



## The Future Workforce of South Dakota

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

Using 2008 ACT results for 4,361 South Dakota high school graduates with career interest information, and 2004-2014 South Dakota state long-term occupational projections (based on job growth and job replacement), here is what we know so far.

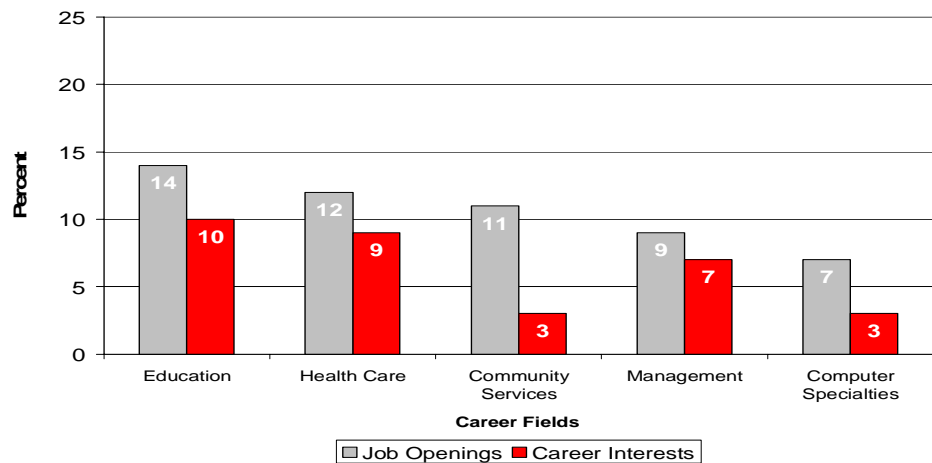
- There is some interest among South Dakota high school students in pursuing these high-growth career fields, but not enough to meet the demand.
- Of South Dakota students expressing interest in most of these high-growth career fields, approximately three-quarters are ready for first-year college English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

**South Dakota educators should continue to encourage their students to pursue high-growth South Dakota career fields.**

### Students' Interests

- Gaps between expected jobs and interested students are apparent for careers in education (secondary teachers, administrators, etc.), health care (nurses, occupational therapists, 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). South Dakota may be faced with potential labor shortfalls in fields where skilled individuals are most needed.

**Figure 1: Projected Annual Job Openings and South Dakota High School Students' Interests in High Growth South Dakota Career Fields<sup>1, 2</sup>**

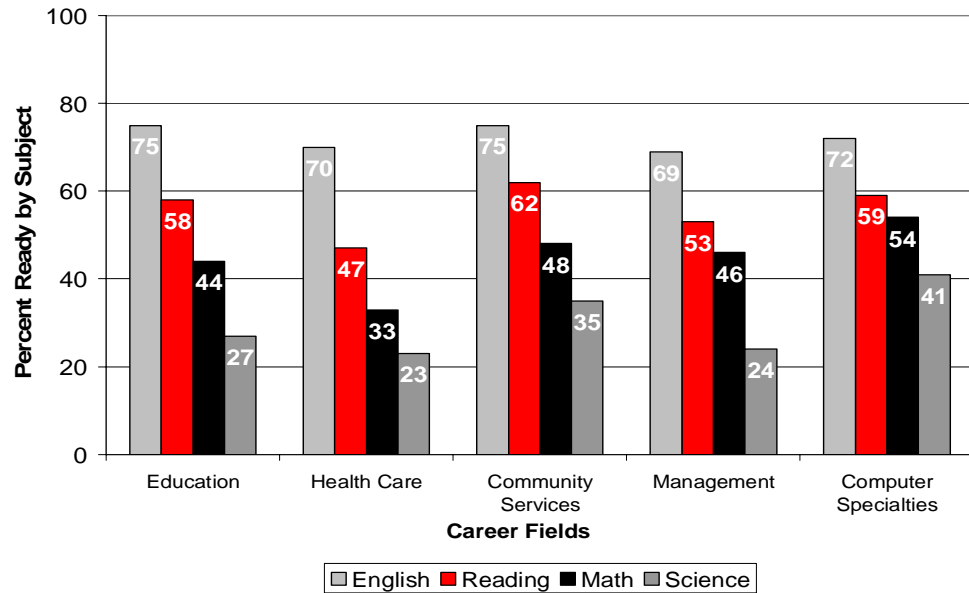


<sup>1</sup>State projections 2004-2014 provided by South Dakota Department of Labor.

<sup>2</sup>Based on 2008 ACT-tested South Dakota students (n = 4,361) with valid career information.

- Although the gap between students interested in the management field (convention planners, hotel/restaurant managers, 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 South Dakota High School Students Interested in High Growth South Dakota Career Fields by Subject<sup>3</sup>**



<sup>3</sup>Based on 2008 ACT-tested South Dakota students (n = 4,361) with valid subject scores and career information.

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

#### *Students' Skills*

- Students are ready to succeed in entry-level college courses if they meet ACT's College Readiness Benchmarks. In South Dakota, approximately three-quarters 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 community services careers being the most prepared.
- Over one-half of students wanting to enter computer specialties are ready for college-level math courses, while less than one-half are ready for college-level science. Less than one-half of students pursuing careers in education, health care, and management are ready for college-level math courses, while approximately one-quarter 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.