

# Unpacking “Career Readiness”



## Introduction

Over the last decade the global economy has become more competitive, and the jobs needed in that new economy have grown more technologically complex. As a result, educators, education researchers, and national and state policymakers have emphasized that students must graduate from high school “ready for college and career.” While college and career readiness has become the goal for all individuals, opinions have recently begun to differ about what college and—especially—career readiness actually means and how best to assess it.

ACT has long been part of this discussion. In 2006, ACT published *Ready for College and Ready for Work: Same or Different?*, which examined the mathematics and reading performance of students who took both the ACT® test, the nation’s premier college readiness assessment, and ACT WorkKeys®, the work readiness assessment system. The report—one of the first to examine college and career readiness from an empirical standpoint—demonstrated that, in mathematics and reading, *all* high school students need to be educated to a rigorous level of readiness whether their goal is to succeed in entry-level college courses without remediation or to go directly into the workforce by learning job-specific skills in workforce training programs (ACT 2006).

In the years since its release, *Ready for College and Ready for Work* has often been incorrectly cited as proving that readiness for college and readiness for work are identical—that is, that when you measure one, you also measure the other. This assertion is simply not true.

*Ready for College and Ready for Work* identified similarities between the academic skills needed for college readiness and those needed for work readiness, similarities that could sometimes be obscured by the fact that these skills are often taught and assessed in different contexts. The goal of the report was to dispel a then-common view that high school graduates who plan to enter targeted workforce training programs after high school should be educated to some lesser standard than graduates who plan to attend college. The report underscored the importance of having a common expectation of readiness for all students: one that prepares them both for entry-level credit-bearing college coursework and for jobs likely to offer both a wage sufficient to support a family and the potential for career advancement (following relevant workforce training).

While studies by ACT continue to support the need for similarly high expectations across all postsecondary paths, ACT has also refined and deepened its groundbreaking research into the requirements for success in postsecondary education and the workplace. In summarizing some of the main conclusions arising from this research, this brief seeks to inform the national discussion around what constitutes college and (especially) career readiness. We also focus attention toward a future direction for assessments that, in taking these new conclusions into account, clarifies and strengthens important concepts related to college readiness and workplace readiness.

## Levels of Workplace Readiness

One strand of ACT research explores the similarities and differences among the specific academic skill and performance demands across postsecondary education, career clusters, and jobs or occupations. This research suggests that there are three levels of academic readiness for the workplace that move from the more general to the more specific. These three levels are described briefly below.

### “Work” Readiness

The broadest way to think about assessing readiness for employment is in terms of determining whether students have attained a core or foundational level of the academic knowledge and skills normally required to enter a typical postsecondary workforce training program, regardless of occupation or career cluster. This is roughly parallel to the ACT College Readiness Benchmarks, which represent criteria for success in entry-level credit-bearing college coursework for a typical student at a typical college (ACT 2013a). A similar level of readiness for workforce training would represent aggregate requirements across institutions, organizations, majors, and occupations. This general level of readiness is often what policymakers focus on when thinking about standards or benchmarks for accountability purposes.



In almost all cases, such a definition will not adequately represent the full extent of the skill domain required for any particular occupation (Camara 2013; Loomis 2011; National Assessment Governing Board 2011). But, in a broad sense, it can serve as a desired “first level” of readiness that students need to attain (for example, in core academic areas) before they can begin to learn job-specific skills. Different kinds and levels of foundational academic and workplace skills are needed depending on the pathway (for example, STEM vs. non-STEM).

### “Career” Readiness

A second level of readiness would focus on the jobs within a particular career cluster (for example, health care, construction, information technology) and determine both the specific academic skills and the performance level of those skills required for readiness in those jobs. For example, certain career clusters may primarily require particular kinds or degrees of math skills (for example, statistics versus algebra, numerical literacy versus geometry). Some career clusters will require a higher level of proficiency in the various skill areas than other career clusters. By specifying particular levels of skills associated with each career cluster or occupation, this concept differs both qualitatively and quantitatively from the aggregate-benchmark or “single score” notion discussed in the previous section. As Conley (2014) noted, additional cognitive competencies may also be identified that are essential for success in specific career clusters and occupations, as measured by some of the ACT WorkKeys assessments (for example, Applied Technology, Teamwork) or job-specific skills assessments (ACT 2013b).

### “Job” Readiness

A third level of readiness, which is even more refined and detailed, would be most directly tied to a specific job within an occupation or career cluster. This level refers to academic skills that are above and beyond foundational and are job specific. This level would provide even greater precision for examining the skills and the levels of these skills required by a particular job or occupation.

## Is a Broader Model Needed?

At the same time that one strand of ACT research has explored the idea of differing levels of academic readiness for college and career, a second strand has broadened the concept of college and career readiness to encompass more than just academic skills. Many students who are academically on target to succeed in postsecondary education may never pursue college or targeted workforce training programs, and of those who do, many may not persist or succeed for reasons beyond academics. In the report *Broadening the Definition of College and Career Readiness: A Holistic Approach* (Mattern et al. 2014), ACT has begun to describe the skills needed for postsecondary success through a new model of learning readiness that encompasses at least four overlapping but distinct domains:

- **Core academic skills** in English language arts, mathematics, and science
- **Cross-cutting capabilities** such as critical thinking, collaboration, problem solving, and information and technology skills

- **Behavioral skills** related to success in education and the workforce, such as being dependable, working effectively with others, adapting, and managing stress
- **Navigation skills**, or skills needed to successfully negotiate educational and career pathways, such as self-knowledge of abilities, likes and dislikes, and values; knowledge about majors, occupations, and future career opportunities; and the variety of skills related to educational and career exploration, planning, and decision making needed for long-term success in the workplace

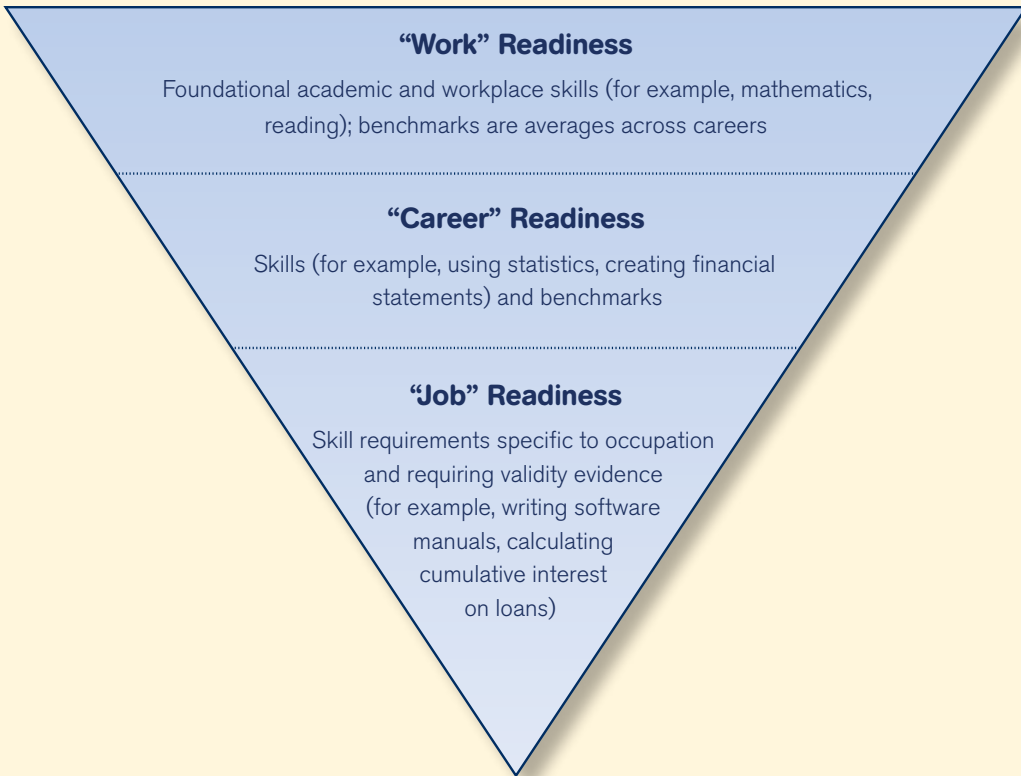
Readiness assessments that focus solely on academic proficiency risk ignoring what education, business, and industry leaders have long recognized: behavioral and career skills and cross-cutting capabilities are no less essential to success in the 21st-century college classroom and the workplace. The “life skills” framework suggested by this new model supports this holistic picture of readiness (Conley 2007).

The solutions ACT offers independently measure key components of this framework but, as ACT and others have increasingly begun to realize, no single solution can measure the full breadth of this readiness, nor should it. Core academic skills—those measured by ACT Aspire<sup>®</sup> in grades 3–10, the ACT in grade 11 or 12, and ACT WorkKeys in high school and beyond—are essential and can be viewed as the foundation upon which the rest of the life-skills framework rests. Behavioral skills—measured by ACT Engage<sup>®</sup> and emphasized in the ACT Soft Skills Suite—provide insight into how students may likely respond in certain academically related situations and potentially suggest how students might fare at some of the cross-cutting capabilities that are useful in solving real-world problems. And by using tools such as ACT Profile, students and others can begin to gain an understanding of the navigation skills needed for long-term career success. Taken together, these various assessments and tools help to measure and inform individuals about their current levels of preparedness for career success.

Each of the four sets of skills in the model above can be clearly articulated at important transition points throughout the K–career continuum. Using this expanded framework, ACT will continue researching how best to support and assist individuals as they identify and navigate career pathways and identify and address potential barriers to college and work success at key transition points along the K–career continuum. The ultimate goal of the model is to provide more personalized, developmentally appropriate feedback and to offer insights in the form of actionable information, empowering all individuals to reach their full potential.

## Conclusion

As ACT has long asserted—and as *Ready for College and Ready for Work* affirmed in 2006—the preparation needed for college and work are similar, and assessments of academic readiness can shed light on either, but they cannot tell the entire story. ACT is working to provide greater clarity to discussions of college and career readiness in the nation’s education, business, and policy communities. Unpacking the similarities and differences between college readiness and career readiness will help move us beyond a discussion of readiness to one of success. This brief touches on two main aspects of ACT’s ongoing research into this topic. First, academic readiness for the workplace can be better understood by focusing on three levels of readiness: a very general concept intended to be broadly applicable across occupations and career clusters and aimed at addressing many of the uses proposed by policymakers, indicators for individual career clusters, and more targeted indicators for specific jobs within career clusters. As the figure illustrates, skills and benchmarks at the broadest level may be useful for policy discussions, but more specific skills and benchmarks are appropriate for providing insights into readiness for career clusters or occupations and for specific majors and institutions.



Three types of readiness for the workplace. As the focus narrows, the skills to assess become more job specific.

Second, a more expansive model of readiness that emphasizes the variety of skill domains and competencies required for college and work success is needed. *Ready for College and Ready for Work* described college and career readiness in terms of benchmarks focusing solely on academic assessments and the level of education and subject-specific competencies required for success in postsecondary education or targeted workforce training. However, research published since that report has clearly established the value of additional areas of competency that are important for both college and career readiness and success. As such, a more holistic model incorporating multiple domains and specific skills associated with career clusters or occupations will typically be most appropriate for describing and evaluating student readiness for college and career.

ACT will continue this necessary research and bring additional thought leadership to the important issue of readiness, assisting education and business leaders and policymakers as they make decisions about the best ways to identify, measure, and track readiness across these multiple domains. ■

## References

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