



# Washington State Graduates: Course-Taking Patterns among Native American Students

Research demonstrates that some racial and ethnic groups are not achieving school success at the same rate as other students (Ashley, 2007). In Washington State, course-taking patterns for Native American students may limit their access to post-secondary education.

Studies show a relationship between students' course-taking patterns and achievement in high school and beyond. Students who took more rigorous courses scored higher on the National Assessment of Educational Progress and were more likely to enroll in college and earn degrees (Bottoms & Feagan, 2003; Adelman, 2006). Because these findings hold regardless of race or socioeconomic status, preparing students to succeed in advanced courses ultimately contributes to closing the achievement gap.

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 Native American students, 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](http://www.sbe.wa.gov/documents/SBETranscriptStudy2008_FINAL.pdf).

**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.

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.

Analysis of course-taking patterns showed fewer Native American students took courses that would meet the minimum entry requirements of a Washington four-year public college. Specifically, 35.2% of Native

American students met HEC Board requirements compared to 48.5% of students in the study, and 10.8% met Core 24 default college and career ready requirements compared to 16.4% of study participants (see Figure 1).

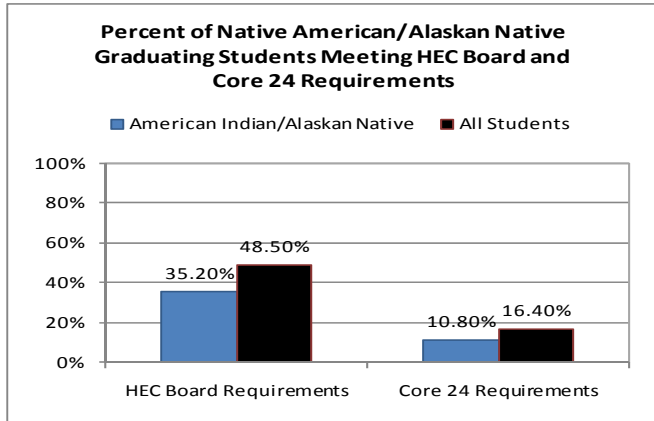


Figure 1. Percentage of Native American Students Meeting HEC Board and Core 24 Default College and Career Ready Requirements.

The course-taking analysis reveals some interesting patterns for Native American students. Native American students met minimum college admission standards and proposed Core 24 default college and career ready requirements in English, social studies, and arts at similar rates or slightly above other students in the sample. However, fewer met the advanced math requirement for the minimum college admission standards. Finally, Native American students met minimum HEC Board and/or Core 24 default requirements at lower rates in science and world language (see Figure 2).

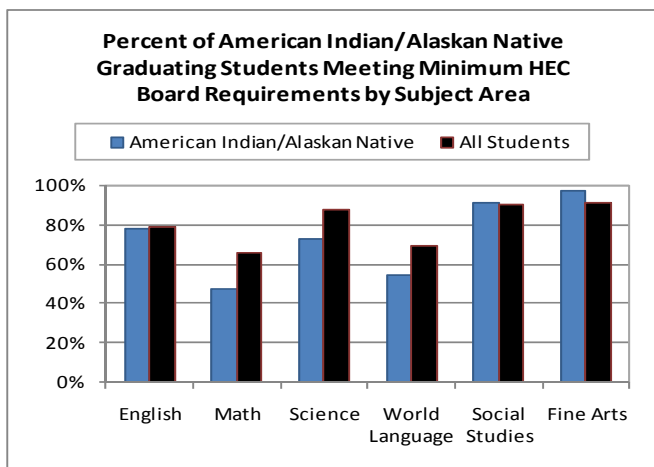


Figure 2. Percentage of Native American Students Meeting HEC Board Requirements by Subject Area.

Among the subjects where the proposed Core 24 default requirements differ from HEC Board requirements, fewer students met the science requirements. However, more Native American students met the arts and career concentration requirements (see Figure 3).

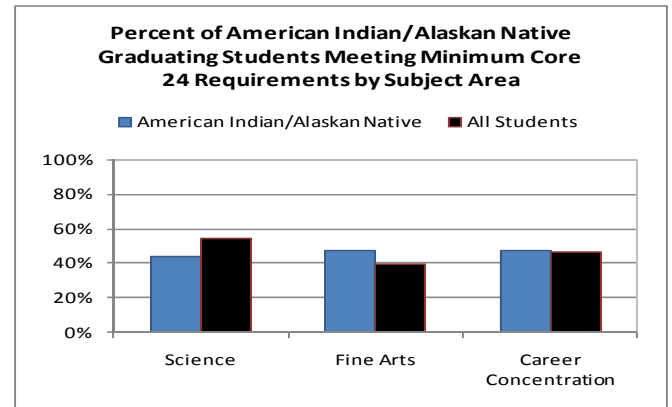


Figure 3. Percentage of Native American students meeting Core 24 default College and Career Ready Requirements by Subject. Note: This brief does not include an analysis of health and fitness requirements. The health and fitness requirements were analyzed from a sample of students after the original study was completed.

The gap in course-taking patterns between Native American and other students began earlier than high school. Only 12.5% of Native American students earned high school math credits in middle school, as compared to 26.1% across the sample. Additionally, 1.1% of Native American students took world language in middle school, compared to 6.3% across the sample. In high school, fewer Native American students took AP/IB classes (29.0% compared to 35.1%). However, a similar percentage of Native American students reenrolled in Running Start (14.2% compared to 13.3%). Further, course failure rates for Native American students were significantly higher than in the rest of the sample: 67.0% failed at least one class as compared to 47.3% of other students. This pattern can make it difficult for students to attain higher levels in math, science, and world language.

References:  
 Adelman, C. (2006). *The toolbox revisited: Paths to degree completion from high school through college*. Washington, D.C.: U.S. Department of Education.  
 Ashley, N. (2007). *Educating all our children: A comprehensive plan for reducing the dropout rate in King County*. Heliotrope: Seattle WA. Prepared by Heliotrope for the Reinvesting in Youth Steering Committee.  
 Bottoms, G. & Feagin, C. (2003). *Improving achievement is about focus and completing the right courses*. Southern Regional Education Board, Washington, DC.