



What is the National Career Readiness Certificate?

The NCRC is proof of preparedness, of trainability – proof that a candidate has the foundation skills to learn quickly, solve problems, and come up to speed on a new challenge. It is based on WorkKeys research and endorsed by the National Association of Manufacturers.

What is WorkKeys?

WorkKeys is ACT's career, workforce, and economic development system, best known for translating a vague statement like "we need more qualified applicants" into a precise set of teachable foundation skills really used in a job.

Employers tell us they use WorkKeys for hiring, promotion, and training. Educators tell us they use it to tailor development plans and certify career readiness. Workforce and Economic Developers tell us they use it to match employees to employers and employers to communities.

To date, WorkKeys' service providers have administered more than 12,500,000 assessments and conducted 16,000 job profiles for Business and Industry, Schools and Colleges, training centers, Corrections, one-stops, and economic developers. For details, see <http://www.workkeys.com>

What are some examples of WorkKeys scores in real life?

Careers that require *Applied Mathematics* plus commonly used life skills:

Level 7: Engineers and Scientists – plus tax, mortgage, insurance, and credit card decisions

Level 6: Auditors and Technicians – plus Brickmason and Carpenter Apprenticeship programs

Level 5: Managers and Loan Officers – plus College and Workforce Readiness programs

Level 4: Judges and Social Workers – plus balancing a checkbook

Level 3: School Counselors and Drivers – plus making change

WorkKeys tools

Ascertain target scores – ideals for real world success at work or training

Certify an individual's scores – readiness to learn quickly, solve problems, and come up to speed on a new challenge

Teach and Train to fill any gaps

Tools for ascertaining target scores

If you're referring someone or sending an applicant pool (based on inexact standards) to an employer, you can estimate readiness requirements with low rigor tools like the National Career Readiness Certificate, the Occupational Profile Database, or Estimator. Be sure to alert the employer that you're using an inexact standard. If you're sending candidates prequalified to exact standards, use rigorous tools like the Job Profile or SkillMap job analysis systems to determine the required skill set.

Tools for certifying individual readiness

If you want to identify 'hard' skills like reading and math, use Foundation Skills Assessments to determine who has the selected skill set. The National Career Readiness Certificate is based on the "Big 3" skill set. If you want to identify 'soft' skills like carefulness and cooperation, use Personal Skills Assessments.

Tools for teaching and training

If you want to reform teaching, use Targets for Instruction.
If you want to simulate testing for practice purposes, use Practice Tests.

If you want to teach foundation skills in focused computer labs, use instructional software from KeyTrain or WIN.

Tools that ascertain target scores

The National Career Readiness Certificate – the baseline for applicant pools

A coalition of States, recognizing a need for an employability skill credential that demonstrates mastery of foundation skills important across a range of jobs, asked ACT to identify those skill requirements through WorkKeys research. The resulting document, the National Career Readiness Certificate (NCRC) provides an easily understood, conveniently attained, and universally valued credential that can contribute to a region’s workforce and economic development.

The NCRC complements traditional credentials such as a degree or diploma. Certificate levels represent different skill levels, with each higher level communicating readiness for a greater range of jobs. A Gold Certificate, for example, is a rigorous standard of performance currently attained by less than 15% of the tested population. Also, the wide pay range for Gold illustrates that the NCRC focuses on foundation skills that prepare clients for further education and training.

Gold signifies foundation skill readiness for approximately 90% of the occupations in the WorkKeys Occupational Profile Database. It is attained by scoring at least “5” in *Applied Mathematics*, *Locating Information*, and *Reading for Information*.

<u>% of Jobs</u>	<u>Level</u>	<u>AM-LI-RFI</u>	<u>2004 Median Pay</u>	<u>2004 Pay Range</u>
90%	Gold	5-5-5	\$62,987	\$23,000 - \$141,000
65%	Silver	4-4-4	38,022	14,000 - 74,000
35%	Bronze	3-3-3	27,340	14,000 - 37,000

Obviously, the wide pay range for the Gold Level demonstrates that these are foundation skills. Using them matters.

Occupational Profile Database – finding examples of typical WorkKeys scores for applicant pools

You can find WorkKeys scores for occupations in the *WorkKeys Occupational Profiles Database*. This database identifies skills important to occupational success and gives readiness benchmarks. Because some occupations have had only a few profiles performed, we created the new *Occupational Opportunities* guide. It adds expert ratings to the data in the *Occupational Profiles Handbook* and links them to O*NET online occupational information.

<u>Sample occupations from Healthcare</u>	<u>AM-LI-RFI</u>	<u>2004 Median Pay</u>
Registered Nurses	5-4-5	\$53,640
Radiologic Technologists	3-4-5	\$44,730
Licensed Practical Nurses	5-4-5	\$34,650
Emergency Medical Techs	4-5-5	\$25,630
Pharmacy Technicians	4-4-5	\$24,160
Nursing Aides	3-4-4	\$21,220

Estimator – localizing WorkKeys national data for applicant pools

You can estimate the skill levels needed to perform a job through the Estimator guided interview process. You don’t need extensive training; you just need about an hour to review the skill definitions and document the results. Also, some schools use *Estimator* to send qualified students to work study programs.

Job Profiles and SkillMap– identifying precise skill set requirements

You can make reliable, EEOC compliant decisions about hiring, training, and program development by matching Job Profile information with individual scores on the WorkKeys assessments. In Job Profiles, the incumbents who do the jobs, guided by an ACT-trained facilitator, define the tasks and skills needed to perform a specific job successfully. They start with a task analysis to select the tasks most critical to a job, then perform a skill analysis to identify the skills and skill levels required to enter the job and perform effectively. SkillMap is a computerized version that does not require a facilitator.

Tools that certify individual readiness

Foundation Skills

Communication Skills – Business Writing, Listening, Reading for Information, Writing
 Interpersonal – Teamwork
 Problem Solving – Applied Mathematics, Applied Technology, Locating Information, Observation

Personal “Soft” Skills

Personal – Performance (integrity), Talent (personality), Fit (interest)

Which to administer first?

(Thanks to ACT’s Steve Robbins for this explanation)

The literature suggests that there are several issues that require consideration when setting up an assessment system that uses multiple tests: (1) purpose of the tests (training vs. selection), (2) sequencing, and (3) job perplexity. These issues are discussed below.

Training & Development

- Sequencing does *not* matter. For (pure) development purposes, there is no evidence that order matters or that individuals try to manipulate their results (whether on cognitive or noncognitive tests).
- Job complexity does *not* matter. In a training and development context, validities of cognitive and noncognitive tests do not evidence differences by job complexity level (Hunter, 1986; Chen et al., 2001)

Selection

- Sequencing matters. Although compensatory models (those in which all applicants take all tests and are later selected in a top-down manner) should be used to maximize validity and utility, multiple-hurdle models are often used as they are cost-effective and thus more appealing to HR managers. In a multiple-hurdles approach, only applicants who pass a hurdle (e.g., minimum cutoff score for a specific test) can take subsequent tests(s). If one uses a multiple hurdle model, then it is recommended that initial hurdles include tests that are more crucial for predicting future success on the job (i.e., those with higher validities) so as not to falsely reject potentially good performers (compared to using less crucial tests).
- Job complexity matters. Which tests are more critical to job success depends on the complexity level of the job. According to Hunter (1996), cognitive tests are more important for jobs of higher complexity in terms of information processing. However, validities of noncognitive tests (e.g., personality tests) do not differ by job complexity (Chen et al., 2001)

Below is a recommended sequence of tests (in terms of priority) that takes into account job complexity and the predictive validities of different types of tests. Other components that are common in a selection system are not included in the table below for ease of presentation. These components are application blanks (usually a first step) and interviews (usually a last step).

Job Complexity	1 st priority	2 nd priority	3 rd priority
High (top 15% of jobs)	Cognitive tests (Required)	<i>Talent</i> (Required)	<i>Fit</i> (Recommended)
Medium (middle 60% of jobs)	Cognitive tests (Required)	<i>Performance</i> or <i>Talent</i> depending on job attributes (Required)	<i>Fit</i> (Recommended)
Low (lowest 25% of jobs)	<i>Performance</i> (Required)	Basic cognitive tests or screens (Recommended)	<i>Fit</i> (Optional)

Tools that teach and train foundation skills

Targets for Instruction -- modifying instruction to help students practice and apply skills in context

Use *Targets for Instruction* guides to develop curricula and instructional strategies. Use *Targets* to identify skill levels of competencies and learning objectives, select developmental materials that match specific WorkKeys skill levels, estimate skill levels of materials you currently use, and bring the education and business communities together

Practice Tests and Test Prep – prepping learners for the WorkKeys assessments

Administer WorkKeys prep tools, such as “Preparing for WorkKeys” or the WorkKeys Practice or Prep Tests.

Instructional Software – teaching foundation skills

ACT has reviewed the curricula of two software companies and determined they teach what WorkKeys measures Contact:

KeyTrain at www.keytrain.com

WIN at www.w-win.com

Other Issues

Can KeyTrain or WIN scores be used for pre-post testing?

Neither KeyTrain nor WIN tests have been validated, so their scores are not equivalent to WorkKeys scores. Thus, using KeyTrain or WIN for pre-testing or post-testing would only provide an approximation. Further, neither qualifies for Common Measures.

What Federal Programs accept WorkKeys scores?

The six Federal Agencies subject to Common Measures accept WorkKeys for “Literacy and Numeracy Gains”. The Department of Labor is reviewing the National Career Readiness Certificate for possible acceptance as a Common Measures “industry recognized credential”. The Department of Education accepts WorkKeys scores for “Ability to Benefit” programs.

Which WorkKeys scoring system should you use?

Use Level Scores for selection, promotion, or other high-stakes purposes. Level Scores are “course-grain” and measure 5-6 points across the performance range.

Use Scale Scores to document growth over time, provide group comparisons in outcome measurement, or show evidence for Common Measures. Scale Scores are “fine-grain” and measure 25-35 points across the performance range.

Assessment	Paper-based	Internet-based	Spanish, Paper-based	Practice or Prep Tests	Details	Measures Skills in...
Applied Mathematics	Yes (45 minutes) Scannable	Yes (55 minutes)	Yes (55 minutes) Scannable	Yes	Multiple-choice 33 problems	Applying mathematical reasoning, set up and solve problems. Calculator OK, formulas included
Applied Technology	Yes (45 minutes) Scannable	Yes (55 minutes)	Yes (55 minutes) Scannable	Yes	Multiple-choice 32 problems	Reasoning to solving problems in basic principles of mechanics, electricity, fluid, and thermal
Business Writing	Yes (30 minutes)	Yes (30 minutes)			Constructed Response 1 message	Writing an original response to work-related situation. Grammar, organization, ideas
Fit		Yes (20 minutes)			Agree–Disagree 102 items	Ascertains the job applicants' interests and values to determine the fit between a candidate and occupations in an organization.
Listening	Yes (40 minutes)				Constructed Response Audio, 6 messages	Reports on accuracy and completeness of writing after receiving information by phone or in-person
Locating Information	Yes (45 minutes) Scannable	Yes (55 minutes)	Yes (55 minutes) Scannable	Yes	Multiple-choice 38 problems	Locating, inserting, comparing, summarizing, and analyzing info in graphics, charts, diagrams
Observation	Yes (60 minutes) Scannable				Multiple-choice Video, 36 problems	Paying attention to instructions, demos, details, process, procedures, standards
Performance		Yes (15 minutes)		Use "Talent"	Agree–Disagree 60 items	Prescreening test measuring a job applicants tendencies towards unsafe behaviors and attitudes towards work
Reading for Information	Yes (45 minutes) Scannable	Yes (55 minutes)	Yes (55 minutes) Scannable	Yes	Multiple-choice 33 problems	Reading and understanding work-related memos, bulletins, policies, notices, letters, regulations,
Talent		Yes (30 minutes)			Agree–Disagree 165 items	Predicts characteristics such as cooperation, discipline, influence, and stability.
Teamwork	Yes (65 minutes) Scannable				Multiple-choice Video, 36 problems	Choosing behaviors and actions that support relationships and accomplish tasks
Writing	Yes (40 minutes)				Constructed Response Audio, 6 messages	Reports on mechanics and style of writing after receiving information by phone or in-person
Readiness Screening**	Yes (40 minutes)				Multiple-choice 35 problems	Determining readiness for Applied Mathematics and Reading for Information assessments

For details see <http://www.act.org/workkeys/assess/index.html>

Test via	Send to ACT via	ACT processes in	ACT Returns via	Pay additional fee to ACT	Name of Service	Who may test...
Paper	Mail (courier, surface, air, or express)	10 business days	Mail	None	Mail	Employers may test their employees and job applicants.
			Email as .pdf	None	Electronic Scoring	
		72 hours	Email as .pdf	Must pay Business Price	Priority Electronic Scoring	Schools and colleges may test their prospective and enrolled students.
	24 hours	Fax Roster, UPS full report	\$10-\$40 per examinee	24 Hour	State agencies or others funded by a government or foundation may test their clients and the students or employees of client enterprises.	
Scanner/ Computer with dial-up access	5-10 minutes	Dial-up access	\$1,500 annual license	Express Scoring		
Computer	Computer with Internet access	2 minutes for score; full report in 24 hours	Email as .pdf	\$100 one-time fee, includes unlimited 'child' sites	WorkKeys Internet Version	Only WSPs and Express Scorers may stock tests. Only WSPs may charge businesses when selling tests.
Contracted Specialist	Varies	Varies	Contracted Specialist	None to ACT	WorkKeys Service Provider (WSP)	See www.workkeys.com . Contact the WSP nearest you about services and fees.
Analyze Jobs by		Fees...	Comments			
Training Own Job Profiler		\$2,000 tuition \$1,600/year software	Five weeks training via self-paced and web-based learning; four-days at designated training sites. Travel extra. See http://www.act.org/workkeys/analysis/profiling.html			
Hiring ACT's Profiler		\$1,750 per day, plus travel and expenses	Total cost varies by project; does not include travel and expenses. Contact ACT for details.			
Contracting with Profiler		Profilers set own fees	Contact john.nelson@act.org for profilers near you.			
Using <i>SkillMap</i>		\$1,600 per job	Computer based asynchronous job profile. 30% discount for WSP's and ACT Centers			
Using <i>WorkKeys Estimator</i>		\$225 per reusable kit	Estimates skill requirements of actual job or curriculum for training and recruiting purposes. 30% discount for VAR's and ACT Centers			
Using <i>Occupational Opportunities</i>		No fee	Estimates skill requirements for hundreds of occupations, by ONET title. Based on Job Profiles, enhanced with expert ratings.			

Teach Skills via	Fees...	Comments
Software-based individual instruction	Varies by Publisher	KeyTrain and WIN curricula alignments to WorkKeys have been approved by ACT. For further information, see www.keytrain.com and www.w-win.com .