WIN LEARNING

LEVERAGING O*NET TO BRIDGE THE SKILLS GAP

OCTOBER 2024

ABOUT WIN LEARNING

WIN Learning is a leading partner with workforce and education entities in strengthening the digital ecosystem providing individuals with sustaining skills for their future.

ABSTRACT

Many primary and secondary educators, educational administrators, and state-level policy makers are striving to ensure that learners are developing the foundational skills and competencies necessary for their future career success. However, there is a disconnect between the skills graduates have and what skills are needed for jobs across the spectrum. This is a significant challenge for not only the nation, but for our young people trying to move into their careers. WIN Learning is solving the problem by linking courseware and assessment solutions to O*NET, a comprehensive database of worker attributes and job characteristics developed by the U.S. Department of Labor Employment and Training Administration, and leveraging the national repository data in a unique way. By utilizing taxonomies, including skills, abilities, and Detailed Work Activities, along with the Job Zone data from O*NET, WIN's assessments, courseware, and credentials are directly linked to the skills required for jobs in a way that aligns workforce policy and funding under Perkins and WIOA with learner outcomes. Additionally, learners can leverage the linkages embedded in WIN Learning's solutions to O*NET to explore jobs that match their skills, and review the education and training requirements, daily tasks, state and national wage data, and growth projections for the jobs. It's a solution that benefits the learner, the parent, the educator, and the policy maker.

THE CHALLENGE

According to the National Skills Coalition, 52% of jobs require skills training beyond high school, but not a four-year degree, and just 43% of workers have had access to the skills training necessary to fill these in-demand careers. There is a continuing and growing need for foundational academic, professional, and digital skills in the workplace.

In 1991, the U.S. Department of Labor Secretary's Commission on Achieving Necessary Skills (SCANS) released a sweeping report that concluded that a new set of competencies and foundation skills should be required of all high school students, and that companies need "high performance" workers who are comfortable with technology, comfortable as members of a team, and have a passion for continuous learning. The SCANS report also proposed a foundation of Basic skills, Thinking skills, and Personal qualities, as well as five competencies that every high school graduate should possess: Resources, Interpersonal, Information, Systems, and Technology.

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In the 30 years after the initial report was published, the SCANS skills have been repeatedly examined, evaluated, and validated. The conclusions of the SCANS report are still recognized as significant and relevant to today's workforce landscape.

While the demand for higher-level skills have changed significantly, with skills such as writing high-quality generative AI prompts becoming important in today's workplace, foundational skills remain highly critical to job success in all industries. In today's work environment, many employers are no longer requiring a college degree and instead are looking for certifications, licenses, and other indicators of academic skills, professional skills, and digital skills in potential employees. In this changing work environment, assessing skill levels, developing foundational skills, and having credentials to verify the skill attainment is more critical than ever before.

Along the way, many valuable resources have been created that focus on the skills needed for work and for students and employees to be successful in their careers. In 1997, the U.S. Department of Labor Employment and Training Administration released the Occupational Information Network (O*NET). O*NET is a comprehensive database of worker attributes and job characteristics. It's the key to unlocking detailed insights into over 900 occupations, facilitating better career and educational planning.

More importantly for learners, job seekers, and parents, O*NET offers tremendous benefits such as the opportunity to explore what people do in various jobs, what the workplace context is like for jobs, what technology is used in jobs, what occupational growth rate is projected, average wages, educational requirements, and more. O*NET is an incredibly powerful career exploration tool for learners and job seekers that helps people make better career choices.

Source: https://www.onetcenter.org/content.html
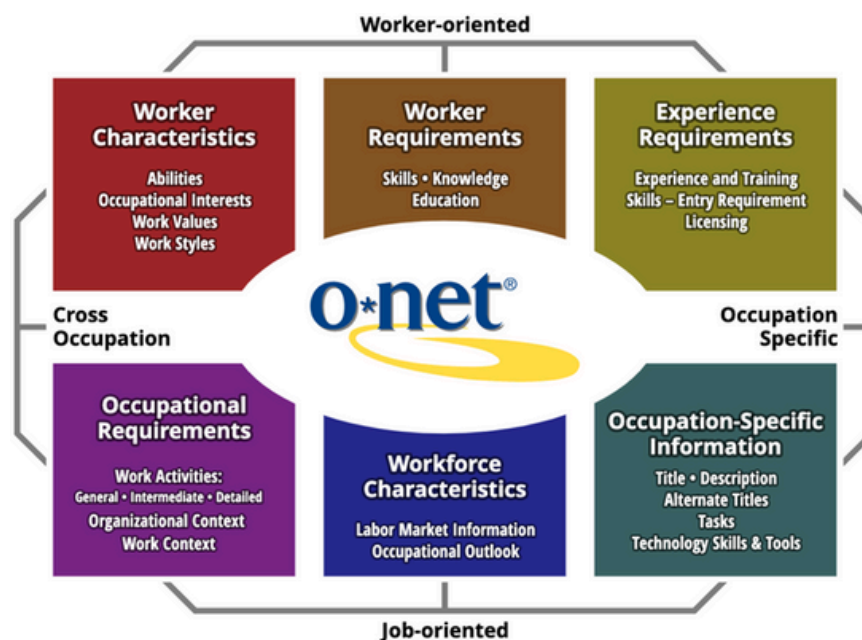
In the early 2000's the Employment and Training Administration created the Building Blocks Competency Model showing a logical progression from a foundation of personal competencies, up through academic and workplace competencies, to very specific competencies needed for particular industries and occupations. This model aligns with the Department of Education's Employability Skills Framework and the National Network of Business and Industry Associations' Common Employability Skills to meet the industry's needs.

The model is built with Personal Effectiveness as the foundation in Tier 1, including competencies such as interpersonal skills, integrity, professionalism, initiative, dependability, growth mindset, and adaptability. Tier 2 is Academic, which includes competencies in reading, math, communication, analytical thinking, and basic computer skills. Tier 3 is Workplace, which includes competencies such as teamwork, problem solving, business fundamentals, and organization.

WIN Learning's solutions target competency development at these three tiers which serve as the foundational building blocks for the rest of the pyramid. Mastering these competencies afford learners the fundamental, transferable skills necessary for career success in any industry.

MANAGEMENT COMPETENCIES

TIER 5: INDUSTRY-SECTOR TECHNICAL COMPETENCIES

TIER 4: INDUSTRY-WIDE TECHNICAL COMPETENCIES

TIER 3: WORKPLACE COMPETENCIES
Teamwork | Customer Focus | Planning & Organizing | Creative Thinking
Problem Solving & Decision Making | Working with Tools & Technology

TIER 2: ACADEMIC COMPETENCIES
Reading | Writing | Mathematics | Science & Technology | Communication
Critical & Analytical Thinking | Basic Computer Skills

TIER 1: PERSONAL EFFECTIVENESS COMPETENCIES
Interpersonal Skills | Integrity | Professionalism | Initiative | Dependability & Reliability
Adaptability & Flexibility | Lifelong Learning

Source: Adapted from https://www.careeronestop.org/CompetencyModel/competency-models/building-blocks-model.aspx

While the U.S. Department of Labor Employment and Training Administration's development of O*NET and the Building Blocks Competency Model provides valuable data about the necessary skills for today's workplace, educators from the primary and secondary levels all the way through state-level educational administrators and policy makers struggle to ensure that students are learning the foundational skills and competencies necessary for their future career success. There remains a disconnect between the skills graduates have and what skills are needed for jobs across the spectrum. This is a significant gap—and problem—for not only our nation, but for our young people trying to move into their careers.

THE SOLUTION

While O*NET is a critical piece to addressing the skills gap, what has been missing is a way to use this authoritative data source to assess the skill levels of learners, a way to increase those skill levels through targeted instruction, and a means of documenting the skill levels and improvement.

There are many vendors in the marketplace who are attempting to solve the skills gap problem. One weakness they have is that they frequently utilize a homegrown list of skills that aren't linked to national databases such as O*NET, and thus have tenuous linkages of skills and varying skill levels to jobs. This approach appears to address the problem, but is insufficient.

WIN Learning is solving the problem in a much more robust way. WIN Learning's courseware and assessment solutions link to O*NET occupational data, and leverage that data in a unique way. By incorporating the Skills, Abilities, and Detailed Work Activities taxonomies, and the Job Zone data from O*NET, WIN's assessments, courseware, and credentials are directly linked to the foundational, professional, and technical skills required for today's jobs.

By assessing against skill benchmarks linked to the O*NET taxonomies and job zones, WIN provides specific feedback on learners' current skill levels and areas for improvement, paving the way for personalized learning journeys. WIN's career-focused training programs, rooted in O*NET's comprehensive skills, work activities, employability skills, and occupational data, empower learners to make informed decisions and pursue pathways aligned with their aspirations and market needs.

In addition, learners can access O*NET OnLine directly from WIN Learning's solutions to explore jobs aligned with their identified skills and review the education and training requirements, daily tasks, wage data, and projected growth for those jobs. The connection between WIN Learning solutions and O*NET reinforces the "Why" of skills development and gives learners the foundation they need to be successful.

Career Focus

Now that you've learned and practiced drawing conclusions from explicit and implicit data, let's apply those skills to a real work environment at Job Zone 3: Forensic Science Technician.

Scenario

Not all forensic science happens in a morgue! Meet Bonnie, a forensic science technician who specializes in analyzing evidence from cybercrimes. This is called *computer forensics*.

Bonnie gets a call from a local business owner telling her that some of his sensitive digital files have mysteriously disappeared from his hard drives. He thinks the files have been stolen! Let's help Bonnie investigate.

CONCLUSION

While educators and policy makers endeavor to ensure that learners develop the foundational academic, professional, and digital skills necessary for career success, the skills gap continues. There is a disconnect between the skills graduates have and the skills employers need across all industries. Leveraging O*NET's comprehensive occupational database ensures that WIN's career readiness solutions are relevant to today's workforce.

WIN's solution to the skills gap problem is a powerful tool, aligned with workforce policy and funding under Perkins and WIOA, that helps learners, their families, and educators to connect learning to work and find a successful career path.

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