



The Future Workforce of Tennessee

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

Using 2008 ACT results for 35,091 Tennessee high school graduates with career interest information, and 2004-2014 Tennessee state long-term occupational projections (based on job growth and job replacement), here is what we know so far.

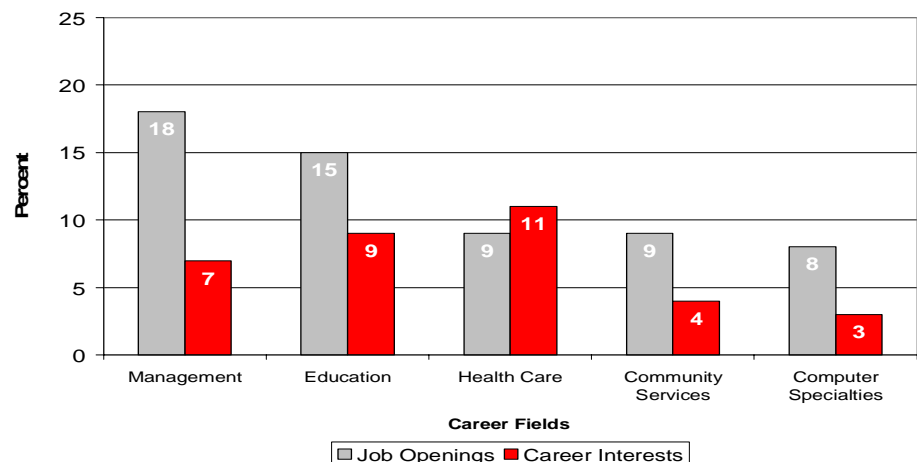
- There is some interest among Tennessee high school students in pursuing these high-growth career fields, but not enough to meet the demand.
- Of Tennessee students expressing interest in these high-growth career fields, nearly two-thirds or more are ready for first-year college English courses, while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

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

Students' Interests

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

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

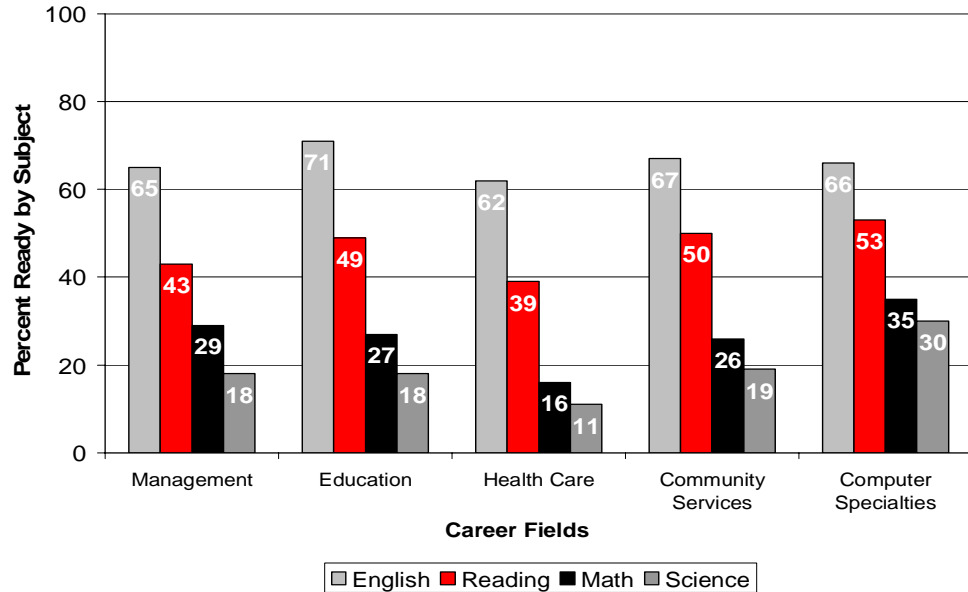


¹State projections 2004-2014 provided by Tennessee Department of Labor and Workforce Development.

²Based on 2008 ACT-tested Tennessee students ($n = 35,091$) with valid career information.

- There are more students interested in the health care field (nurses, occupational therapists, 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 Tennessee High School Students Interested in High Growth Tennessee Career Fields by Subject³



³Based on 2008 ACT-tested Tennessee students ($n = 35,091$) with valid subject scores and career information.

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

Students' Skills

- Students are ready to succeed in entry-level college courses if they meet ACT's College Readiness Benchmarks. In Tennessee, 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 computer specialties careers being the most prepared.
- Approximately one-third of students wanting to enter computer specialties are ready for college-level math or science courses. Less than one-third of students pursuing careers in management, education, health care, and community services are ready for college-level math courses, while less than one-fifth 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.