



The Future Workforce of Wyoming

Wyoming'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 Wyoming. Academic preparation is critical, given that many of the projected high growth job openings in Wyoming will require a 2-year college degree or more. In Wyoming, five of the expected highest growth career fields will be management, education, health care, community services, and engineering. Do Wyoming's future workers have the necessary skills to fill positions in these high-growth careers? Are Wyoming's future workers interested in jobs in these fields?

Using 2008 ACT results for 2,881 Wyoming high school graduates with career interest information, and 2004-2014 Wyoming state long-term occupational projections (based on job growth and job replacement), here is what we know so far.

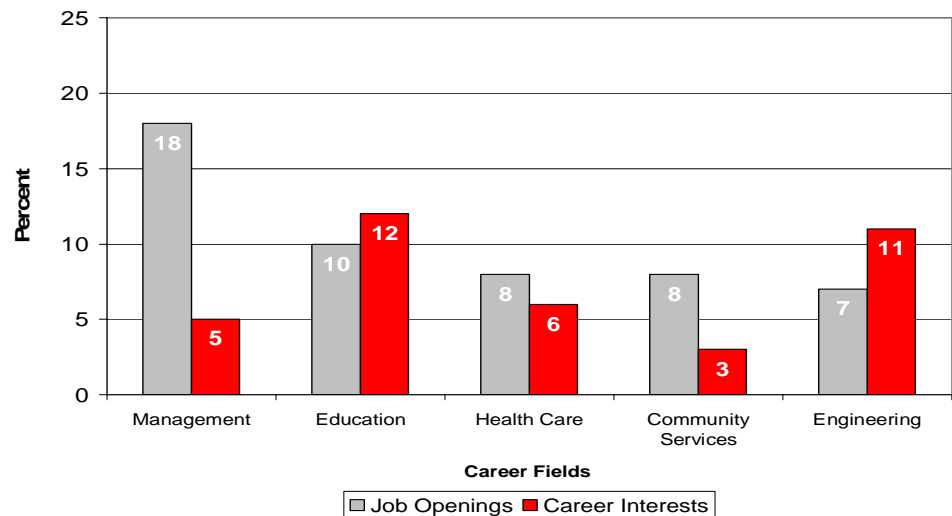
- There is some interest among Wyoming high school students in pursuing these high-growth career fields, but not enough to meet the overall demand.
- Of Wyoming students expressing interest in many of these high-growth career fields, nearly two-thirds or more are ready for first-year college English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

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

Students' Interests

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

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

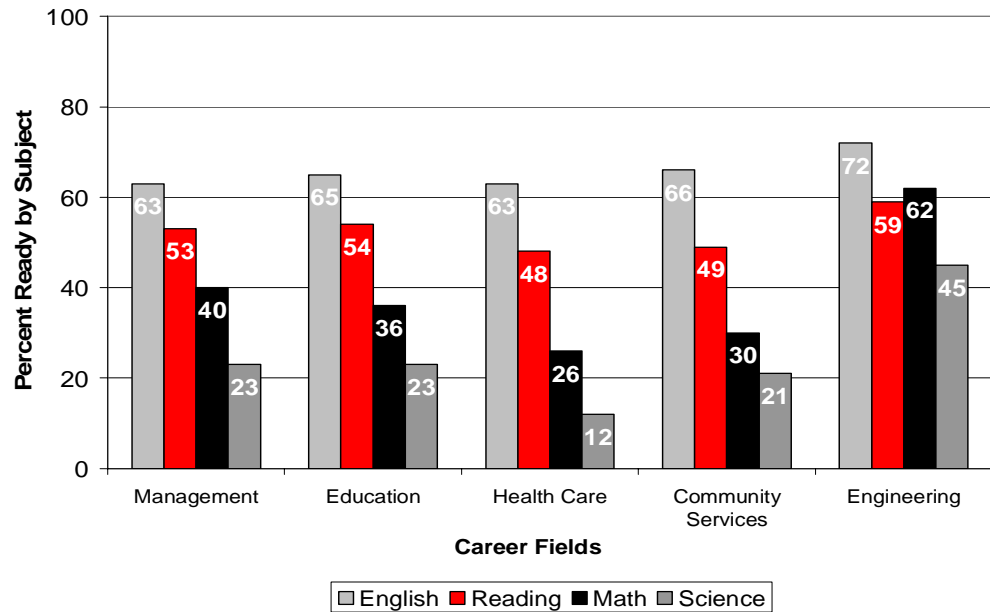


¹State projections 2004-2014 provided by Wyoming Department of Employment.

²Based on 2008 ACT-tested Wyoming students (n = 2,881) with valid career information.

- There are more students interested in the education field (secondary teachers, administrators, etc.) and the engineering field (architects, mechanical engineers, etc.) than jobs that will be available in these fields, but many of these students 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 Wyoming High School Students Interested in High Growth Wyoming Career Fields by Subject³



³Based on 2008 ACT-tested Wyoming students (n = 2,881) with valid subject scores and career information.

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

Students' Skills

- Students are ready to succeed in entry-level college courses if they meet ACT's College Readiness Benchmarks. In Wyoming, nearly two-thirds or more of students are prepared for first-year college coursework in English for the five high-growth career fields. 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 engineering careers being the most prepared.
- Approximately two-thirds of students wanting to enter engineering are ready for college-level math courses, while less than one-half are ready for college-level science. Less than one-half of students pursuing careers in management, education, health care, and community services are ready for college-level math, while less than one-quarter 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.