



Washington State Graduates: Failure Rates

“Improving graduation rates and reducing dropout rates are high-priority items on the national agenda for high school reform. There is increasing recognition that a high school diploma is a minimum requirement for success in the workplace and that too few students obtain this minimum standard. ... What is often lost in discussions about dropping out is the one factor that is most directly related to graduation — students’ performance in their courses” (Allensworth & Easton, 2007, pg. 1).

The Washington State Board of Education (SBE) is revising high school graduation requirements to better prepare students for career, postsecondary education, and citizenship. The proposed Core 24 graduation requirements framework, approved in July 2008 with implementation contingent on funding, is more rigorous than current Washington State graduation requirements and, in some content areas, more rigorous than minimum college admission standards set by the Washington Higher Education Coordinating (HEC) Board. Table 1 summarizes graduation requirements, including notations about course levels.

Prior to proposing new requirements, the SBE commissioned a transcript study. Researchers from The BERC Group examined course-taking patterns for 14,875 students who graduated in 2008 from 100 schools in 100 districts across Washington. This research brief, with an emphasis on failure rates, is one in a series of research briefs. More information about the study can be obtained at http://www.sbe.wa.gov/documents/SBETranscriptStudy2008_FINAL.pdf.

This study was conducted to provide a baseline of information that would inform the SBE’s graduation requirements initiative. The proposed Core 24 requirements were not in place for the class of 2008, and students were not trying to meet these requirements.

Table 1.
Credits Required or Proposed for High School Graduation and Required for WA Public Four-year College Admission

Subject	2008 State Minimum Graduation Reqs.	2008 HEC Board Reqs.	Core 24 Default Reqs.
English	3	4*	4*
Math	2	3**	3**
Science	2***	2***	3
Social Studies	2.5	3	3
Arts	1	1	2
World Language	0	2****	2****
Career Concentration	1	0	3
Health & Fitness	2	0	2
Electives	5.5	0	2
Total	19	15	24

*Including 3 credits of literature

**Algebra I, II, and geometry or Integrated Mathematics I, II, III

*** Including at least 1 credit of laboratory science (2 labs in 2010)

****Including 2 credits of the same world language

Note. The Core 24 default college and career ready requirements align with the Higher Education Coordinating Board minimum college admissions requirements. Some students may choose an alternative Core 24 pathway.

Analysis of failure rates showed that 47.3% of students failed at least one credit during high school, with 21.0% failing two or more credits. Additional analyses by year in school revealed that course failure rates were fairly

consistent across the four years of high school, with slightly higher rates in the third year and slightly lower rates in the first year (see Figure 1).

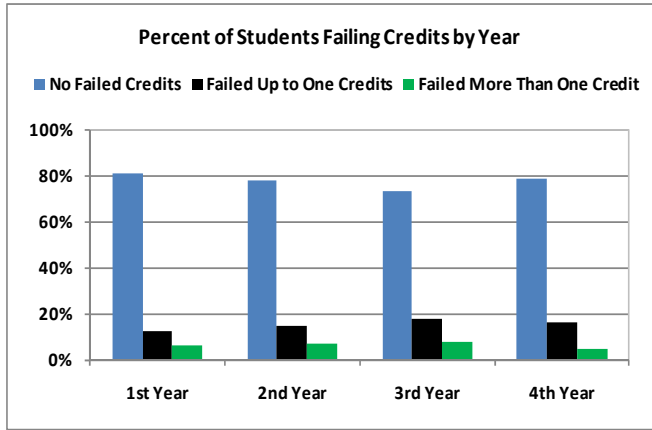


Figure 1. Percent of Students Failing Credits by Year

Additional analyses from a stratified random sample of the 14,875 transcripts found that course failures were most likely to occur in the core subject areas of math, English, and science. Table 2 details the percentage of students failing at least one course in that subject area.

Table 2.
Percent Failing Each Content Area

Content Area	Percent
Math	32.7%
English	21.9%
Science	21.4%
Social Studies	19.9%
Occupational Education/CTE	17.3%
World Language	9.2%
Arts	5.8%
Other	17.3%

Students tended to retrieve credits in a number of ways. Many students (39.4%) did not make up these courses because the course was an elective or the student had already met minimum graduation requirements for that subject area. About one-quarter of students (22.5%) retook the class during the following term. These students graduated with fewer than the possible credits (e.g. 24 possible credits, but graduated with 23), but still met or exceeded minimum district requirements. Some students (11.6%) elected to repeat the class in the following term by adding in a zero hour or an after-school class to their schedules. Finally, a smaller percentage of students participated in an online class (3.6%) or summer school (3.2%) to make up for course failure. Of these final options, freshmen and sophomores were more likely to enroll in summer school, while juniors and seniors were more likely to enroll in an online course.

Of students failing more than one course, there was no discernable pattern of failures. Often students failed classes in multiple subject areas, and the pattern for retrieving credits was similar to the trend listed above. Math was the most commonly failed subject, followed by English, and then Science.

Reference:

Allensworth, E. M. & Easton, J. Q. (2007). *What matters for staying on-track and graduating in Chicago public high schools: A closer look at course grades, failures, and attendance in the freshman year.* Chicago, IL: Consortium on Chicago School Research at the University of Chicago.