



The Future Workforce of Missouri

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

Using 2008 ACT results for 30,792 Missouri high school graduates with career interest information, and 2004-2014 Missouri state long-term occupational projections (based on job growth and job replacement), here is what we know so far.

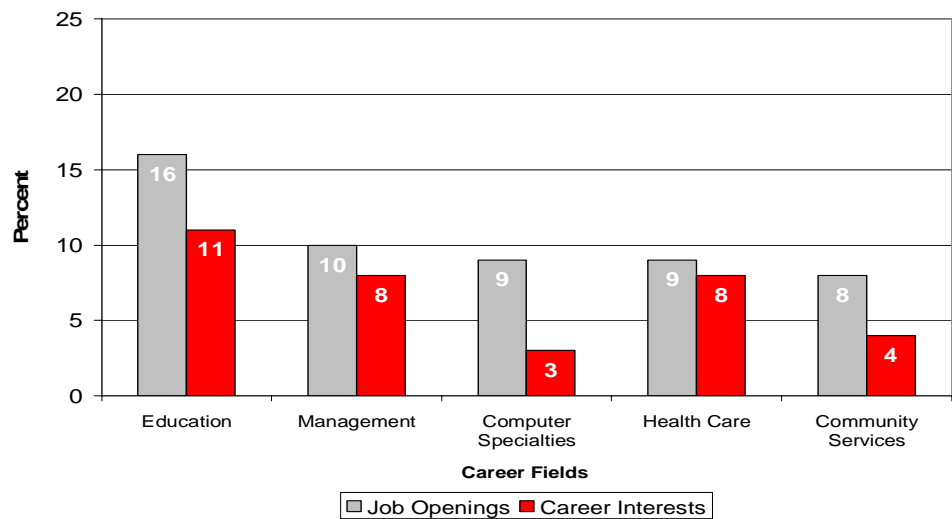
- There is some interest among Missouri high school students in pursuing these high-growth career fields, but not enough to meet the demand.
- Of Missouri students expressing interest in most of these high-growth career fields, more than two-thirds are ready for first-year college English courses, while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

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

Students' Interests

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

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

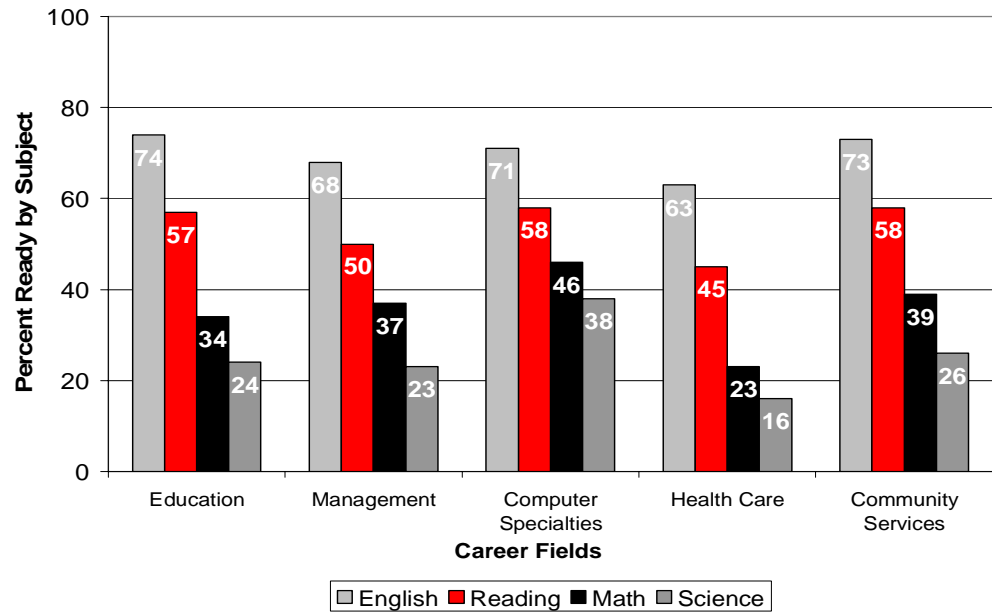


¹State projections 2004-2014 provided by Missouri Economic Research and Information Center.

²Based on 2008 ACT-tested Missouri students ($n = 30,792$) with valid career information.

- Although the gap between students interested in the health care field (nurses, occupational therapists, etc.), and the jobs that will be available in this field is more narrow, 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 this high-growth career field.

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



³Based on 2008 ACT-tested Missouri students ($n = 30,792$) with valid subject scores and career information.

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

Students' Skills

- Students are ready to succeed in entry-level college courses if they meet ACT's College Readiness Benchmarks. In Missouri, more than two-thirds of students are prepared for first-year college coursework in English for four of 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 computer specialties and community services careers being the most prepared.
- More than one-third of students wanting to enter four of the five high-growth careers are ready for college-level math courses. Less than one-quarter of students pursuing careers in education, management, and health care are ready for college-level science courses.
- 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 computer programming, nursing, and teaching.