

Washington State Board of Education

Transcript Analysis

March 2, 2009



Objectives

- Develop a sense of the study
- Know the types of data that are in the report
- Explore two specific areas of data:
 - Senior Course Taking Patterns
 - Course Failure Rates

Brief Overview

Study Purpose

- Overall, to assess how well high schools are preparing students to succeed in postsecondary education, the workplace and citizenship.
- Specifically, to provide SBE with information regarding student course-taking patterns in relation to districts' current graduation requirements and new graduation requirements – CORE 24 – by analyzing a sample of transcripts from high schools across Washington state.

Sampling Procedure

- Stratified Random Sample
 - Districts were selected based on total enrollment for each county in Washington state.
 - All 39 counties had at least one district selected.
 - To ensure variance, we selected districts with higher math and science requirements, because there are fewer in the state.
 - Districts requiring the minimum number of math and science credits were then selected using a random number array.
 - We did not include schools that OSPI identified as home-based schools, learning centers, special education schools, technical skills centers, parent partnership schools, night schools and schools located in justice centers.
 - After eliminating these schools from the list, we selected high schools using a random number array.
 - 95 schools from the original sample participated; 5 schools were added as replacements.

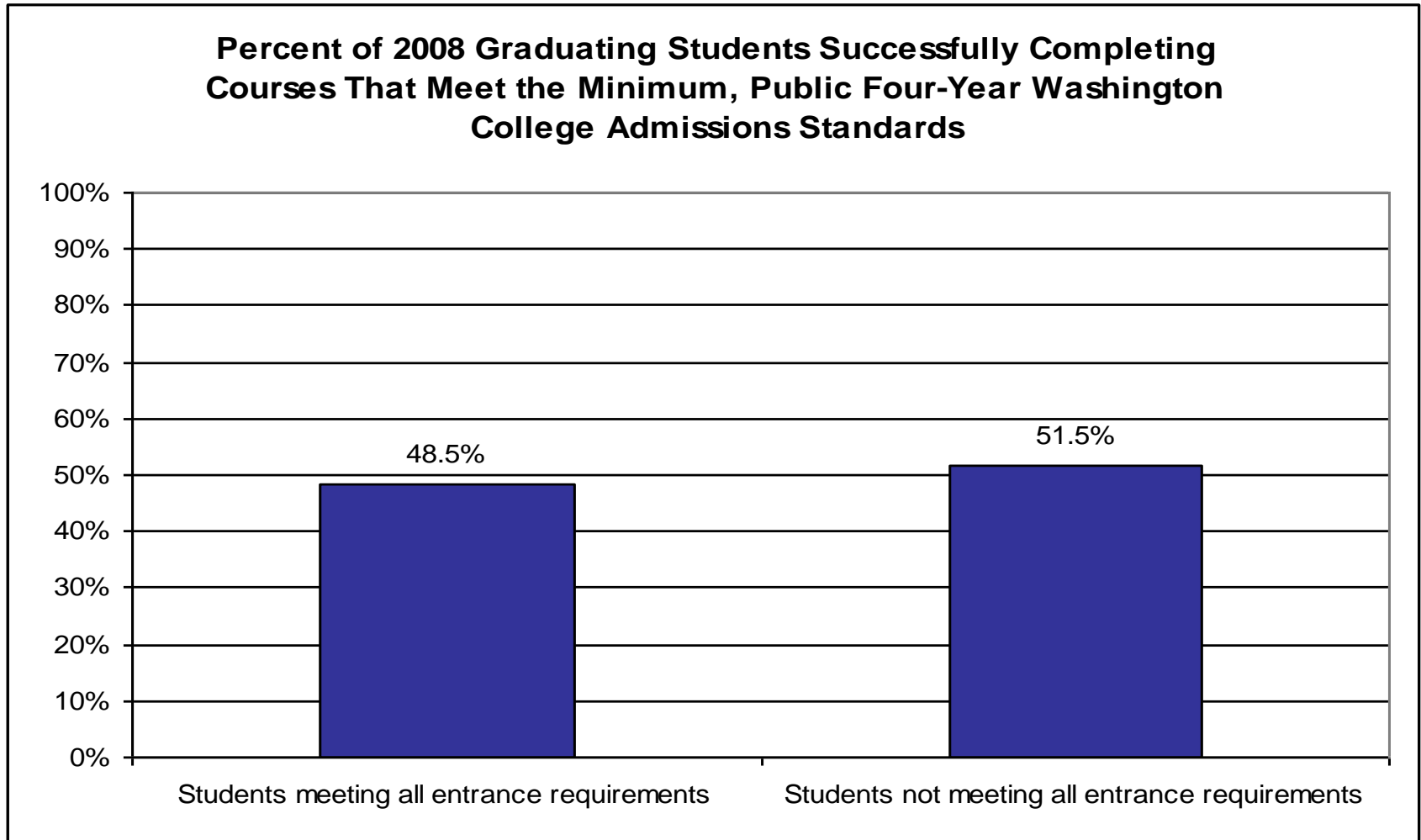
Sample

	Entire Population* (n = 504)	Student Sample (n = 100)
Enrollment	Mean = 637 (Range = 5 – 3142)	Mean = 787 (Range = 26 – 3142)
Free/Reduced Lunch	35%	34%
Amer Ind/Ala Native	3%	3%
Asian	8%	5%
Black	6%	4%
Hispanic	14%	13%
White	68%	75%

Transcript Analysis

- Transcripts (n = 14,875) were coded and analyzed to determine the percentage of students at each school meeting or exceeding minimum Higher Education Coordinating Board (HEC Board) college entrance requirements and CORE 24 requirements.
 - The minimum HEC Board requirements were used because they provide a standard, measureable metric of comparison in Washington state
 - College preparedness is a good measure of preparation for work readiness, particularly for those pursuing a certificate, apprenticeship or two-year college degree
- Additional coding was added to answer all the questions posed by SBE.

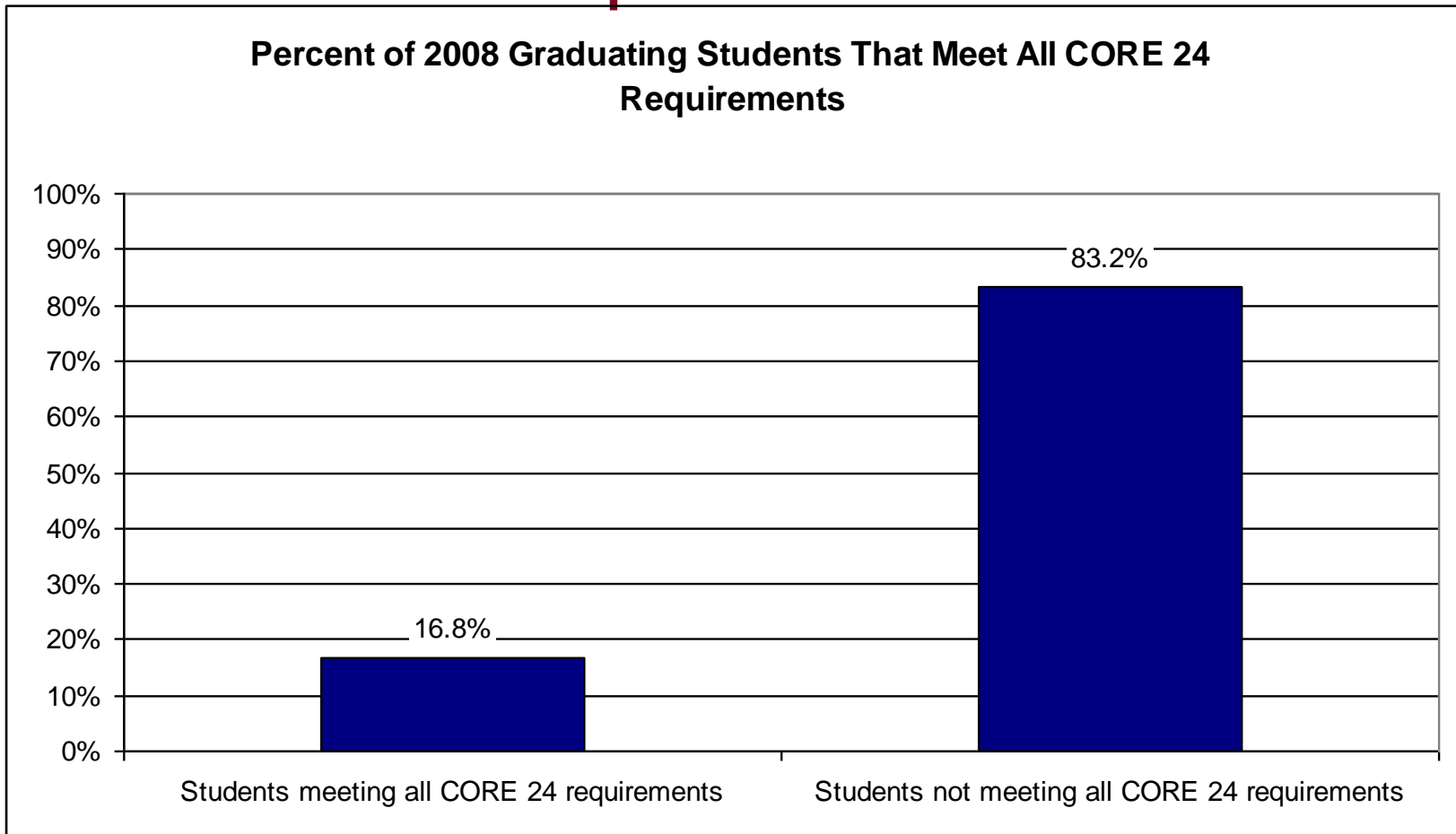
Percent of Students Meeting Current HEC Board Requirements*



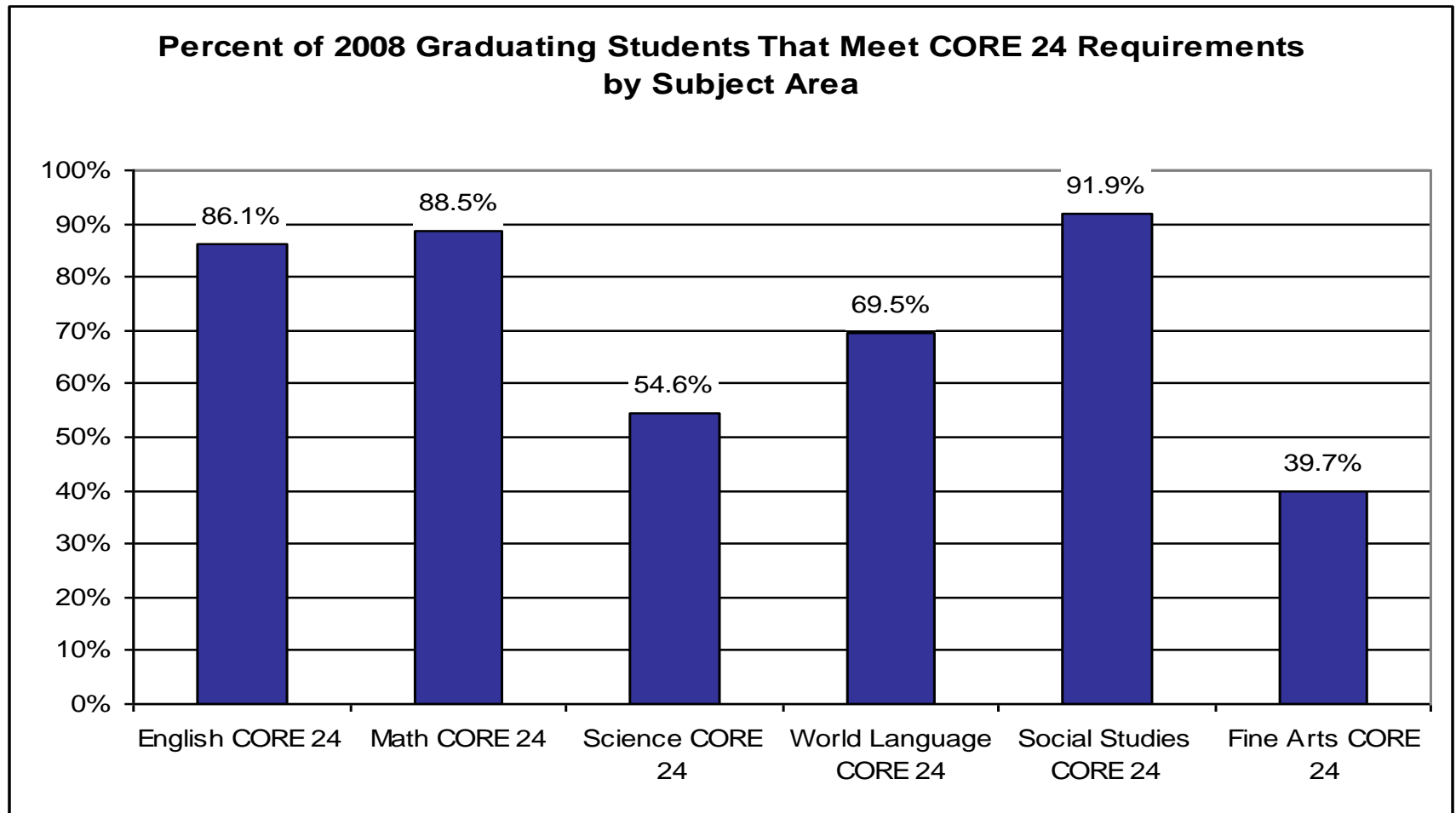
*For this study, minimum HEC Board requirements were used because they provide a standard, measurable metric of comparison in Washington state

Meeting CORE 24

Percent of Students Meeting CORE 24's Four-Year College Requirements



Percent of Students Meeting CORE 24 by Subject



High School Courses by Subject

- English
 - 86.4% meet CORE 24 requirements
 - 78.8% meet current HEC Board requirements
 - 21.2% did not meet minimum HEC Board course requirements
 - 13.9% took fewer than 4 English credits, largely because districts did not require 4 credits
 - 7.3% of the students took 4 credits of English, but credits included multiple elective English courses
 - Newspaper, debate, drama as English, journalism, and silent reading for multiple credits
 - Repeating classes for multiple credits

High School Courses by Subject

- Math
 - 88.5% meet CORE 24 requirements
 - 65.5% meet minimum HEC Board requirements
 - 34.5% did not meet minimum HEC Board course requirements
 - 11.5% took fewer than 3 credits of math
 - 23.0% took 3 or more credits, but the courses include pre-algebra, math support labs, segmented math, applied math, business math, or algebra expanded over a two year period.
 - » 13.4% of students took segmented math or PAS math, which likely increased the total number of credits students take in math

High School Courses by Subject

- Social Studies
 - 91.9% met CORE 24 requirements
 - 90.2% met minimum HEC Board requirements
 - 9.8% did not meet minimum HEC Board course requirements
 - 8.8% took fewer than 3 credits of social studies, largely because districts did not require 3 credits
 - 1% took social studies courses that did not match HEC Board requirements
 - » E.g. basic courses taken by special education students

High School Courses by Subject

- Science
 - 54.6% met CORE 24 requirements (3 credits with 2 labs)
 - 87.6% met minimum HEC Board course requirements (2 credits with 1 lab)
 - 78.4% took 2 labs but fewer than 3 credits
 - 12.4% did not meet minimum HEC Board course requirements
 - 5.9% took fewer than 2 credits of science
 - 6.5% took classes that were not clearly defined as a laboratory or that were cross-credited with Career and Technical Education (CTE) courses

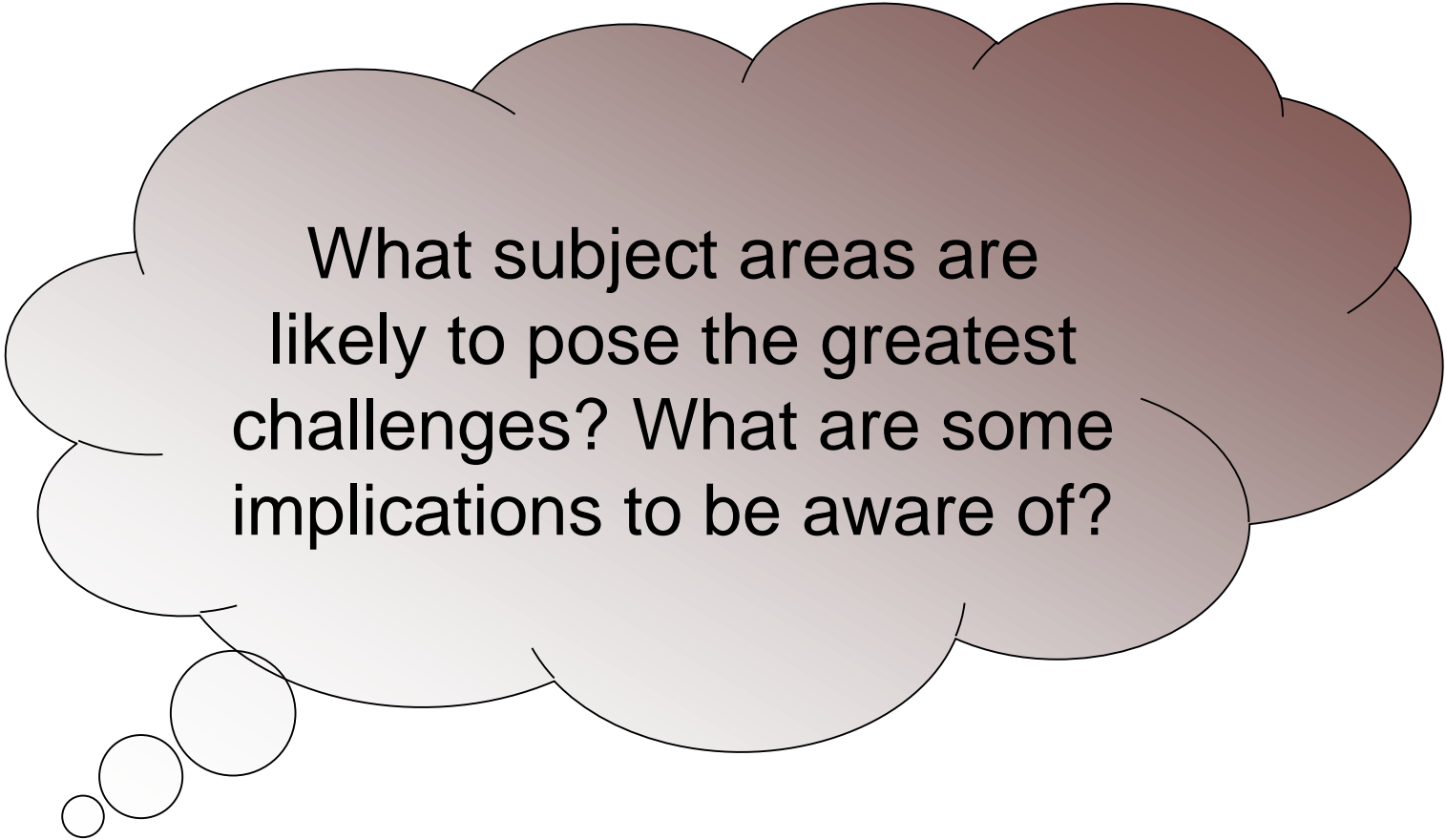
High School Courses by Subject

- World Language
 - 69.5% met CORE 24 requirements and minimum HEC Board course requirements
 - 30.5% did not meet minimum HEC Board course requirements
 - 13.3% took NO world language credits
 - 4.2% took less than 1 credit of world language
 - 13.0% took at least 1 credit of world language, but less than 2 credits

High School Courses by Subject

- Fine Art
 - 39.7% met CORE 24 requirements (2 fine arts credits)
 - 91.2% met minimum HEC Board course requirements (1 fine arts credit)
 - 8.8% did not meet minimum HEC Board course requirements
 - 3.9% took less than a half credit
 - Generally higher achieving students had the fine arts classes waived.

Reform Efforts



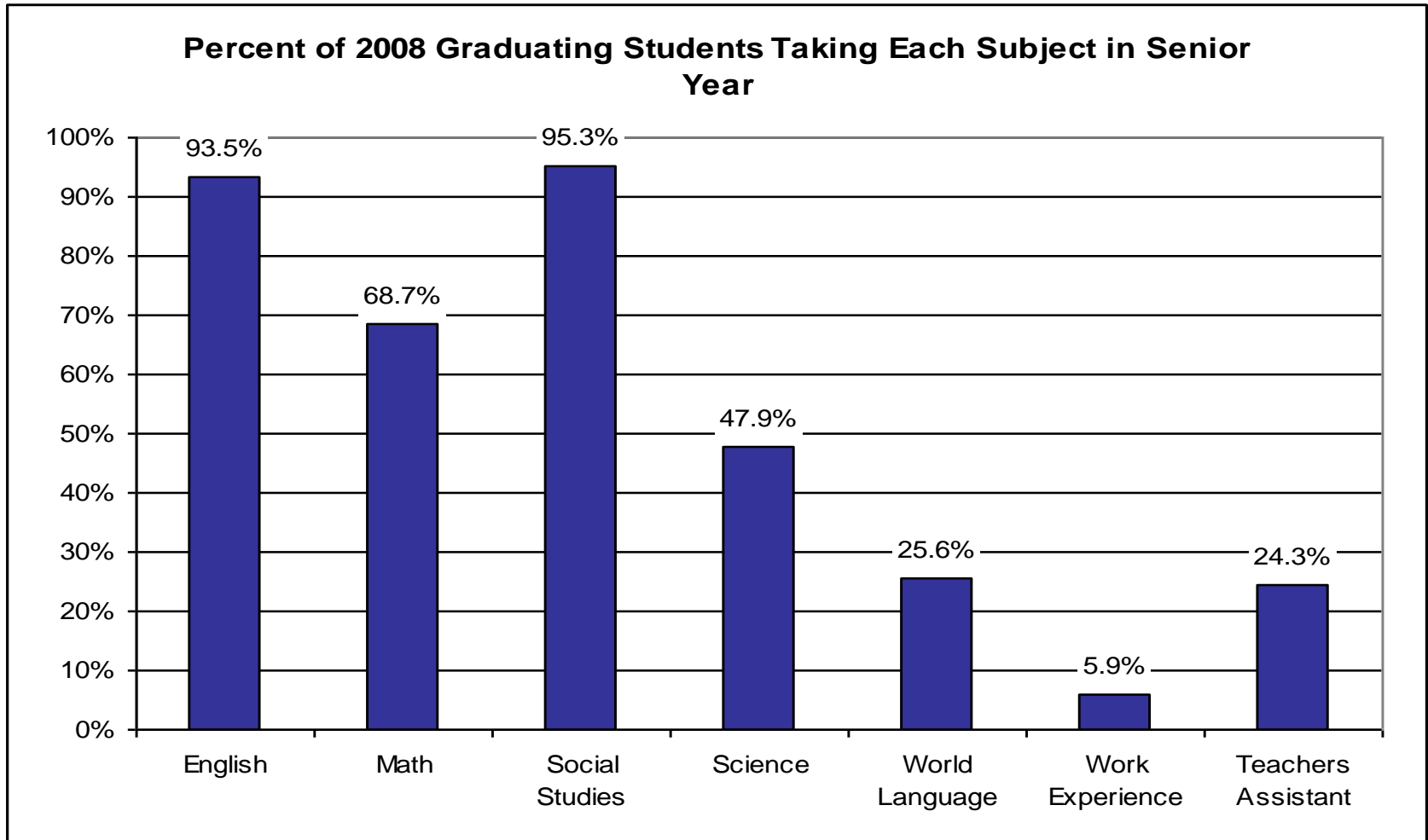
What subject areas are likely to pose the greatest challenges? What are some implications to be aware of?

A Closer Look

- Senior Course Taking Patterns
- Course Failure Rates

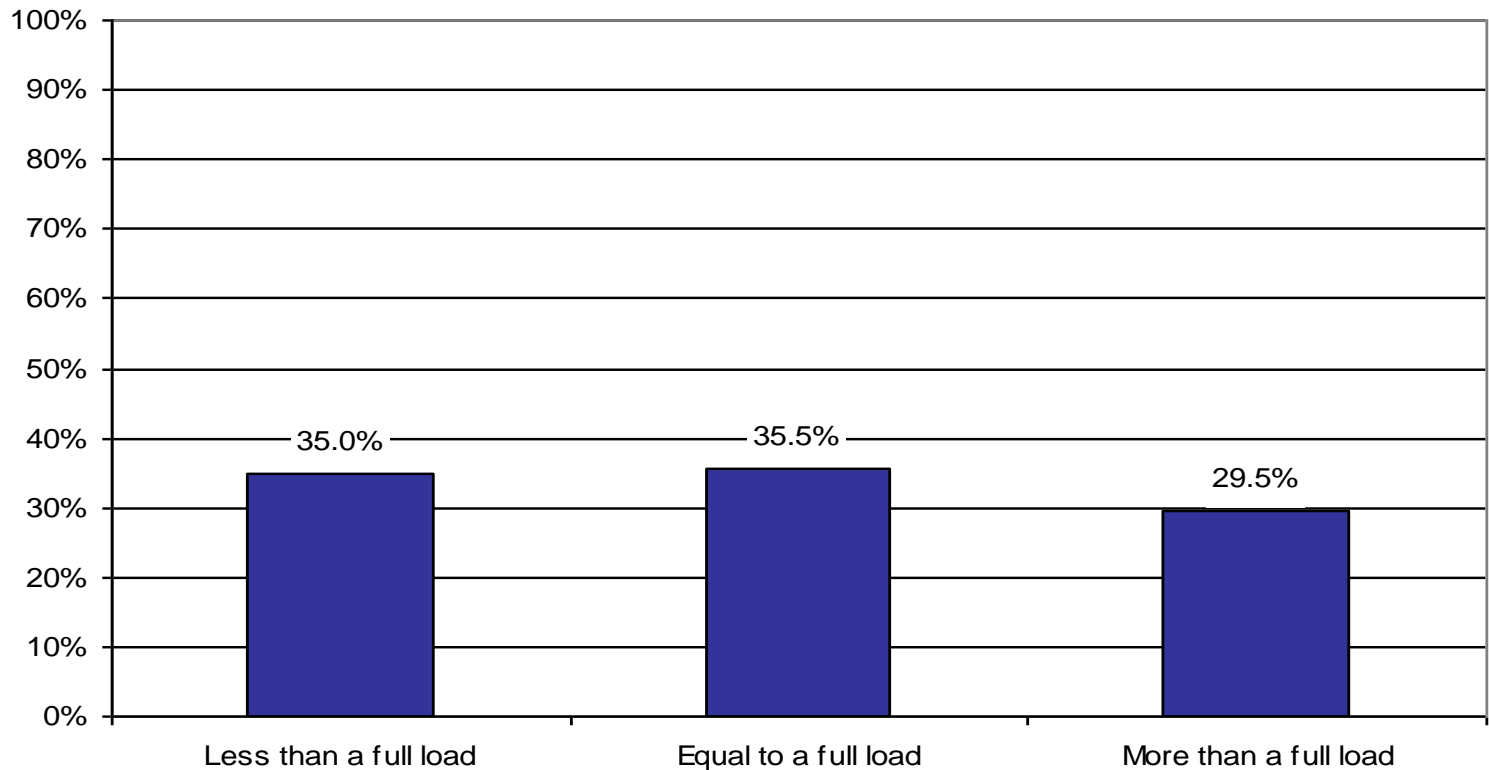
Senior Year

The Senior Year



The Senior Year

Percent of 2008 Graduating Students Taking Less Than, Equal To, or a Full Load of Classes



The Senior Year

- Students taking less than a full load
 - Had the fewest failed classes of the three groups
 - Had the highest GPA of the three groups
- Students taking more than a full load
 - 26.7% failed 2 or more classes
 - 23.2% enrolled in Running Start
 - Many took additional electives, particularly in the fine arts

Reform Efforts

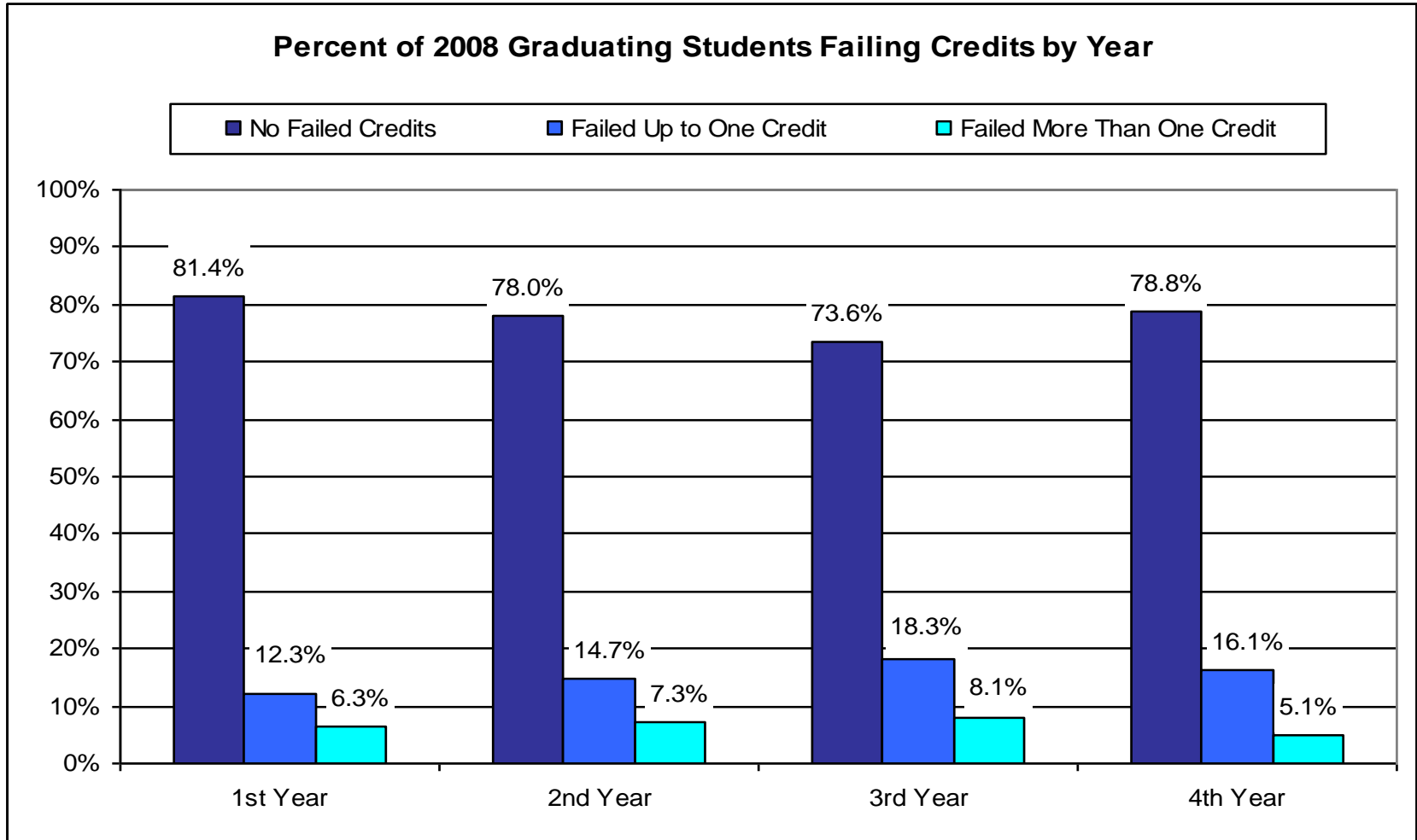
What are some implications of the **senior year** course taking pattern data?

Course Failures

Failed Classes

- 47.3% of students failed credits throughout high school
- 21.0% failed two or more credits

Failed Classes



Failed Classes

- Additional analyses from a stratified random sample
 - Most common failed classes are in the core subject areas
 - 35.5% failed math
 - 26.4% failed English
 - 25.5% failed Social Studies
 - 22.4% failed science
 - 10.6% foreign language
 - 7.0% fine arts

Failed Classes

- Credit Retrieval
 - 40.0% did not make up the class because it was an elective or above minimum graduation requirements (e.g. foreign language or pre-calculus)
 - 32.3% took the class in a subsequent quarter, but graduated with fewer than the possible credits (e.g. 24 possible credits, but graduated with 23).
 - 9.7% repeated the class in a subsequent quarter, adding in a zero hour or after school class.
 - 7.0% participated in summer school
 - 5.5% took the class online

Reform Efforts



What are some implications
of the *failure data*?

Additional Credits

- 23% of students received credit in one or more subject area for passing a particular section of the WASL
 - Students usually received .25 or .50 credits in English, math, or science for passing a portion of the WASL.