



**CROSS**

**CUTTING**

**CAPABILITIES**

A broader  
range of  
cognitive skills

Holistic Framework



# Four Keys to College and Career Readiness

Current gauges of college and career readiness tend to focus on academic preparation and achievement, but evidence shows that success in school and the workplace is dependent on multiple aspects in addition to academic ability.

Using ACT research, **ACT's Holistic Framework** provides four domains (core academic skills, cross-cutting capabilities, behavioral skills, and education and career navigation) that most effectively predict and prepare someone's college and career readiness.

Students and employees can use this framework as a map to track themselves along their journey to becoming college and career ready. Teachers and employers can use this framework to identify times for intervention or manage additional support for their students or employees.

# Am I leveraging this in my institution?

## **K-12 Educators and Administrators**

The main core academic skills (English, language arts and math) are important in your curriculum, encouraging learning through tasks that incorporate technology skills, thinking skills, and collaboration skills provides students with an opportunity to develop their cross cutting capabilities as well. The skills learned from these types of tasks are identified by business and industry and post secondary partners as the abilities individuals need to succeed in their institutions.

## **Higher Education Professionals**

The use of technology and group collaboration in classroom settings can correlate to higher grades, support student retention, and effectively prepare them for the workplace. Incorporating tasks that support the development of these skills and offering courses that address these skills directly can lead to a higher quality graduate and workforce employee.

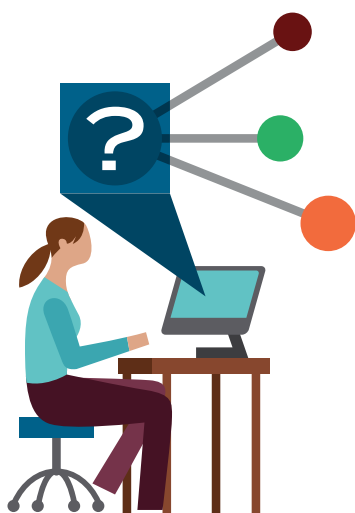
## **Workforce Development Professionals**

The knowledge and skills found in this book expand upon the traditional skills used to predict performance in the workforce. The measurement and evaluation of these skills will facilitate the ability of the workforce to identify candidates with the ability to not just perform, but to excel, in their organization.

# Cross Cutting Capabilities

## Table of Contents

<b>What are cross-cutting capabilities?</b> .....	<b>1</b>
<b>Technology and Information Literacy</b> .....	<b>3</b>
<b>Collaborative problem solving</b> .....	<b>5</b>
<b>Study skills</b> .....	<b>7</b>
<b>Thinking skills</b> .....	<b>9</b>
<b>Takeaways</b> .....	<b>11</b>



# WHAT ARE CROSS CUTTING CAPABILITIES?



# Cognitive ability outside of the core areas

As globalization and the increasing role of technology in the workforce push the boundaries of the skills traditionally required for success, we will see a decrease in jobs requiring routine and low-level cognitive skills and an increase in jobs requiring higher level social and thinking skills.



## **Technology and Information Literacy:**

Using technology knowledge and skills to effectively acquire and apply information



## **Collaborative problem solving:**

Social and cognitive knowledge, skills, and strategies to collaborate with a group to solve a problem



## **Learning skills:**

Strategies and methods to effectively facilitate and manage learning



## **Thinking skills:**

Employing modes of thinking that apply to a broad range of contexts

Each cross-cutting capability area is broken down into specific collections of knowledge and skills. Understanding an individual's proficiency with these knowledge and skills can provide insights into their strengths, weaknesses, and opportunities for improvement.

# TECHNOLOGY AND INFORMATION LITERACY



# Technology and Information Literacy

This capability focuses on the ability to research, collect, manage, transform, and exchange information using technologies such as web browsers, email, word processing, and spreadsheets as well as knowledge of sources, security, and ethics.

Understanding and using technology to acquire and apply information is also vital to success in modern work environments. Frequent use of classroom technology is rapidly increasing and associated with higher grades in college courses.

It is important, then, that education plays a role in ensuring that all students have access to and familiarity with technology.

Understanding and using technology to acquire and apply information is vital to success in modern work environments.

Fluency with these technologies can expand opportunities for success in both education and the workforce.



# COLLABORATIVE PROBLEM SOLVING



# Collaborative Problem Solving

Collaborative problem solving skills are critical for the success of both team members and the team as a whole.

At an individual level, superior collaborative problem solving skills support increased cohesion, improved communication, and superior conflict resolution.

Effective collaborative problem solving depends on the team's ability to establish both an inclusive environment and a group understanding of the problem, the goal, and the plan for achieving the goal.

# STUDY SKILLS



# Study Skills

This capability involves the development of critical study strategies related to the comprehension, integration, and retention of information.

Students who understand how they learn new information will have a more accurate understanding of what they have and have not mastered and will be in a better position to develop expertise in both academic and workplace settings.

Instruction in studying and learning strategies has been shown to have positive effects on course grades, yet these strategies are rarely taught by typical instructors, who are focused on covering core academic content.

As a cross-cutting capability, Study Skills highlights the importance for learners at all stages to acquire strategies to effectively comprehend, integrate, and retain information in a way that facilitates their learning and positions them for success.

# THINKING SKILLS



# Thinking Skills

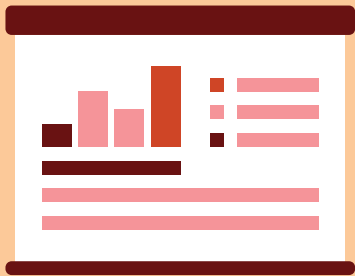
The area of Thinking Skills highlights the important applications that specific collections of thinking skills play in education and the workforce.

Examples of Thinking Skills includes critical thinking skills, problem solving, decision making and computational thinking skills.

Improvement in these skills is associated with improved success and performance in both academics and work.

These types of thinking skills have always been valuable to education and the workforce, but are expected to be required in increasing demand over the next 20 years.

# TAKEAWAYS

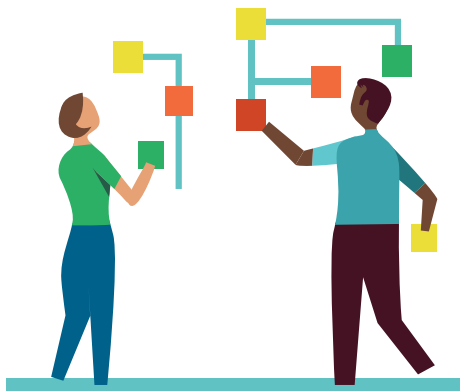


# Applying these skills to college and career readiness

The cross cutting capabilities framework focuses on skills that are consistently identified as critical for success along the entire Kindergarten to Career continuum.

When combined with the knowledge and skills of core academic contents, cross-cutting capabilities can empower people to fulfill their potential as effective and creative knowledge seekers, communicators, and problem solvers.

Integrating these abilities into your curriculum or organization can help you prepare individuals for a education and workplace landscape.





# Tracking & Evaluating Skills

How should you get started? How do you measure and cross-cutting capabilities into your school or organization?

ACT is dedicated to helping develop and evaluate students and employees using the core academic aspect of the Holistic Framework.



**PreACT® 8/9** supports 8th-9th graders with an early practice experience for the ACT test and an early indicator of college and career readiness..



**PreACT®** provides a powerful simulated testing experience for the ACT test with a predicted ACT score and data to prepare students for life after high school.



**The ACT** test evaluates a student's college readiness in the subject areas covered in this book. It accurately predicts a student's probability of getting a B or C in a corresponding entry college course.



**ACT WorkKeys®** measures real-world skills that employers believe are critical to job success.



**The National Career Readiness Certificate™ (NCRC®)** improves career outcomes for everyone and enhances employers' hiring, training, retention and promotion decisions.



**ACT Learning Professional Services** shares ACT expertise in support of programs targeting K-12, higher education, workforce, credentialing, and professional development.