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## Washington State Graduates: Course-Taking Patterns in the Senior Year

Education prepares students for the future in the society in which they live. Upon graduation from high school, our nation's students should have the opportunity to transition smoothly into college and careers. For that to occur, schools must provide students with the skills and background necessary to make that transition.

Research and forecasts pertaining to labor, industry, and the economy indicate that postsecondary education and training is a prerequisite for the majority of jobs and for financial independence. Thus, it could be argued that all high schools need to prepare students with the option to attend college or postsecondary training if they are to earn a living wage and if our nation is to maintain a central role in the global economy. For students today, there is little difference between being "workforce ready" and "college ready." This includes the requisite coursework for college admittance, as well as skills associated with college and career readiness.

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 the senior year, is

one in a series of research briefs. More information about the study can be obtained at <a href="http://www.sbe.wa.gov/documents/SBETranscriptStudy2008">http://www.sbe.wa.gov/documents/SBETranscriptStudy2008</a> FINAL.pdf.

Table 1.
Credits Required or Proposed for High School
Graduation and Required for 2008 WA Public Fouryear College Admission

Subject	2008 State Minimum Graduation Regs.	2008 HEC Board Regs.	Core 24 Default Regs.
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

<sup>\*</sup>Including 3 credits of literature

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.

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.

<sup>\*\*</sup>Algebra I, II, and geometry or Integrated Mathematics I, II, III

<sup>\*\*\*</sup> Including at least 1 credit of laboratory science (2 labs in 2010)

<sup>\*\*\*\*</sup>Including 2 credits of the same world language

The analysis showed that 48.5% of seniors met minimum HEC Board requirements, and 16.4% met Core 24 default college and career ready requirements. This pattern emerged in spite of the fact that students frequently took more credits than needed for graduation.

A closer examination of the course-taking patterns revealed that students most frequently failed to meet HEC Board and the proposed Core 24 default requirements in math (35%), world language (31%), and English (21%). In these three subject areas, 2008 state graduation requirements were lower than the 2008 HEC Board admissions requirements by at least one credit.

One way students may be able to be college and career ready is by taking courses aligned with minimum admissions requirements in their senior year. This study found room in students' schedules for more stringent requirements, including more credits and more advanced courses. In fact, 35% of the graduating seniors took less than a full load of credits (see Figure 1).

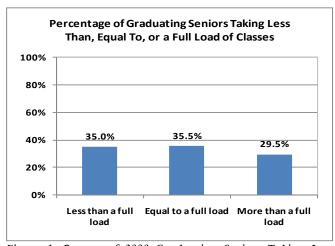


Figure 1. Percent of 2008 Graduating Seniors Taking Less Than, Equal To, or a Full Load of Classes

Students who took less than a full load had fewer failed courses and the highest grade point averages compared to students who were taking a full load or more than a full load. Of those students who took more than a full load, 26.7% had failed two or more classes and 23.2% were enrolled in Running Start. The remaining students appeared to be taking additional elective credits, particularly in arts (usually music), career or technical education, or physical education.

Further analysis reveals that the majority of seniors took social studies (95.3%) and English (93.5%) in their senior year (see Figure 2). This finding is consistent with district graduation policies and requirements. For example, the majority of districts require Current World Problems in the senior year. Furthermore, although the state minimum requirement in English is three credits, 84% of the districts with high schools in Washington State require a minimum of four credits (SBE database, 2008).

Conversely, only 40% of the districts require more than the 2008 state minimum requirements in math (two credits), 19% in science (two credits), and 2% in world language (zero credits). Consequently, the majority of students have already met these credit requirements by the end of their junior year, and many students do not take these classes in their senior year. Instead, many students choose to take other courses, including teacher's assistant and electives.

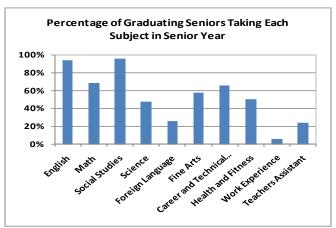


Figure 2. Percent of 2008 Graduating Seniors Taking Each Subject in Senior Year

It is noteworthy that students graduating in 2008 who did not pass the math Washington Assessment of Student Learning (WASL) were required to take math credits in their senior year, which likely resulted in more students taking math as seniors. However, results indicated that while 68.7% of students took math in the senior year, only 55.3% took higher-level math that would qualify students for admission to college and decrease the likelihood that they would need to take remedial courses.

References:

SBE database. (2008).

http://www.sbe.wa.gov/documents/Copy%20of%20Graduation%20Requirements%20Database%202010.xl