



The Future Workforce of Minnesota

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

Using 2008 ACT results for 23,432 Minnesota high school graduates with career interest information, and 2006-2016 Minnesota state long-term occupational projections (based on job growth and job replacement), here is what we know so far.

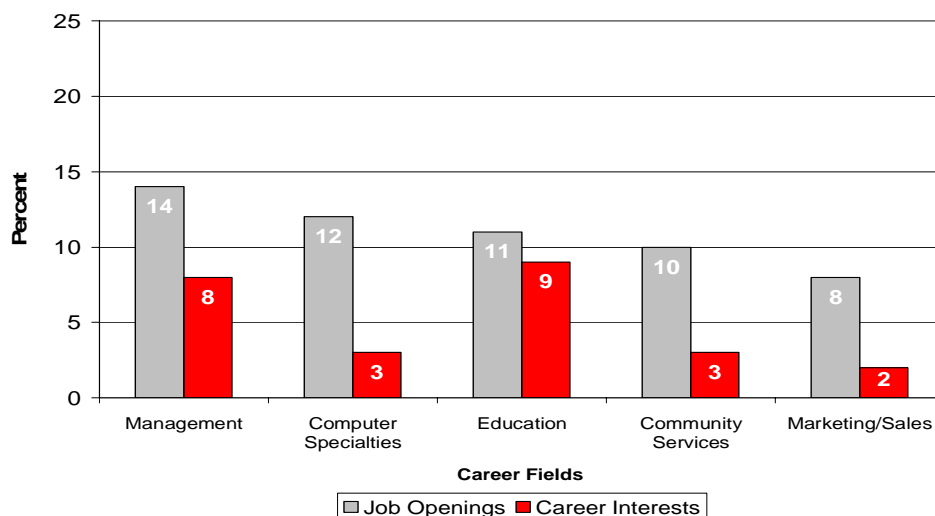
- There is some interest among Minnesota high school students in pursuing these high-growth career fields, but not enough to meet the demand.
- Of Minnesota students expressing interest in these high-growth career fields, approximately three-quarters are ready for first-year college English courses,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

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

Students' Interests

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

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

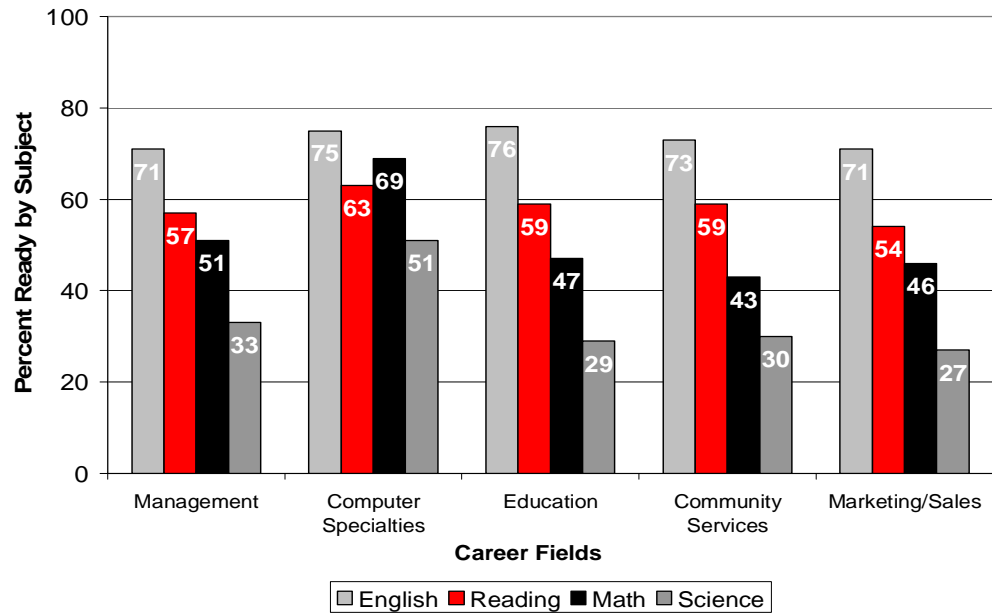


¹State projections 2006-2016 provided by Minnesota Department of Employment and Economic Development.

²Based on 2008 ACT-tested Minnesota students ($n = 23,432$) with valid career information.

- Although the gap between students interested in the education field (secondary teachers, administrators, 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 Minnesota High School Students Interested in High Growth Minnesota Career Fields by Subject³



³Based on 2008 ACT-tested Minnesota students ($n = 23,432$) with valid subject scores and career information.

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

Students' Skills

- Students are ready to succeed in entry-level college courses if they meet ACT's College Readiness Benchmarks. In Minnesota, approximately three-quarters 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 marketing & sales careers being the least prepared and students pursuing computer specialties careers being the most prepared.
- One-half or more 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 education, community services, and marketing & sales are ready for college-level math, while less than one-third of students pursuing these careers 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 and teaching.