College Readiness: Test Data Summaries

Overview: Class of 2008

This report provides a brief summary of the results from the Montana’s Class of 2008 who took at least one College Entrance Exams: the ACT, the SAT, and/or the Montana University System Writing Assessment. It also summarizes results from other College Board tests, including Advanced Placement, PSAT, and Subject Area Exams.

Over 60% of Montana’s Class of 2008, consisting of 11,202 students* took an entrance exam. (*March 2008, WICHE)

Entrance exams are only part of the admissions requirements for Montana’s four-year universities. The full array of admissions requirements include:

Regents’ College Preparatory Curriculum
- 4 years English
- 3 years math
- 2 years lab sciences
- 3 years social studies

Composite/Overall College Entrance Exam Scores:
- 20 (MSU-N & UM-W) or 22 on ACT
- 1440 (MSU-N & UM-W) or 1540 on SAT; or
- 2.5 GPA; or
- Upper Half of Class.

Math Proficiency or Rigorous Core for Full Admission/College-Level Placement
- 22 on ACT or 520 on SAT

Writing Proficiency for Full Admission/College-Level Placement
- 7 on ACT essay or 18 on ACT Combined Writing
- 7 on SAT essay or 440 on SAT Writing Section
- 3.5 on MUSWA
State & National Averages

On both the ACT and SAT, Montana’s Class of 2008 scored above the national averages.

ACT Summary

In Montana’s graduating class of 2008, 6,286 students took the ACT, representing 56.1% of Montana’s graduates. The composite score (English, mathematics, reading, and science) was 22.0 overall, compared to 21.9 in 2007. The national average was 21.1. Students who took core courses (4 years English, 3 or more years math, 3 years social sciences, 3 or more years science) averaged 23.2; and those with less than core averaged 20.5.

The average for English was 21.3; for math 21.8; for reading 22.7; and for science, 21.8. The Optional Writing Test was taken by 3,800 students, whose average score was 7.2 on the Essay and 21.2 for the English/Writing Combined Score. ACT’s predictive analyses indicate that 26% of the class met all four college-readiness benchmarks (a 75% chance of earning a C or higher in a credit-bearing course), with 75% of the students ready for college composition; 49% ready for college algebra; 33% ready for college biology; and 62% ready for college social sciences. From another perspective—considering scores used for admissions as college-readiness benchmarks:

- 70% of the test takers met the MSU-N and UM-W admission standard of 20 (composite);
- 52% met the MSU, MSU-B, UM, and MT Tech admission standard of 22 (composite);
- 49% met the Math Proficiency Standard for placement into college-level math;
- 78% of the 3,800 students who took the Optional Writing Test earned Combined English/Writing scores that met or exceeded the standard for placement into college-level composition (18); and
- 62% of these 3,800 test takers earned Writing Subscores that met or exceeded the standard for placement into college-level composition (7).
Montana’s 325 American Indian students who took the ACT earned an average composite score of 17.7, down .4 from 2007; though the 37% who took core courses earned an average of 19.3 (17.5 without core). The number of American Indian students taking core has declined since 2000, when 50% took core or more. (Among Caucasian students, 58% took core or more in 2008 and in 2000.) American Indian averages were 16.1 in English; 17.8 in math; 18.2 in reading; and 18.3 in science.

The Montana Department of Labor projects management, education, community services, health care, and computer specialties as the highest growth career fields. Based on the career information that ACT collects, student interest matches the demand in the field of education and exceeds the demand in health. We expect 18% of the annual job openings in management, but only 6% of the students are interested in those fields. In terms of readiness, only 21% of the students interested in health care meet the benchmark for college readiness in science. Students interested in computer specialties demonstrate the highest college readiness scores.

**College Board Summary**

**SAT**

The SAT Reasoning Test was taken by 2,648 students. That is a 7.8% decrease in SAT test-takers from 2007.

The mean score for Critical Reading was 541 (3 points higher than 2007) and for Writing, 522 (down 1 point from 2007). In Mathematics, the mean score was 548, as compared to 543 in 2007 and 539 in 2004. Montana students who have taken core (4 yrs English, 3 yrs math, 3 yrs social sciences, 3 yrs science) or more averaged 550 in Critical Reading; 533 in Writing; and 557 in mathematics. Nationally, the Critical Reading mean was 504; Writing was 488; and Mathematics was 533. By comparison, the 2007 national means were 504 in Critical Reading, 489 in Writing, and 533 in Mathematics.

Montana students with less than core preparation scored 509 in Critical Reading, 491 in Writing, and 512 in Mathematics. Core is defined by SAT (and ACT) as 4 years English, 3 or more years math, 3 years social sciences, and 3 or more years science.

Considering scores used for admissions:
- 74.7% of the test takers met the MSU-N and UM-W admission standard of 1440;
- 61.4% met the MSU, MSU-B, UM, and MT Tech admission standard of 1540;
- 63.8% met the Math Proficiency Standard (520) for placement into college-level math
- 81.1% earned Writing scores that met the standard for placement into college-level composition (440); and
- 71% earned Essay scores that met or exceeded the standard for placement into college-level composition (7).

Montana’s 40 American Indian students who took the SAT (down from 53 in 2007) earned an average Critical Reading score of 596, down 7 points from 2007; a Writing score of 463, down 8 points; and Mathematics score of 477, down 18 points from 2007.

As with ACT, College Board reports course-taking patterns, indicating that calculus, pre-calculus, physics, European history, German, and Latin, as well as multiple years of music performance correlate with the highest scores. Like ACT, this data shows the highest percentage of students selecting “health professions” as their intended college major, yet with scores below the state average.
College Readiness Is Measured by Benchmarks, Not Averages

Despite relatively high SAT and ACT average scores, students must meet admissions requirements individually. Depending on the measure used, between 49% – 81% of the students tested College Ready. When 50% of the students test college-ready, up to 50% of the students could need developmental courses. Students who score below the General Admission Standards (first two sets of bars) may be admitted based on their GPA or class rank. Students who score below the proficiency levels in math or writing may work to improve their skills in high school, take another placement test, or enroll in developmental courses.

College Board Summary Continued

SAT II
226 Montana students took 585 SAT II Subject Area tests, often required by highly-selective universities. Subjects taken most were Math, Literature, and U.S. History.

PSAT/NMSQT
5,832 Montana sophomores and juniors took the PSAT; 4,873 of whom will graduate in 2009. National Merit Scholarships are awarded based on PSAT scores. The mean Math score for juniors was 49.9, compared to a 48.2 nationally; Critical Reading’s mean score was 48.2, compared a 46.8 national mean; and the Writing Skills average was 46.7, compared to 45.9 nationally.

AP (Advanced Placement)
2,623 Montana students took 4,048 AP exams, of which 2,585 had scores of 3 or above, meaning scores may be used to waive or earn credit for college courses. The number of test-takers was up (6.2%), and the number of scores of 3 or above increased 5.5% since 2007. 42 American Indian students took AP tests (an increase of 23.5% from 2007) and 20 of those students earned scores of 3 or above.

977 English Literature and Composition tests (69% with scores of 3 or above); 496 English Language and Composition tests (69% with scores of 3 or above); 576 US History tests (58% with scores of 3 or above); 400 Biology tests (43% with scores of 3 or above); and 393 Calculus AB tests (58% with scores of 3 or above) made up 70% of the tests taken. The number of biology tests was 107 more in 2008 than in 2007. Others remained about the same.
Montana University System Writing Assessment Summary

In Montana’s graduating class of 2008, 6,608 students took the MUSWA as juniors in 2007 and 492 took the MUSWA as seniors. The average score of those juniors was 3.5 and the average score of those seniors (who were re-taking the test to improve their scores) was 3.6. Students who indicated that they plan to continue their educations at a college or university in Montana had an average score of 3.7 in 2008 and 3.5 in 2007. For both years, 81% of the students plan to go to college.

- In the class of 2008, among those students who tested as juniors 63% earned MUSWA scores that met or exceeded the standard for placement into college-level composition (3.5).

- In the class of 2008, among those students who tested as seniors 61% earned MUSWA scores that met or exceeded the standard for placement into college-level composition (3.5).

- For the 2008 test, among students planning to go to college, 68% earned scores that met or exceeded the standard for placement into college-level composition (3.5).

- Among the 438 American Indian students who took the MUSWA, 40.3% met or exceeded the standard for placement into college-level composition (3.5).

Essay Scores from ACT, SAT, and MUSWA Reveal Similar Distribution

The graph above shows the number of students in the Class of 2008 who earned each essay score. As the graph uses the ACT/SAT scale of 2-12 points, the MUSWA scores have been doubled. Each whole number reflects perfect agreement between two scorers, whereas the odd numbers reflect adjacent scores. A score of 7 marks the threshold between non-proficient and proficient essays.

For questions about this report or to obtain more information, including full reports from ACT, SAT, or MUSWA, please contact: Jan Clinard, Director of Academic Initiatives
Office of the Commissioner of Higher Education
jclinard@montana.edu 406-444-0652