



The Future Workforce of Indiana

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

Using 2008 ACT results for 10,019 Indiana high school graduates with career interest information, and 2004-2014 Indiana state long-term occupational projections (based on job growth and job replacement), here is what we know so far.

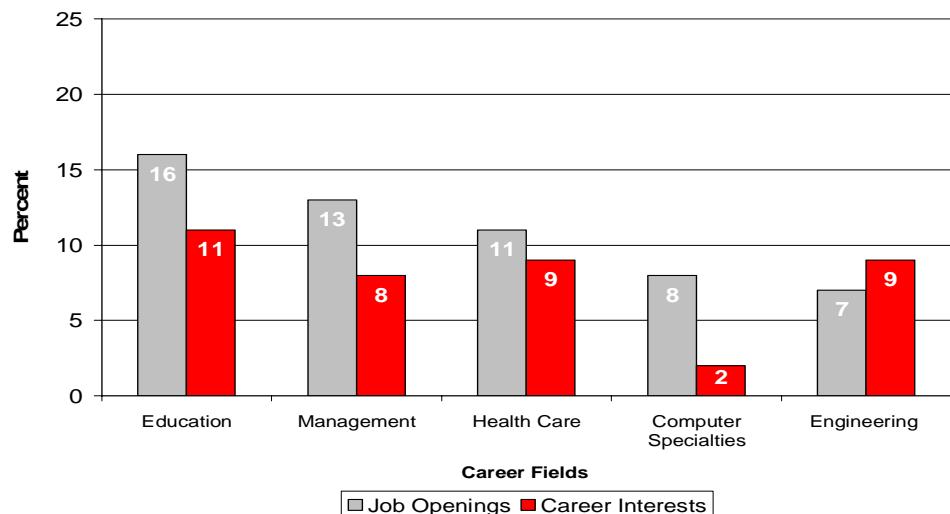
- There is some interest among Indiana high school students in pursuing these high-growth career fields, but not enough to meet the demand.
- Of Indiana students expressing interest in many of these high-growth career fields, two-thirds or more are ready for first-year college English courses, while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

Indiana educators should continue to encourage their students to pursue high-growth Indiana 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.), health care (nurses, occupational therapists, etc.), and computer specialties (computer programmers, database administrators, etc.), with more jobs expected than students interested in jobs in these fields (Figure 1). Indiana may be faced with potential labor shortfalls in fields where skilled individuals are most needed.

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

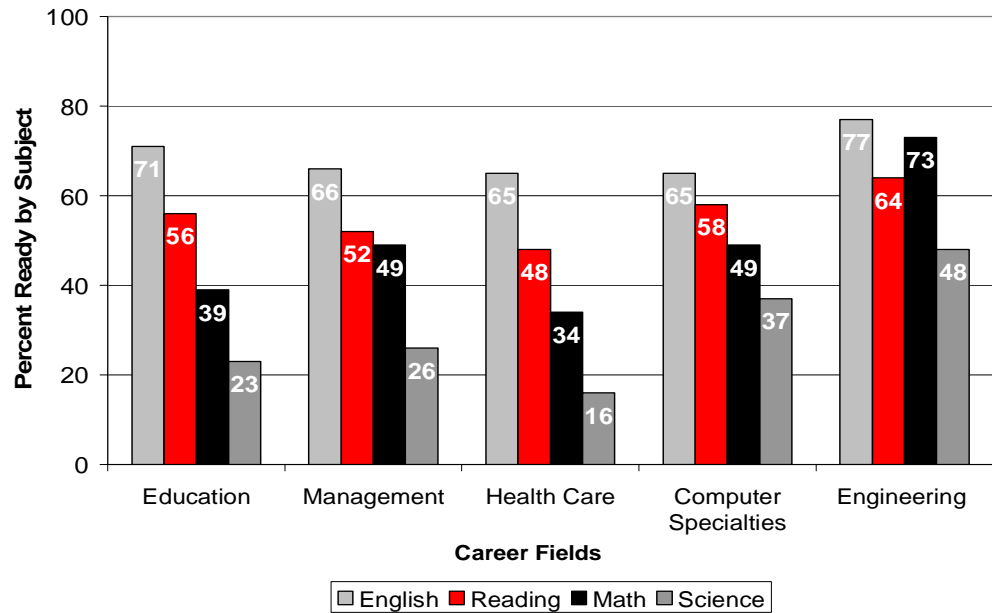


¹State projections 2004-2014 provided by Indiana Department of Workforce Development.

²Based on 2008 ACT-tested Indiana students ($n = 10,019$) with valid career information.

- There are more students interested in the engineering field (architects, mechanical engineers, etc.) than jobs that will be available in this field, 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 this high-growth career field.

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



³Based on 2008 ACT-tested Indiana students ($n = 10,019$) with valid subject scores and career information.

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

Students' Skills

- Students are ready to succeed in entry-level college courses if they meet ACT's College Readiness Benchmarks. In Indiana, 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 three-quarters of students wanting to enter engineering are ready for college-level math courses, while nearly one-half of these students are ready for college-level science. One-quarter or less of students pursuing 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 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.