



Washington State 2008 Graduates: Course-Taking Patterns, Requirements, and School Schedule

Improvement efforts in some high schools have included restructuring schedules. This investigation examines the relationship between graduation requirements and block and standard schedules.

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 equivalent to or more rigorous than the minimum college admission standards set by the Washington Higher Education Coordinating (HEC) Board. Table 1 summarizes graduation requirements, including notation about course levels, for each plan.

Table 1.
Credits Required or Proposed for High School Graduation and Required for 2008 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.

Over the last several decades, school improvement efforts have brought attention to the structure of the school day, and various schedules exist across Washington high schools. *Standard* schedules consist of six to eight shorter class periods per day, whereas *block* schedules consist of fewer classes for longer time periods (e.g. four 90-minute classes). In a 2006 study of Washington high schools, Baker et al, found 62.8% had standard schedules, 21.3% had block schedules, and 15.9% had a modified block schedule (combination of standard and block classes).

Both types of schedules have benefits and drawbacks related to student outcomes, access to courses, and learning models (Canady & Rettig, 1996; Irmsher, 1996). In their 2006 study of Washington high schools, Baker et al. investigated high school Washington Assessment for Student Learning outcomes for five types of schedules and found stronger performances for 7-period and modified block schedules, compared to 6-period and straight block schedules. The authors note these results do not indicate superiority of one type of schedule over another and that shifting to a block schedule requires transformation of instructional philosophy and strategies.

Prior to proposing new requirements, the SBE commissioned a transcript study. Researchers from The BERCC 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 scheduling, 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.

The percentages of students meeting HEC Board minimum admissions requirements and Core 24 default college and career ready requirements are similar for standard and block schedules (see Figure 1). Close to 50% met HEC board requirements, regardless of schedule type. Fewer students met Core 24 requirements, although slightly more students (23%) on block schedules met the requirements than on standard schedules (15%).

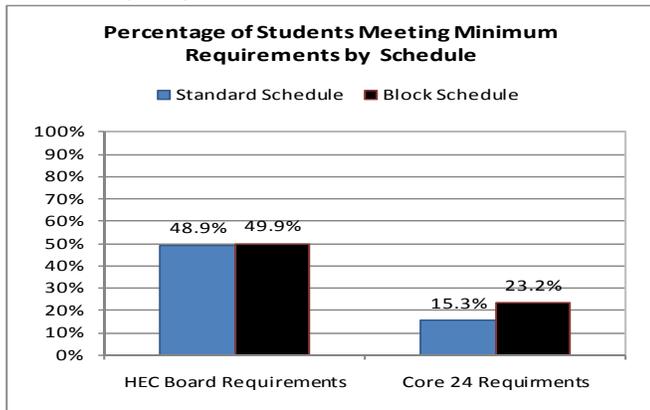


Figure 1. Percentage of Students Meeting Minimum Requirements by Schedule

Examination of schedule and subject for students meeting HEC Board requirements showed small differences (0% to 9%) between schedule types, with block schedules slightly stronger in English, social studies, and arts. However, the differences between subjects were larger, with fewer students meeting criteria in math and world language (see Figure 2).

For students meeting Core 24 default college and career ready requirements that differ from HEC Board requirements, small differences (2% to 10%) emerged between schedule types, with block schedules slightly stronger (see Figure 3). For arts and career

concentration, larger percentages (19% to 22%) met criteria on block schedules.

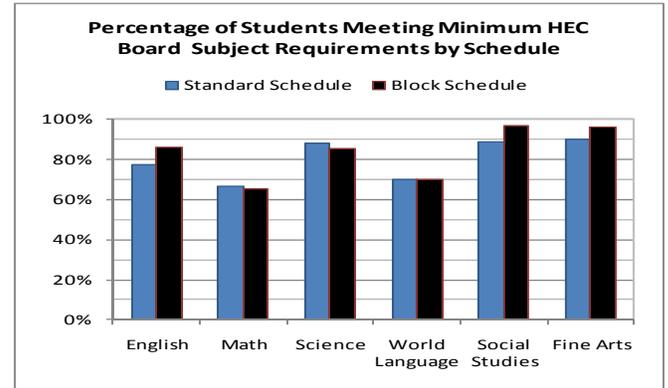


Figure 2. Percentage of Students Meeting HEC Board Subject Requirements by Schedule

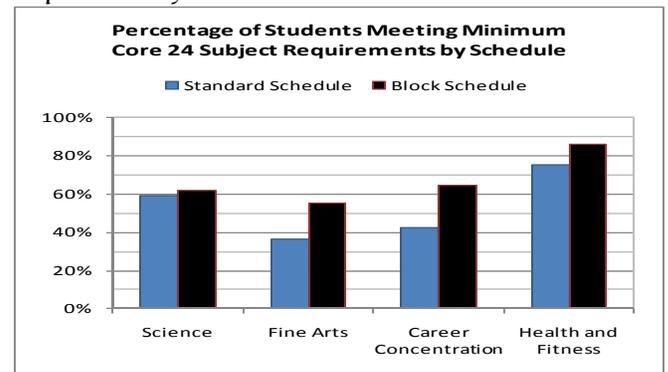


Figure 3. Percentage of Students Meeting CORE 24 Subject Requirements by Schedule

Findings suggest schedule type has minor impact on meeting graduation requirements in most subjects. Where small differences existed, block schedules were slightly stronger. For Core 24, more students met criteria for arts and CTE on block than on standard schedules. These results are similar to those obtained by Baker et al (2006) in that student outcomes are not definitively associated with standard or block schedules. Overall, research suggests type of schedule may be less important than manner and focus of implementation. However, block schedules, if implemented intentionally (Baker et al, 2006; Queen 2000), may provide students with more options for meeting graduation criteria and for enhanced learning.

References:

Baker, D, Joireman, J., Clay, J, & Abbot, M. (2006). *Schedule matters: The relationship between high schools schedule and student academic achievement.* Washington School Research Center, Seattle, WA.
 Canady, R. L., & Rettig, M. D. (1995). *Block scheduling: A catalyst for change in high schools.* Princeton, NJ: Eye on Education.
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