

# The Condition of Career Pathway Readiness in the United States

## Executive Summary

- Achieving a score of Level 5 or higher on each of the three WorkKeys NCRC assessments is associated with being qualified for almost all jobs in the US.
- Overall average wages for jobs in the US increase with higher foundational skill levels.
- For examinees who took the three ACT® WorkKeys® National Career Readiness Certificate® (NCRC®) assessments (Workplace Documents, Applied Math, and Graphic Literacy) between June 2017 and July 2019, NCRC attainment levels generally increased with level of education.
- Individuals who tested in high school or who had a low education level were less likely to qualify for an NCRC compared to examinees with a middle or high level of education.
- Of the 16 Career and Technical Education (CTE) career clusters, half do not include occupations that span the full range of educational levels (low, middle, and high) required for entry. Seven CTE clusters (Business Management, Education & Training, Finance, Government, Hospitality & Tourism, Information Technology, and Marketing) have zero to four occupations requiring mid-level educational attainment for entry. The Hospitality & Tourism cluster has only two occupations that require a high level of education, and two clusters (Information Technology and STEM) have zero to two occupations that require a low level of education.
- For this report, career cluster benchmarks were estimated for 16 career clusters. A skills gap analysis was conducted by calculating the percentage of WorkKeys examinees who met the benchmarks for a career cluster, limiting the analyses to examinees whose educational attainment level was equal to the required educational level for entry.
- The gap analysis results indicate that level of educational attainment does not necessarily track with meeting or exceeding career pathway readiness skill benchmarks across career pathways for occupations that require a similar level of education for entry.
- Foundational skill gaps across all three career pathway readiness skill benchmarks were observed among examinees with a low level of educational attainment for occupations that required a similar level of education in five career clusters (Agriculture, Government, Human Services, Information Technology, and Marketing).
- For examinees with a middle level of educational attainment, skill gaps were found for occupations that required a similar level of education in three career clusters (Architecture & Construction; Information Technology; and Law, Public Safety, Corrections, & Security).
- Skill gaps among examinees with a high level of educational attainment for occupations that required a similar level of education were identified in eight career clusters (Agriculture; Architecture & Construction; Education & Training; Government; Human Services; Health Science; STEM; and Law, Public Safety, Corrections, & Security).

## Policies and Practices to Increase Career Readiness

### *Use Career Readiness and Career Pathway Readiness Benchmarks to Set Goals for Students and Programs*

Broadly applicable career readiness benchmarks can be developed at the state or local level and used by policymakers to guide education and workforce development efforts for regions, districts, or schools. These aggregate career readiness benchmarks can be used in workforce development efforts to ensure that job seekers have the foundational skills local employers seek. Career pathway readiness benchmarks can be used in career counseling to guide individuals who are exploring different college majors, CTE programs, or job training programs linked to different career pathways. Students can work with high school or career counselors to set goals for KSAO development in alignment with the student's college major or career pathway interests.

Career pathway readiness benchmarks can also be used by education and training providers to help better align programs with student learning objectives and ensure alignment with the KSAOs demanded by local industry. Work readiness benchmarks (at the occupational level) can be used to align job-specific and work-based learning programs (including apprenticeships and other rigorous and structured work-based learning experiences) to local employer needs as well as to ensure student readiness upon entry into and completion of the program.

### *Value College Readiness and Career Readiness Equally*

At any stage in the educational pipeline, but especially in high school, classifying students as either “college prep” or “career focused” does students a grave disservice, leaving them at a disadvantage in developing the skills on the “other side” of an artificial divide. Both types of readiness are essential to every student, and both types are empirically measurable. All students deserve to know their strengths and areas for development with respect to both college and career, so that they have the data necessary to help them explore their options within whichever education and career pathways they ultimately choose. A lack of equity of “choice” for a student's education and career path is a problem which must be addressed. Schools, districts, and states should provide all students with the opportunity to benefit from both college preparatory coursework and the applied teaching that occurs in CTE programs.

Perhaps the most challenging issue that policymakers face when trying to address readiness is the issue of equity of opportunity. While domestic and international research support the assumption that higher educational attainment and cognitive skill levels are related to increased lifetime earnings, everyone does not have an equal chance of increasing their education and skills. Breaking the pattern of income and opportunity inequality in the US is inextricably linked to providing individuals of all ages with the knowledge and skills needed to successfully navigate career and education transitions throughout their lifetimes.

### *Encourage Career Awareness and Advisement Activities to Begin Earlier in a Student's Educational Pathway*

Developing a plan is the critical first step in an individual's lifelong journey toward making their educational and career aspirations a reality. While research has demonstrated that students stand to benefit the most from career exploration activities that take place early in their education, particularly in middle school, two primary barriers currently prevent career awareness from occurring sooner. First, lighter caseloads for school counselors would allow for greater attention to assisting students along their education and career pathways. School- and institution-based counselors should be provided with professional development opportunities focused on promoting career readiness to ensure that they are able to act as a conduit of relevant and timely information for students as they seek out programs and coursework that fit their needs and match their interests regardless of their postsecondary plans.

Second, students need greater exposure to quality CTE courses earlier on in order to make informed steps along their educational pathway. Support for introductory or exploratory CTE courses that seek to familiarize students with industries, careers, and available credentials are often fragmented and overshadowed by other priorities such as core academic courses or are simply not offered at all. State CTE policy should therefore aim to ensure that all middle school students have the opportunity to enroll in introductory or exploratory CTE courses that seek to familiarize students with potential CTE pathways to keep students engaged with their learning and help them begin to formulate a plan for their future.

### *Offer Authentic Work-Based Learning Experiences and Training in State Education Policies and Programs*

State education agencies must ensure that programs and curricula have genuine value for students inside and outside of the classroom. High-quality CTE contextualizes and brings to life such concepts as the practical uses of mathematics, the real-world applications of reading comprehension, and the utility of biology for a future in the health sciences industry. One of the effects of this approach is that it helps students engage with the material being taught.

Another crucial form of engagement in CTE programs is the integration, at appropriate stages of student career pathway readiness, of authentic work-based experiences. Incorporating job shadowing, internships, and apprenticeships into state education policies—often through partnerships between educators and employers—gives students an opportunity to experiment with various career paths, allowing them to more clearly identify their interests and strengths. Such programs can offer valuable work-based learning experiences that can act as a connection point to apprenticeship programs, which offer further intensive on-the-job training and relevant technical instruction.

### *Recognize the Importance of Foundational and Nonacademic Behaviors Along with an Individual's Academic and Technical Skills in State Education Policies and Programs*

Major drivers of economic change and upheaval in the labor market—globalization, technological advancements, and an aging workforce—have increasingly required students to learn new, transferable foundational skills in addition to traditional academic and technical competencies. These skills are foundational in that they are both fundamental, because they are the foundation toward more advanced skill development, and portable, because they are commonly recognized by employers nationwide and across a wide variety of occupations.

Additionally, as addressed in the ACT readiness and Holistic frameworks,<sup>18</sup> nonacademic characteristics such as behavioral skills and career navigation skills are necessary for success in both college and career. Acknowledging and incorporating these characteristics into determinations of readiness is essential to improving equity because these characteristics interact with attainment of academic skills and exhibit smaller group differences among individuals who may not have the same academic or economic opportunities as others.