

The Future Workforce of Montana

Montana's labor force and economy are strengthened when the state's high school graduates are prepared for college and are interested in pursuing available jobs in Montana. Academic preparation is critical, given that many of the projected high growth job openings in Montana will require a 2-year college degree or more. In Montana, five of the expected highest growth career fields will be management, education, community services, health care, and computer specialties. Do Montana's future workers have the necessary skills to fill positions in these high-growth careers? Are Montana's future workers interested in jobs in these fields?

Using 2008 ACT results for 3,958 Montana high school graduates with career interest information, and 2004-2014 Montana state long-term occupational projections (based on job growth and job replacement), here is what we know so far.

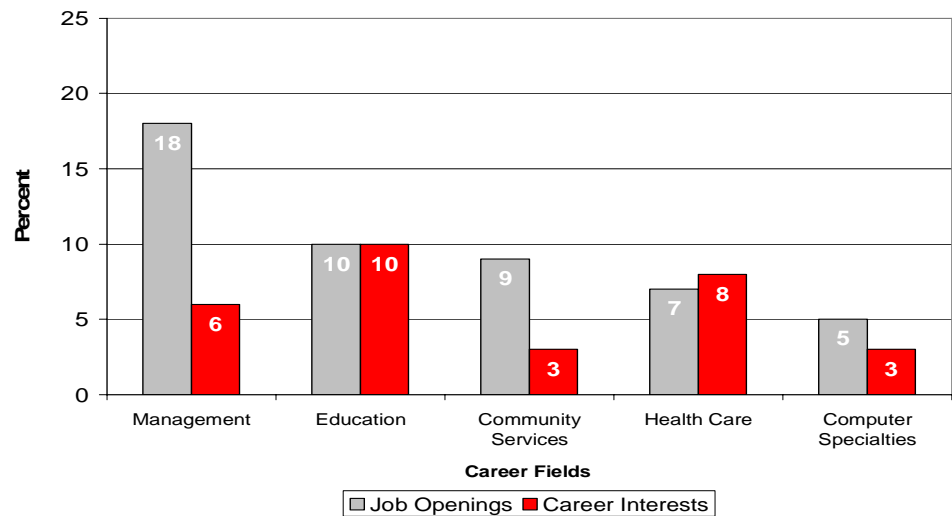
- There is some interest among Montana high school students in pursuing these high-growth career fields, but not enough to meet the overall demand.
- Of Montana students expressing interest in most of these high-growth career fields, more than two-thirds are ready for first-year college English courses, while two-thirds or less are prepared for college-level social science courses.
- Of Montana students expressing interest in most of these high-growth career fields, less than one-half are ready for college-level math or science courses.

Montana educators should continue to encourage their students to pursue high-growth Montana career fields.

Students' Interests

- Gaps between expected jobs and interested students are apparent for careers in management (convention planners, hotel/restaurant managers, etc.), community services (social workers, school counselors, etc.), and computer specialties (computer programmers, database administrators, etc.), with more jobs expected than students interested in jobs in these fields (Figure 1). Montana may be faced with potential labor shortfalls in fields where skilled individuals are most needed.

Figure 1: Projected Annual Job Openings and Montana High School Students' Interests in High Growth Montana Career Fields^{1, 2}

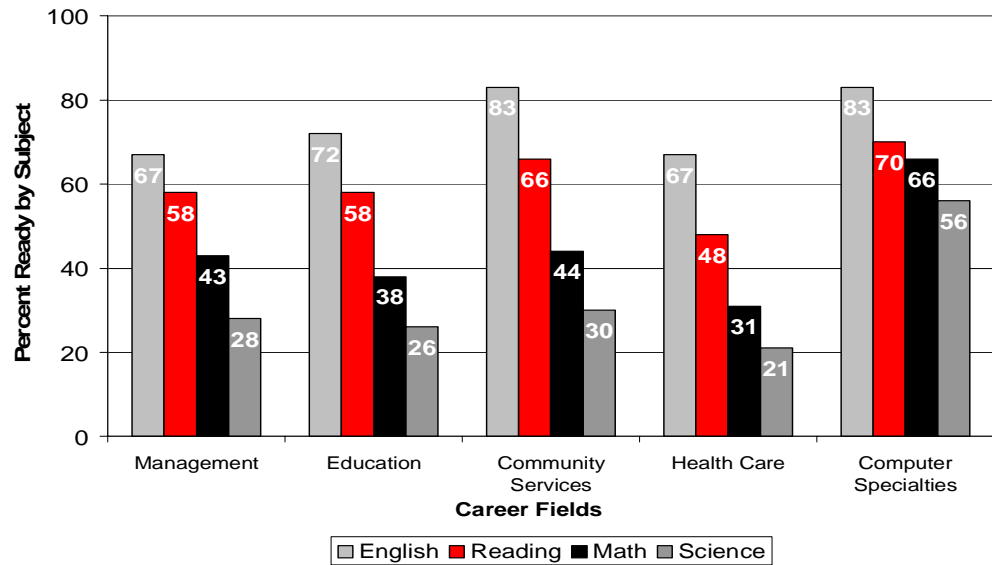


¹State projections 2004-2014 provided by Montana Department of Labor & Industry, Research & Analysis Bureau.

²Based on 2008 ACT-tested Montana students ($n = 3,958$) with valid career information.

- It appears that there is no gap between students interested in education (secondary teachers, administrators, etc.), and the jobs that will be available in this field. There are also slightly more students interested in health care (nurses, occupational therapists, etc.) than jobs that will be available in this field. However, many of the students interested in the education and health care fields are not ready to meet or exceed one or more of ACT's College Readiness Benchmarks in English, reading, mathematics, or science, as shown in Figure 2. Students who are interested and college ready are more likely to be successful in the coursework needed to enter these high-growth career fields.

Figure 2: ACT College Readiness Benchmark Performance of Montana High School Students Interested in High Growth Montana Career Fields by Subject³



³Based on 2008 ACT-tested Montana students ($n = 3,958$) with valid subject scores and career information.

Montana educators should continue to encourage their students to achieve the highest level of preparation for college, in order to meet Montana Workforce demands.

Students' Skills

- Students are ready to succeed in entry-level college courses if they meet ACT's College Readiness Benchmarks. In Montana, more than three-quarters of students are prepared for first-year college coursework in English for two of the five high-growth career fields, and more than two-thirds of students pursuing the other three fields are prepared for college-level English. Fewer students interested in these high-growth fields are prepared to succeed in college-level social science courses (indicated by ACT Reading Benchmark), with students pursuing health care careers being the least prepared and students pursuing computer specialties careers being the most prepared.
- More than one-half of students wanting to enter computer specialties are ready for college-level math or science courses. Less than one-half of students pursuing careers in management, education, community services, and health care are ready for college-level math, while less than one-third of students pursuing these careers are ready for college-level science.
- Overall, the pattern of readiness for college coursework is similar across the five high-growth career fields: Student preparation is highest for English and social sciences, and much lower for math and science. The lower levels of preparation among graduating high school students is alarming, given the high demand for science- and math-intensive careers such as nursing, pharmacy, and teaching.