

The Future Workforce of Iowa

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

Using 2008 ACT results for 13,519 Iowa high school graduates with career interest information, and 2004-2014 Iowa state long-term occupational projections (based on job growth and job replacement), here is what we know so far.

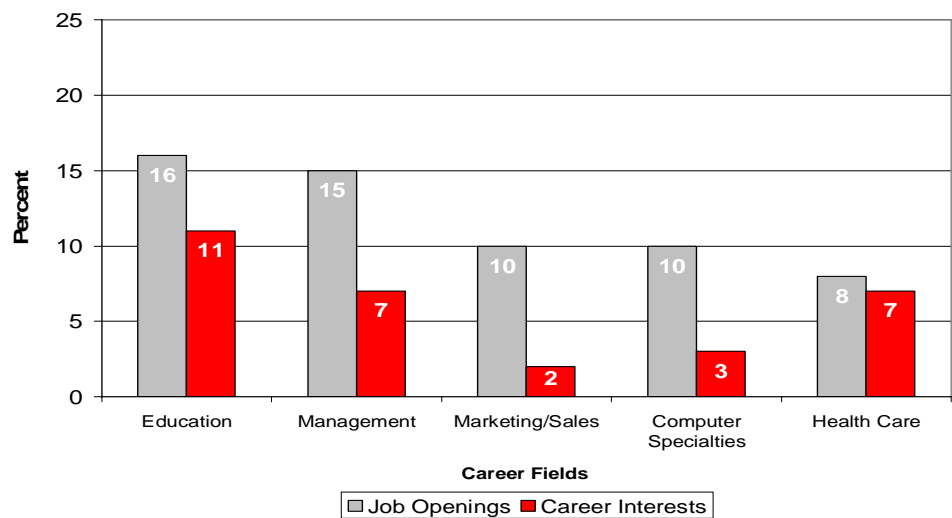
- There is some interest among Iowa high school students in pursuing these high-growth career fields, but not enough to meet the demand.
- Of Iowa students expressing interest in most of these high-growth career fields, nearly three-quarters or more are ready for first-year college English courses, while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

Iowa educators should continue to encourage their students to pursue high-growth Iowa 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.), marketing & sales (insurance agents, buyers, etc.), and computer specialties (computer programmers, database administrators, etc.), with more jobs expected than students interested in jobs in these fields (Figure 1). Iowa may be faced with potential labor shortfalls in fields where skilled individuals are most needed.

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

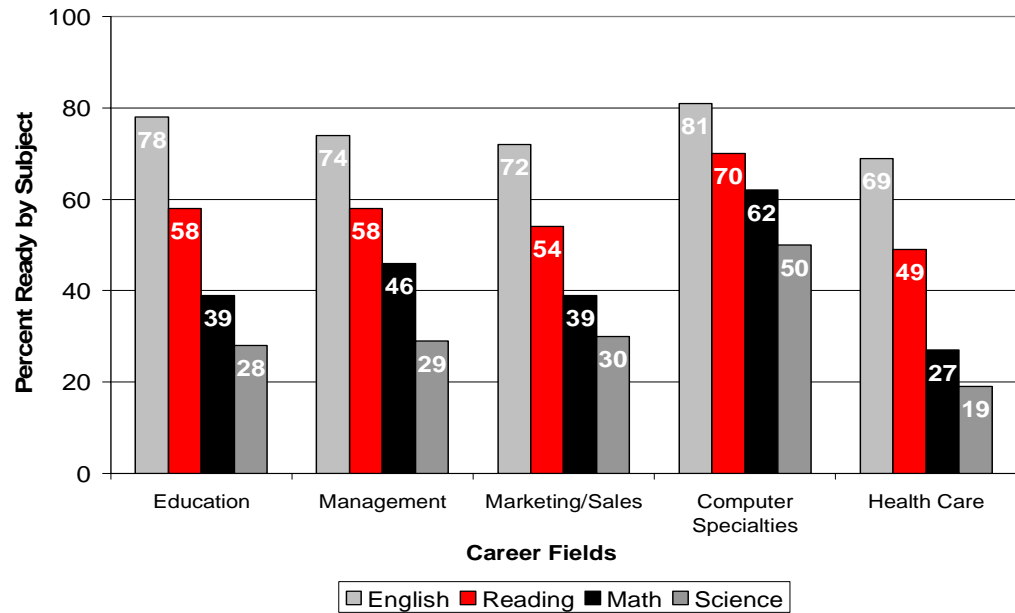


¹State projections 2004-2014 provided by Iowa Workforce Development.

²Based on 2008 ACT-tested Iowa students ($n = 13,519$) 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 Iowa High School Students Interested in High Growth Iowa Career Fields by Subject³



³Based on 2008 ACT-tested Iowa students ($n = 13,519$) with valid subject scores and career information.

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

Students' Skills

- Students are ready to succeed in entry-level college courses if they meet ACT's College Readiness Benchmarks. In Iowa, nearly three-quarters or more 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 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, management, marketing & sales, and health care are ready for college-level math or 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 computer programming, nursing, and teaching.