College Readiness: Test Data Summaries

Overview: Class of 2009

This report provides a brief summary of the results from the Montana's Class of 2009 who took at least one College Entrance Exam: 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.

Montana's Class of 2009 consisted of 11,037 students, 54% of whom took the ACT, 22% took the SAT, and 70% took the MUSWA.

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

1) Regents' College Preparatory Program

- 4 years English
- 3 years math
- 2 years lab sciences
- 3 years social studies
- 2) Composite/Overall College Entrance Exam Scores:
 - 20 (MSU-N) or 22 (all other campuses) on ACT
 - 1440 (MSU-N) or 1540 on SAT; or

2.5 GPA; or

Rank in Upper Half of Class.

- 3) Math Proficiency for Full Admission and Placement into MUS Core-level courses:
 - 22 on ACT or 520 on SAT; or
 - Rigorous Core (add one year of math and of science to Regent's College Preparatory Program)
- 4) Writing Proficiency for Full Admission or Placement into WRIT 101:
 - 7 on ACT essay or 18 on ACT Combined Writing; or
 - 7 on SAT essay or 440 on SAT Writing Section; or
 - 3.5 on the Montana University System Writing Assessment



State & National Averages

On both the ACT and SAT, Montana's Class of 2009 scored above the national averages.

ACT tests for science and reports English and writing scores separately. (The ACT writing test is optional.) Reading scores are used to predict college readiness in the social sciences.

These graphs also show thresholds that define college readiness according to ACT, SAT, and Montana's college admissions standards. ACT defines the threshold for college readiness as the score that predicts the stu-





dent has a 50% chance of achieving a B or higher in the freshman-level course or 75% chance of a C or higher.

These thresholds are minimums. A "perfect score" on the ACT is 36. The "perfect score" on each component of the SAT is 800.

• The graph below shows that 68% of the ACT testtakers and 74% of the SAT test-takers met the MSU Northern General Admissions Standards of 20 (ACT Composite Score) and 1440 (SAT Total score).

• 52% met the MSU, MSU-B, UM, UMW and MT Tech admission standard of 22 (ACT composite) and 60% met the 1540 SAT standard;

• 48% met the ACT Math Proficiency Standard for placement into college-level math and 60% met the SAT standard of 520;

- 74% of the 3,686 students who took the ACT Optional Writing Test and 81% who took the SAT earned combined scores that met or exceeded the standard for placement into college-level composition; and
- 62% of the ACT essays, 70% of the SAT essays and 71% of the MUSWA essays earned scores that met or exceeded the standard for placement into college-level composition.



ACT Summary

In Montana's graduating class of 2009, 5,960 students took the ACT, representing 54% of Montana's graduates. The composite average score (English, mathematics, reading, and science) was 22 overall, the same as 2008. 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 20.1.

The average for English was 21.2; for math 21.7; for reading 22.7; and for science, 21.7. The Optional Writing Test was taken by 3,686 students, whose average score was 7 on the Essay and 21.7 for the English/Writing Combined Score.

ACT's predictive analyses indicate that 23% of the class met all four college-readiness benchmarks (a 75% chance of earning a C or higher in a credit-bearing course), with 76% of the students ready for college composition; 43% ready for college algebra; 30% ready for college biology; and 55% ready for college social sciences.

Montana's 313 American Indian students who took the ACT earned an average composite score of 18.1, up.4 from 2008; though the 45% who took core courses earned an average of 19.7 (17.2 without core). The number



of American Indian students taking core declined from 2000 to 2008, but rose in 2009. (Among Caucasian students, 64% took core or more in 2009.) American Indian averages were 16.6 in English; 17.9 in math; 18.8 in reading; and 18.4 in science.

The Montana Department of Labor projects management, education, community services, health care, and marketing/sales as the highest growth career fields. Based on the career information that ACT collects, student interest matches the demand in the field of health. However, their interest lags in the other fields. We expect 14% of the annual job openings in management, but only 6% of the students are interested in those fields. In terms of readiness, only 19% of the students interested in health care meet the benchmark for college readiness in science. Students interested in community services demonstrate the highest college readiness scores.

EPAS: Educational Planning and Assessment System

ACT's EPAS includes three tests: EXPLORE, PLAN, and the ACT. In general, students themselves pay for the ACT, but school districts opt to pay for other parts of the system. PLAN, administered in several of Montana's high schools, was taken by 2,655 sophomores. These test results showed 23% of the sophomores on track to meet all four of the College Readiness Benchmarks set for the ACT. In English, 78% are on track to meet the benchmark; in mathematics, 43% are on tract; in reading, 55%; and in science, 30% are on track.

Another 627 eighth grades took EXPLORE, 590 of whom were tested in GEAR UP schools. Montana GEAR UP is concentrating on college readiness and pays for EPAS in the GEAR UP schools. These test results showed 6% on track to meet all four benchmarks; 48% on track to meet the English benchmark; 24% mathematics; 26% reading; and 8% on track to meet the science benchmark.

EPAS includes instructional supports, as well as very detailed feedback on test results so that teachers know exactly what kinds of problems students miss and suggestions as to how students could improve in those areas.

College Board Summary

SAT

The SAT Reasoning Test was taken by 2,456 students. That is a 7.3% decrease in SAT test-takers from 2008. The mean score for Critical Reading was 541 (the same as 2008) and for Writing, 519 (down 4 points from 2008). In Mathematics, the mean score was 542, as compared to 548 in 2008 and 543 in 2007. Nationally, the Critical Reading mean was 501; Writing was 493; and Mathematics was 515.

Montana students who have taken core (4 yrs English, 3 yrs math, 3 yrs social sciences, 3 yrs science) or more

averaged 551 in Critical Reading, 529 in Writing; and 554 in mathematics. Montana students with less than core preparation scored 510 in Critical Reading, 486 in Writing, and 508 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.

Montana's 44 American Indian students who took the SAT (up from 41 in 2008) earned an average Critical Reading score of 515, up 19 points from 2008; a Writing score of 480, up 17 points; and Mathematics score of 490, up 13 points from 2008.

As with ACT, College Board reports course-taking patterns, indicating that calculus, pre-calculus, physics, Euro-



pean history, German, and Latin, as well as multiple years of music performance correlate with the highest scores. This data shows the highest percentage of students selecting "health professions" as their intended college major, yet these students had average scores well below the state average.

SAT II

224 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

5,883 Montana sophomores and juniors took the PSAT; 4,835 of whom will graduate in 2010. National Merit Scholarships are awarded based on PSAT scores. The mean Math score for juniors was 50.7, compared to a 48.8 nationally; Critical Reading's mean score was 48.5, compared a 46.7 national mean; and the Writing Skills average was 46.3, compared to 45.8 nationally.

AP (Advanced Placement)

2,650 Montana students took 4,084 AP exams, of which 2,680 tests 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 (1%), and the number of scores of 3 or above increased 3.7% since 2008. 39 American Indian students took AP tests (a decrease of 7.1% from 2008) and 14 of those students earned scores of 3 or above. This includes 885 English Literature and Composition tests (69% with scores of 3 or above); 591 English Language and Composition tests (72% with scores of 3 or above); 632 US History tests (60% with scores of 3 or above); 347 Biology tests (48% with scores of 3 or above), and 399 Calculus AB tests (53% with scores of 3 or above). The big change in this test-taking pattern was that Language and Composition tests increased by 95 tests and Language and Literature decreased by 92 tests.

Montana University System Writing Assessment Summary

In Montana's graduating class of 2009, 6,608 students took the MUSWA as juniors in 2008 and 559 took the MUSWA as seniors. The average score of those juniors was 3.7 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 3.8 in 2009 and 3.7 in 2008. For both years, 81% of the students plan to go to college.

- In the class of 2009, among those students who tested as juniors, 65.6% earned MUSWA scores that met or exceeded the standard for placement into college-level composition (3.5).
- In the class of 2009, among those students who tested as seniors, 67.8% earned MUSWA scores that met or exceeded the standard for placement into college-level composition (3.5).
- In the class of 2009, among students planning to go to college in Montana, 68.3% 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 in 2009, 47.8% met or exceeded the standard for placement into college-level composition (3.5), up 7.5% from 2008.





College Readiness and Developmental Education

The graph below shows that remediation rates of those freshmen entering the Montana University System directly from a Montana high school are slowly declining. The apparent increase in remediation rates reported for mathematics in 2009 as compared to 2008 is the result of common course numbering. One course, which was a mixture of remedial and college algebra and unique in the system, has now been numbered and reconfigured to match other Intermediate Algebra courses throughout the system (M095). Intermediate Algebra is the equivalent of high school Algebra II. In the Fall of 2009, 4,229 students were enrolled in seven developmental mathematics courses and 1,288 of those students were enrolled in M095. However, only 972 of those students came directly from a Montana high school and 56% of those students are in Intermediate Algebra or Survey of Algebra, the threshold classes that prepares students for core-level College Algebra.



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

Or go to the **Preparing for College** website http://mus.edu/collegeprep.asp

This report was distributed to the Montana Board of Regents in November 2009. An abbreviated Power Point of this report will be given at the November Board of Regents meeting.