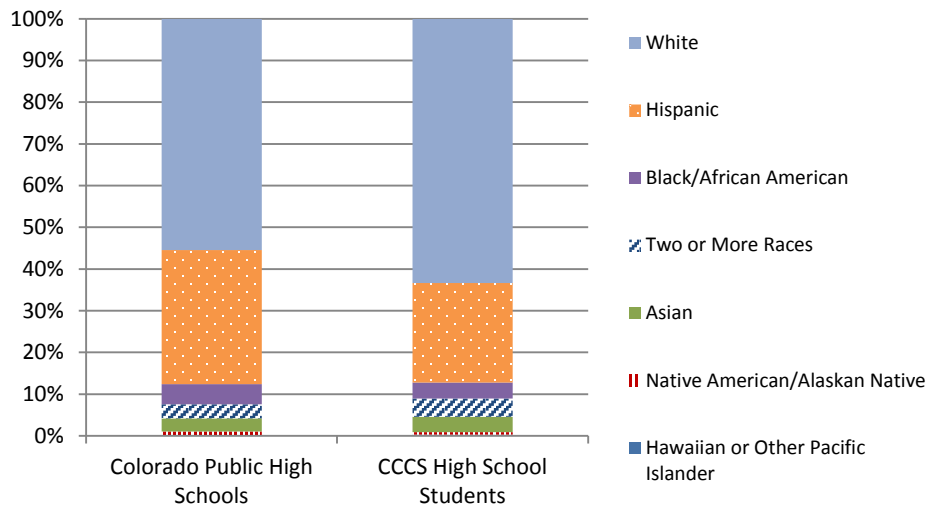
	Fall 2015 Public HS Students	AY 2016 CCCS HS Students
Race/Ethnicity		
White	55.4%	63.3%
Students of Color	44.6%	36.7%

CCCS calculation based solely on students of color and white population; students of unknown race/ethnicity and international students are excluded

³ “Students of color” includes Asian, Black/African American, Hawaiian/Pacific Islander, Hispanic, Multiple Race, and Native American/Alaska Native students.

⁴ Please note data differences: all public high school students have a reported race/ethnicity, according to data published by the Colorado Department of Education (CDE), whereas race/ethnicity is missing for 9.5 percent of high school students enrolled in CCCS colleges. The 9.5 percent includes international or nonresident alien, students (about 20 percent of the total unknown students). Under IPEDS reporting rules, nonresident alien students are classified as such, rather than with a specific race/ethnicity. Lack of race/ethnicity data for all CCCS high school students may affect the proportions in Figures 7 and 8.

Figure 8. Comparison of Race/Ethnicity: Students at Public High Schools and CCCS Colleges

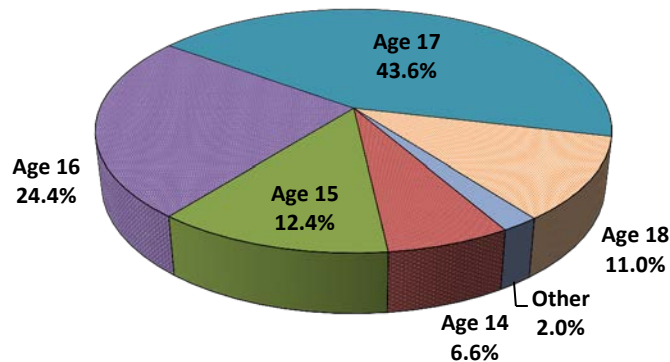


Notable were the marked increases in students of color at Pueblo Community College (56.6 percent), Arapahoe Community College (35.1 percent), and Front Range Community College (24.4 percent). The Community College of Denver, Community College of Aurora, and Trinidad State Junior College were the top three colleges in the proportion of high school students of color. These three colleges accounted for 43.5 percent of the high school students of color attending CCCS institutions. The Denver, Aurora, and Trinidad school districts each have high school populations of students of color that exceed 80 percent.

Seventeen was the predominant age for high school students attending CCCS colleges. Forty-four percent of students were seventeen on October 1, 2015, while 24.4 percent were sixteen years of age.⁵

⁵ Data for the age calculation was extracted from Banner rather than SURDS files. Thus, the universe of students may not exactly match other data in the report and there is some duplication of students across colleges. Age is calculated on October 1 because October 1 is the date for determining whether a child is eligible (six years of age) for first grade.

Figure 9. High School Students by Age



Parents of high school students tended to be college graduates at higher rates than parents of CCCS students overall. Forty-eight percent of high school students enrolled in a CCCS college reported that they were first generation college students – that is, neither parent had earned a bachelor’s degree. For CCCS students overall, 55.2 percent of students reported being first generation college students.⁶

Participation by term. More high school students were registered for college courses in the Spring term than in the Summer or Fall terms (Figure 10). Similarly, the Spring term accounted for the highest number of credit hours. College courses offered in high schools on a year-long basis help explain the higher Spring numbers: students in these courses are typically registered in the Spring so that the terms of registration and grading are the same. Systemwide, students carried an average of 8.5 credit hours over the course of the academic year.

⁶ These percentages exclude students who did not respond to the question. For high school students, 1.2 percent of students were not included in the calculation; for CCCS overall, 6.0 percent of students were excluded. As with age, these statistics contain some duplication of students across colleges and are from data extracted from Banner rather than SURDS.

Figure 10. Number of Students, Attempted Credit Hours, and Average Attempted Credit Hours by Dual Enrollment Program

Program	Summer	Fall	Spring	Total
Concurrent Students*	201	13,699	17,335	21,377
ASCENT Students*	32	321	271	338
Other Students*	85	150	138	307
Total Students by Term*	318	14,167	17,740	21,902
Concurrent Attempted Credit Hours	756	74,388	101,498	176,642
ASCENT Attempted Credit Hours	179	4,360	3,496	8,035
Other Attempted Credit Hours	380	1,002	1,088	2,470
Total Attempted Credit Hours by Term	1,315	79,749	106,082	187,146
Concurrent Credit Hours/Student	3.8	5.4	5.9	8.3
ASCENT Credit Hours/Student	5.6	13.6	12.9	23.8
Other Credit Hours/Student	4.5	6.7	7.9	8.0
Average Attempted Credit Hours by Term	4.1	5.6	6.0	8.5

*Numbers may not sum down or across because of duplication of students between programs and across terms.

Seventy-one percent of high school students who enrolled in Fall term also enrolled in Spring term. Forty-three percent of students enrolled in Spring term were not registered the previous Fall.

Programs and courses of study. Of students who identified a specific program of study, 60.9 percent reported an AA or AS degree as their intended program of study, while 8.7 percent indicated that an associate of general studies (AGS) degree was their desired outcome. The most predominant programs following these liberal arts and general studies degree programs were business administration and management, automotive mechanics technology, and welding technology.⁷ These programs accounted for about three-quarters of the intended programs of study indicated by students.

⁷ A specific program of study was indicated for about 60 percent of high school students.



Fifty-four percent of courses taken by high school students in 2015-16 were general education courses guaranteed to transfer to public colleges and universities in Colorado (gtPathways courses).⁸ This number is an increase of three percentage points over last year. The six courses in which students most frequently matriculated – all of which are gtPathways courses – were English 121, Math 121, English 122, Literature 115, Psychology 101, and Communication 115. These courses accounted for about one-quarter of student course enrollments. Slightly over one-third of courses taken by high school students were career and technical education (CTE) courses.

A small proportion – 4.3 percent – of courses taken by high school students were remedial, basic skills, or supplemental academic instruction courses.⁹ Math was the predominant developmental subject taken with 61 percent of these course enrollments. The course with the highest number of developmental enrollments was College Composition and Reading 92, with 31.7 percent of developmental course enrollments, followed by Math 55, with 26.6 percent of developmental course enrollments. Nine percent of CCCS high school students enrolled in one or more remedial courses; 35.7 percent of these students only took developmental education courses.

Enrollment in a four-year college. In Fall 2016, one-quarter of CCCS high school students in 2015-16, or 5,475 students, enrolled in a four-year college.¹⁰ Colorado State University-Fort Collins was the most popular destination, with 14.6 percent of college enrollees, followed by the University of Colorado Boulder, with 11.5 percent of college enrollees. The top six destinations of CCCS high school students are contained in

⁸ Certain grade requirements must be met; not all courses are accepted for some degrees.

⁹ Advancing Academic Achievement (AAA) course enrollments are included in these numbers.

¹⁰ This statistic is based on a submission to the National Student Clearinghouse (NSC), a nonprofit organization that provides educational reporting, data exchange, verification, and research services. More than 3,600 colleges and universities, enrolling 98 percent of students in public and private higher education institutions in the U.S., report enrollment information to the NSC. The match rate for the NSC submission was 83.7 percent.



Figure 11. About three-quarters of the college-enrolled high school students attended college in Colorado; Arizona followed in popularity with 2.5 percent of the students.

Figure 11. Top Six Colleges for High School Students Enrolling in Four-Year Colleges

Four-Year College Destination	Number of Students	Percent of Total
Colorado State University - Fort Collins	801	14.6%
University of Colorado Boulder	631	11.5%
University of Colorado Denver	558	10.2%
Metropolitan State University of Denver	394	7.2%
University of Colorado Colorado Springs	381	7.0%
University of Northern Colorado	360	6.6%
Total of Top Six Destinations	3,125	57.1%
Total Unique Students Enrolling in Four-Year College	5,475	N/A

Compared to their total number of high school students, Arapahoe Community College had the highest proportion – and number – of students who enrolled in a four-year college, followed by Trinidad State Junior College and Morgan Community College. Front Range Community College and Community College of Aurora ranked second and third in the number of students who enrolled at a four-year college.

High School Students by Institution

High school students accounted for 18.3 percent of the CCCS headcount in 2015-16 (Figure 12).¹¹ Among CCCS institutions, however, the proportion of high school students ranged from a high of 35.6 percent at Lamar Community College to 11.6 percent at Pikes Peak Community College. Arapahoe Community College is the third largest college in terms of the total number of overall students but had the greatest number of high school students. As a group, rural colleges had a higher proportion of high school students (28 percent) than urban colleges (17.3 percent). Five years ago, high school students

¹¹ The sum of the number of students by college (22,117) is greater than the number of total students (21,902) because some students attend more than one college.

comprised 9.8 of the total system headcount, 19.5 percent of the rural college headcount, and 8.8 percent of the urban college headcount.

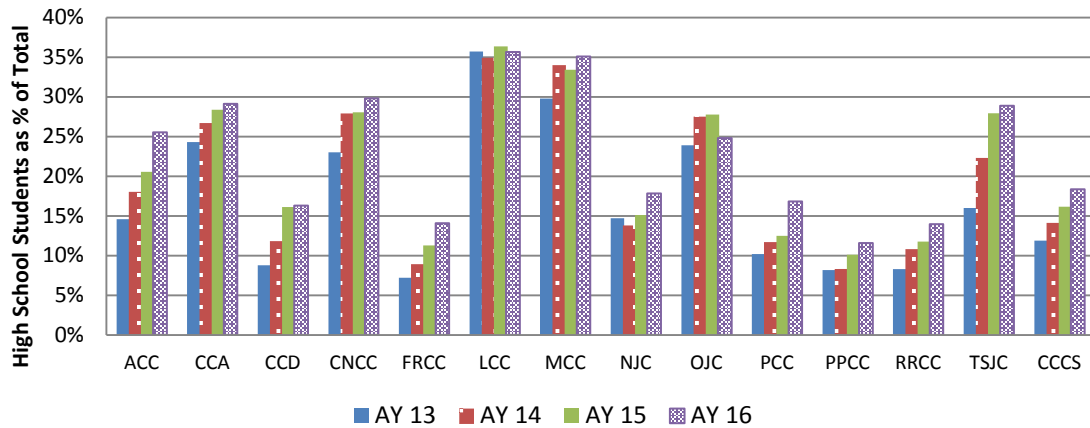
Figure 12. High School Students by Institution

College	High School Students	Total Headcount	High School as % of Total
ACC	4,340	17,012	25.5%
CCA	3,063	10,529	29.1%
CCD	2,241	13,763	16.3%
CNCC	504	1,692	29.8%
FRCC	3,905	27,726	14.1%
LCC	344	965	35.6%
MCC	773	2,203	35.1%
NJC	392	2,200	17.8%
OJC	458	1,847	24.8%
PCC	1,497	8,911	16.8%
PPCC	2,201	19,020	11.6%
RRCC	1,738	12,476	13.9%
TSJC	661	2,291	28.9%
CCCS	22,117	120,635	18.3%

Figure 13. Number and Percent Change in High School Students by Institution, 2012 - 2016

College	AY 12 Count	% Chg	AY 13 Count	% Chg	AY 14 Count	% Chg	AY 15 Count	% Chg	AY 16 Count	% Chg	5-Year Change
ACC	2,532	27.4%	2,964	17.1%	3,553	19.9%	3,579	0.7%	4,340	21.3%	71.4%
CCA	2,763	24.9%	3,002	8.7%	3,185	6.1%	3,222	1.2%	3,063	-4.9%	10.9%
CCD	1,114	15.1%	1,554	39.5%	1,851	19.1%	2,418	30.6%	2,241	-7.3%	101.2%
CNCC	394	-7.1%	409	3.8%	488	19.3%	501	2.7%	504	0.6%	27.9%
FRCC	1,553	38.8%	2,206	42.0%	2,583	17.1%	3,149	21.9%	3,905	24.0%	151.4%
LCC	400	1.0%	411	2.8%	387	-5.8%	378	-2.3%	344	-9.0%	-14.0%
MCC	746	-0.5%	750	0.5%	856	14.1%	803	-6.2%	773	-3.7%	3.6%
NJC	353	-3.8%	418	18.4%	388	-7.2%	403	3.9%	392	-2.7%	11.0%
OJC	481	-13.2%	516	7.3%	584	13.2%	567	-2.9%	458	-19.2%	-4.8%
PCC	1,204	12.7%	1,154	-4.2%	1,210	4.9%	1,245	2.9%	1,497	20.2%	24.3%
PPCC	1,363	-4.8%	1,797	31.8%	1,749	-2.7%	2,017	15.3%	2,201	9.1%	61.5%
RRCC	1,115	22.7%	1,198	7.4%	1,491	24.5%	1,527	2.4%	1,738	13.8%	55.9%
TSJC	330	-13.4%	401	21.5%	560	39.7%	696	24.3%	661	-5.0%	100.3%
CCCS	14,348	14.2%	16,780	17.0%	18,885	12.5%	20,505	8.6%	22,117	7.9%	54.1%

Figure 14. High School Students as a Percent of Total Headcount by Institution, AY 2013 through AY 2016



Year	ACC	CCA	CCD	CNCC	FRCC	LCC	MCC	NJC	OJC	PCC	PPCC	RRCC	TSJC	CCCS
AY 13	14.6%	24.3%	8.8%	23.0%	7.2%	35.7%	29.8%	14.7%	23.9%	10.2%	8.2%	8.3%	16.0%	11.9%
AY 14	18.0%	26.7%	11.8%	27.9%	8.9%	34.9%	34.0%	13.8%	27.5%	11.7%	8.3%	10.8%	22.3%	14.1%
AY 15	20.6%	28.4%	16.1%	28.1%	11.3%	36.3%	33.4%	15.1%	27.8%	12.5%	10.1%	11.8%	28.0%	16.2%
AY 16	25.5%	29.1%	16.3%	29.8%	14.1%	35.6%	35.1%	17.8%	24.8%	16.8%	11.6%	13.9%	28.9%	18.3%

Participation by program by college. Figure 15 details high school students by program – concurrent, ASCENT, or other.¹² The vast majority of students (97.1 percent) enrolled in CCCS colleges through the concurrent enrollment program. In fact, Northeastern Junior College and Otero Junior College only had concurrent enrollment program enrollees.

¹² The sum of the number of students by program (22,228) is greater than the number of students by college (22,217) because some students participate in multiple programs.

Figure 15. High School Students by Program by Institution

College	Concurrent	ASCENT	Other	Total
ACC	4,226	7	159	4,392
CCA	2,965	98	0	3,063
CCD	2,198	45	1	2,244
CNCC	503	1	0	504
FRCC	3,839	71	2	3,912
LCC	334	9	2	345
MCC	772	1	0	773
NJC	392	0	0	392
OJC	458	0	0	458
PCC	1,482	14	12	1,508
PPCC	2,100	60	61	2,221
RRCC	1,652	33	70	1,755
TSJC	658	2	1	661
CCCS	21,579	341	308	22,228
% of Total	97.1%	1.5%	1.4%	100.0%

For most colleges, Spring was the term with the greatest number of students and credit hours; this phenomenon was especially evident at Red Rocks Community College where 84.4 percent of credit hours were attempted in the Spring. As previously mentioned, high school students in year-long courses are typically registered in the Spring, and Red Rocks Community College, through its arrangement with Jefferson County Public Schools' Warren Tech career and technical high school, has a high number of students in year-long courses.

Systemwide, students carried an average of 8.5 credit hours over the course of the academic year. The proportion of high school credit hours to total credit hours was highest at Morgan Community College, at 36.1 percent; Lamar Community College and Colorado Northwestern Community College also had rates that exceeded 20 percent. Lamar Community College's average of 14.0 credit hours per student was the highest of the thirteen colleges (Figure 17).

Figure 16. Course Enrollment and Attempted Credit Hours by Term

College	Summer Students	Fall Students	Spring Students	Summer Credit Hours	Fall Credit Hours	Spring Credit Hours	Total Credit Hours
ACC	88	2,596	3,128	398	10,965	13,445	24,807
CCA	39	1,810	2,709	202	9,411	13,698	23,311
CCD	16	1,284	1,792	22	7,455	8,554	16,031
CNCC	1	398	391	3	2,455	2,565	5,022
FRCC	50	2,621	3,152	206	13,336	17,058	30,599
LCC	1	287	295	6	2,306	2,516	4,828
MCC	19	728	695	65	4,948	4,437	9,450
NJC	0	361	319	0	2,212	2,039	4,251
OJC	0	339	399	0	1,775	2,427	4,202
PCC	0	973	1,121	0	6,745	7,932	14,677
PPCC	90	1,850	1,881	344	13,093	14,641	28,078
RRCC	14	442	1,433	69	2,508	13,995	16,572
TSJC	0	531	542	0	2,542	2,779	5,321
CCCS	318	14,220	17,857	1,315	79,749	106,082	187,146
% of Total/ Avg Cr Hrs	1.0%	43.9%	55.1%	4.1	5.6	5.9	8.5

Figure 17. High School, Total, and Average Credit Hours

College	High School Credit Hours	Total Credit Hours	High School as % of Total	High School Students	Avg Credit Hours/ HS Student
ACC	24,807	161,953	15.3%	4,340	5.7
CCA	23,311	122,458	19.0%	3,063	7.6
CCD	16,031	166,210	9.6%	2,241	7.2
CNCC	5,022	23,276	21.6%	504	10.0
FRCC	30,599	349,229	8.8%	3,905	7.8
LCC	4,828	17,362	27.8%	344	14.0
MCC	9,450	26,171	36.1%	773	12.2
NJC	4,251	35,648	11.9%	392	10.8
OJC	4,202	29,464	14.3%	458	9.2
PCC	14,677	124,552	11.8%	1,497	9.8
PPCC	28,078	274,198	10.2%	2,201	12.8
RRCC	16,572	158,522	10.5%	1,738	9.5
TSJC	5,321	34,448	15.4%	661	8.0
CCCS	187,146	1,523,492	12.3%	22,117	8.5

Academic Studies and Outcomes

Ninety-eight percent of high school course enrollments resulted in a course completion, as indicated by a final grade (Figure 18). Of those completions, passing grades were awarded in 92.9 percent of the cases.¹³ With the largest number of course enrollments, concurrent enrollment students successfully completed 93.1 percent of their courses. The completion rates for college level courses was higher than that for developmental level courses, 93.4 percent compared to 81.2 percent, and female students tended to complete at a higher rate than male students (94 percent compared to 91.5 percent). At 94.7 percent, the completion rate of white students outpaced that of students of color (90.4 percent).

Figure 18. 2015-16 End-of-Term Completion Status for High School Course Enrollments by Program Type, All Terms*

End-of-Term Status	# of Course Enrollments	% of Course Enrollments	Concurrent	ASCENT	Other
Pass	55,657	90.6%	52,797	2,170	690
Fail	4,255	6.9%	3,909	302	44
Incomplete	182	0.3%	179	2	1
Withdrawn	1,166	1.9%	1,042	103	21
Course in Progress or Ungraded Course	165	0.3%	165	0	0
Total	61,425	100.0%	58,092	2,577	756
% Completing with Pass or Fail Grade	97.5%	N/A	97.6%	95.9%	97.1%
% of Completions with Passing Grade	92.9%	N/A	93.1%	87.8%	94.0%

*An end-of-term completion status of “pass” indicates a grade of “C” or higher or the equivalent for a non A-F grade. Course completion rates are measured by dividing the number of passing grades by the sum of the number of passing and failing grades. Thus, the cohorts for course completion rates may be different from the number of course enrollments.

¹³ A passing grade for purposes of this analysis is “C” or better or the equivalent for non A-F grade courses.

Figure 19. End-of-Term Completion Status for High School Course Enrollments by Course Level/Selected Demographic Data*

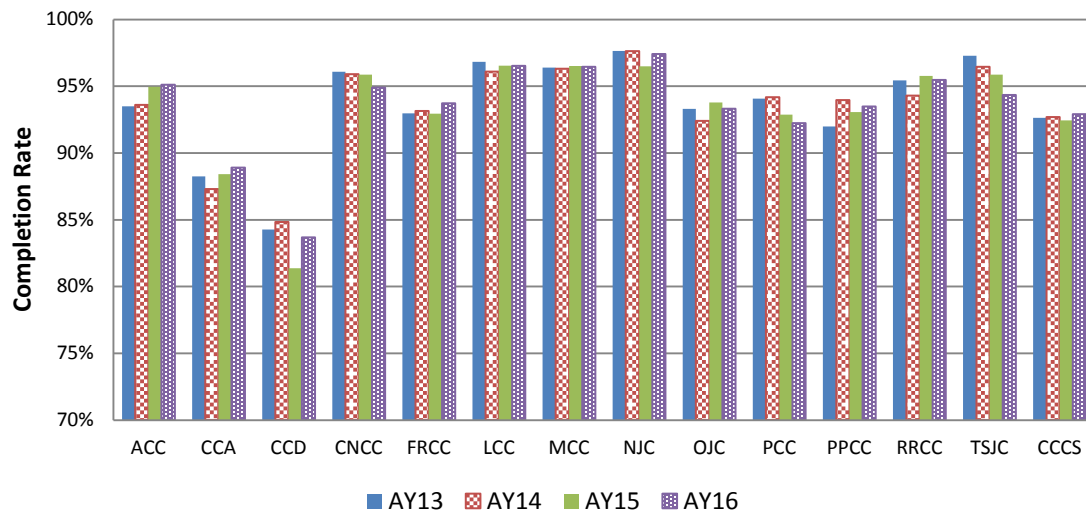
End-of-Term Status	# of Course Enrollments	% of Course Enrollments	Pass	Fail	Incomplete, Withdrawn, In Progress/ Ungraded	% of Courses with Final Grade	Completion Rate
Overall	61,425	100.0%	55,657	4,255	1,513	97.5%	92.9%
Courses: College Level	58,796	95.7%	53,621	3,783	1,392	97.6%	93.4%
Courses: Developmental Ed	2,629	4.3%	2,036	472	121	95.4%	81.2%
Gender: Male	27,118	44.1%	24,097	2,243	778	97.1%	91.5%
Gender: Female	34,292	55.8%	31,553	2,004	735	97.9%	94.0%
Students of Color	19,738	32.1%	17,363	1,835	540	97.3%	90.4%
White Students	36,176	58.9%	33,460	1,876	840	97.7%	94.7%
Race/Eth. Unk or Internat'l	5,511	9.0%	4,834	544	133	97.6%	89.9%

*College level courses include those with a course number equal to or greater than 100, while developmental courses include those less than 100 (including some AAA courses).

Course completion by college.¹⁴ Course completion rates at ten of the CCCS colleges exceeded the overall system level of 92.9 percent in 2015-16. Northeastern Junior College had the highest course completion rate, at 97.4 percent. Four additional colleges had completion rates in excess of 95 percent: Lamar Community College, Morgan Community College, Red Rocks Community College, and Arapahoe Community College. Further, course completion rates increased in six of the colleges. Community College of Denver had the greatest increase in its completion rate, followed by Northeastern Junior College. Figure 20 provides the course completion rates by college for 2015-16 and, for comparison purposes, for the three preceding years.

¹⁴ Course completion rates are measured by dividing the number of passing grades by the sum of the number of passing and failing grades. Thus, the cohorts for course completion rates may be different from the number of course enrollments.

**Figure 20. Comparison of Course Completion Rates by College
AY 2013 through AY 2016**



Year	ACC	CCA	CCD	CNCC	FRCC	LCC	MCC	NJC	OJC	PCC	PPCC	RRCC	TSJC	CCCS
AY13	93.5%	88.3%	84.3%	96.1%	93.0%	96.8%	96.4%	97.7%	93.3%	94.1%	92.0%	95.4%	97.3%	92.6%
AY14	93.6%	87.3%	84.8%	95.9%	93.1%	96.1%	96.3%	97.6%	92.4%	94.2%	93.9%	94.3%	96.4%	92.7%
AY15	95.0%	88.4%	81.4%	95.9%	92.9%	96.5%	96.5%	96.5%	93.8%	92.9%	93.1%	95.8%	95.9%	92.4%
AY16	95.1%	88.9%	83.7%	94.9%	93.7%	96.5%	96.4%	97.4%	93.3%	92.2%	93.5%	95.5%	94.3%	92.9%

Credits earned/tuition saved. High school students earned a total of 174,772 credits, including credit hours earned with a “D” or better grade, which was 93.4 percent of the 187,146 credit hours attempted. As with the number of course enrollments, the vast majority of these credit hours were earned by concurrent enrollment and ASCENT students. With resident tuition of \$130.50 per credit hour in 2015-16, concurrent enrollment and ASCENT students saved about \$22.5 million in college tuition costs for earned credit hours.

Subject areas. The 61,425 high school course enrollments covered 1,180 distinct courses, 82.7 percent of which were 100 series courses and 13 percent of which were 200

series courses. The remaining 4.3 percent of course enrollments were in courses with course numbers less than 100 – either developmental education or academic skills courses. Figure 21 shows the course completion rates, by college, for the ten courses with the greatest number of course enrollments systemwide. These ten courses, all of which were gtPathways courses, accounted for 30.8 percent of high school course enrollments. The system completion rate for these ten courses was 91.9 percent. Northeastern Junior College had the highest completion rate at 97.2 percent.

Figure 21. Completion Rate by College for Top Ten Courses System wide*¹⁵

College	Top Ten CCCS Course Enrollments as % of Total Enrollments	Completion Rate
ACC	32.3%	95.0%
CCA	45.3%	86.4%
CCD	26.8%	82.2%
CNCC	37.7%	94.4%
FRCC	33.7%	94.7%
LCC	47.3%	96.7%
MCC	45.3%	96.2%
NJC	46.7%	97.2%
OJC	55.0%	92.3%
PCC	24.4%	89.1%
PPCC	23.3%	92.7%
RRCC	4.5%	88.6%
TSJC	38.9%	93.8%
CCCS	30.8%	91.9%

*ENG 121, MAT 121, ENG 122, LIT 115, PSY 101, COM 115, MAT 122, CIS 118, HIS 122, and HIS 121

¹⁵ The top ten courses are based on enrollments at the system level, not the individual college level.



As previously discussed, the course with the greatest number of enrollments systemwide was English 121 (with 8.1 percent of enrollments), followed by Math 121 (4.8 percent), English 122 (3.8 percent), Literature 115 (3.1 percent), and Psychology 101 (2.5 percent). It is notable that, unlike last year, the list of top ten courses does not include any developmental education courses. Figure 22 shows the course with the greatest enrollment by college, along with its percentage of total high school course enrollments.

Figure 22. Top High School Course by Enrollment by College

College	Top Course by Enrollment	% of Total College Course Enrollments
ACC	ENG 121	9.1%
CCA	MAT 121	11.1%
CCD	ENG 121	11.7%
CNCC	ENG 121	6.6%
FRCC	ENG 121	8.7%
LCC	COM 115	8.2%
MCC	ENG 121	10.5%
NJC	ENG 121	10.8%
OJC	COM 115	8.7%
PCC	ENG 121	8.3%
PPCC	ENG 121	7.1%
RRCC	BUS 118	4.2%
TSJC	PSY 101	10.8%
CCCS	ENG0121	8.1%

Career and technical education (CTE). Career and technical education accounted for 35.9 percent of high school course enrollments in 2015-16. Changes of note from 2014-15 include the increase in the proportion of CTE course enrollments at Colorado Northwestern Community College (9.8 percentage points) and the decreases at Trinidad



State Junior College (7.7 percentage points) and Community College of Aurora (6.2 percentage points).

The CCCS completion rate for CTE courses of 95.1 percent was higher than the overall completion rate of 92.9 percent (Figure 23). At the Community College of Denver and Community College of Aurora, the difference between the overall and CTE completion rates was significant: 9.0 and 6.2 percentage points, respectively.

Figure 23. CTE Course Completion Rates by College

College	CTE Course Enrollments as % of Total Enrollments	CTE Completion Rate
ACC	49.0%	95.7%
CCA	12.4%	95.1%
CCD	22.2%	92.7%
CNCC	30.2%	94.7%
FRCC	30.7%	93.3%
LCC	14.9%	97.8%
MCC	19.1%	97.0%
NJC	18.3%	98.8%
OJC	23.8%	94.2%
PCC	42.4%	95.9%
PPCC	38.0%	94.2%
RRCC	77.8%	95.9%
TSJC	29.5%	95.6%
CCCS	35.9%	95.1%

Developmental education. Three-quarters of enrollments in remedial and supplemental academic instruction courses were at two colleges: Community College of Denver (50.3 percent) and Community College of Aurora (25.5 percent). State law limits the ability of high school students to participate in developmental education courses at the college level. For example, the concurrent enrollment program limits basic skills courses



to 12th graders and the ASCENT program is geared to students who are not in need of basic skills. At 81 percent, the system completion rate for high school students in developmental education courses was 4.7 percentage points higher than last year.

Conclusion

High school enrollment at CCCS institutions now accounts for 18.3 percent of student enrollment and 12.3 percent of total credit hours. The purpose of compiling data on high school students is to identify emerging trends and monitor student success. With the fourth successive year of similar data collection and analysis, we note that high school students continue to successfully complete their courses at high rates. Increasing proportions of students are earning credentials while still in high school. Career and technical education courses are maintaining their popularity, and students are succeeding in them at a higher rate than the rate for all courses.

The Colorado Department of Higher Education reports that, on average, participation in dual enrollment is associated with an increase in the likelihood of enrolling in college immediately after high school; a decrease in the likelihood of needing remedial education in the first year of college; and higher credit hour accumulation, grade point average, and retention in the first year of college, all of which have been linked to successful degree attainment.¹⁶ Because of the positive benefits of dual enrollment and the number of students involved, CCCS and institution leadership believe continued scrutiny of the success of high school students at CCCS institutions is crucial to understanding the dynamics of the high school student population and strategically planning for its success.

¹⁶ Colorado Department of Higher Education, Annual Report on Concurrent Enrollment 2012-2013 School Year and The Effects of Concurrent Enrollment on the College-Going and Remedial Education Rates of Colorado's High School Students, both March 27, 2014. Please see reports for discussion of selection bias and how that may lead to an overestimation of the impacts of dual enrollment on the likelihood of enrolling in college.