

# Foundational skills are key to success in the workplace

If a degree is enough, why do we spend so much money on training?

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When faced with the idea of training its employees in foundational skill areas such as applied math, applied technology, and communication skills, many employers shy away—deferring to their employees' educational background.

Yet consider these facts:

1. 80% of manufacturers have trouble finding qualified employees, with 60% of their job applicants rejected due to deficiencies in foundational skills such as poor reading, writing, math, and English communication skills.
2. Employers in nursing, production technology, information technology and other fields that may already require a 2- or 4-year degree are experiencing the detrimental effects caused by workers lacking in foundational skills. They have reported an adverse business impact due to inadequate skills in listening, communicating with others, working in teams, writing, and performing basic mathematics and science functions.
3. U.S. employers have been forced to compensate for the lack of foundational skills in workers by spending an estimated \$40 million per year in remedial training costs.

With increasing evidence that foundational skills do indeed form the backbone of their employees' performance and potential, employers who fail to address deficiencies in foundational skills run the risk of experiencing higher costs, more employee errors, and lower productivity.

The lack of adequately skilled workers resulted in deficient production levels for 60% of manufacturers and an inability to implement new productivity improvements for 40% of manufacturers, according to NAM's survey.

Employers are demanding a more highly skilled workforce to compete in the global economy. As emphasized in the opening remarks of the President's Economic Summit (December 2004), U.S. Secretary of Labor Elaine Chao stated that this reality, along with shifts in the labor market and recent job growth, highlights the need to ensure that workers are committed to lifelong learning. This is necessary for workers to be prepared for available jobs and to adapt to inevitable job changes over time.

### Increasing skills gap

Yet, there is a growing disconnect between the skills that job seekers have and the skills that jobs require. For example, in the medical field, there is increasing evidence that the pool of job candidates in nursing and the allied health professions lacks the necessary technical, clinical, and communication skills needed on the job<sup>1</sup>. This data, combined with existing shortages and calls for millions of new nurses and health-care workers within the next 10 years<sup>2</sup>, has created a crisis within the medical community.

The mismatch between the skill requirements of available jobs and the skills of the U.S. workforce extends to most businesses and industries<sup>3</sup>, making a significant impact on the bottom line. For example, the National Association of Manufacturers (NAM) conducted a national survey in 2001 that indicated that the lack of adequately skilled workers resulted in deficient production levels for 60% of respondents and an inability to implement new productivity improvements for 40%.

Unfortunately, this isn't only due to a lack of workers' technical or job-specific skills. It involves a lack of basic skills, too—the kind of skills that are believed to be gained through a high school and college education. Employers who think they will be able to avoid this problem by finding and hiring qualified workers should think again. According to the NAM survey results, more than 80% of manufacturers have trouble finding qualified employees, with 60% of applications for jobs rejected due to deficiencies in foundational skills such as poor reading, writing, math, and English communication skills.

## What are foundational skills?

The U.S. Secretary of Labor's Commission on Achieving Necessary Skills (SCANS) identified the skills required to succeed in the 21st-century workplace. The commission identified (1992) a three-part foundation that contained basic skills, thinking skills, and personal qualities as follows:

**Basic Skills**—reading, writing, arithmetic/mathematics, listening, and speaking

**Thinking Skills**—creative thinking, decision making, problem solving, seeing things in the mind's eye, knowing how to learn, and reasoning

**Personal Qualities**—responsibility, self-esteem, sociability, self-management, integrity/honesty

According to the commission, these skills are needed in order to advance in a career, acquire new skills for changing technologies, and maintain competitiveness in the marketplace.

Unfortunately, many workers lack the foundational skills needed to learn and apply that learning to the performance of their job<sup>4</sup>, thereby limiting an employer's ability to rely on a workforce that can perform the jobs of today and tomorrow. As a result, dollars spent by employers to train and develop the professional and technical skills of workers may need to be redirected to enhancing foundational skills first.

## Complements to a degree

Though foundational skills have traditionally been associated with a formal education, employers cannot assume that a college degree—not to mention a high school diploma—provides adequate documentation of a candidate's acquisition of or proficiency in these skills.

Corporations are pursuing the design of their own tests to document the necessary skills for their jobs. According to Ralph Alvarez, COO of McDonald's USA, "I looked at testing as something that happened in the school system. It wasn't an integral part of how to run an organization ... but we found that the verification of knowledge is critical for a successful organization"<sup>5</sup>.

U.S. employers spend approximately \$40 million per year in remedial training costs.

According to Craig Barrett, CEO of Intel, U.S. employers have had to compensate for the lack of foundational skills in workers by spending an estimated \$40 million per year in remedial training costs<sup>6</sup>. He further indicated that college graduates from other countries such as China, India, and Singapore are more qualified than U.S. graduates, particularly in math and science, and these countries are graduating far more students. For example, when compared with the U.S., China awards nearly twice as many bachelor's degrees and produces six times as many engineering majors<sup>7</sup>. As a result, an increasing number of companies are relying on immigration to match available talent to their math and science needs<sup>8</sup> or are outsourcing jobs to workers in other countries<sup>9</sup>.

Employers with jobs in fields that may already require a 2- or 4-year degree, such as nursing, production technology, and information technology, have reported the detrimental effects of workers with inadequate skills in listening, communicating with others, working in teams, writing, and performing basic mathematics and science functions. For example, the lack of effective listening and written communication skills has been associated with deficient clinical skills of osteopaths<sup>10</sup>, and an inability by doctors of internal medicine<sup>11</sup> to take a complete medical history.

These gaps in foundational skills have also been cited by professional organizations as reasons why they do not have enough prospective qualified leaders to fill top positions within their fields. Competency models have been identified for effective leadership in positions such as president and CEO of a community college<sup>12</sup> or health-care corporation<sup>13</sup>. These models reflect such skills as the need for writing, speaking, listening, reasoning, knowing how to learn, self-management, and integrity/honesty skills—the same foundational skills cited by SCANS. These professions have stated that they are in a state of crisis because, not only will they have numerous vacancies in their top positions within the next five years, but individuals coming out of their graduate school programs and within their own organizations do not have sufficient levels of competency in these foundational skills. To target measurable improvements in the acquisition and proficiency of these competencies by their constituents, these professions are coordinating efforts between their educational programs, employing organizations, and providers of professional training and development.

In an attempt to establish proficiency in the foundational skills of all U.S. workers, various states, municipalities, and the U.S. Chamber of Commerce have implemented economic development initiatives that provide documentation of foundational skills as indicators of work readiness across entry-level to technical and professional jobs. For example, Virginia and Indiana have governor-sponsored initiatives that provide a certificate that documents a worker's foundational skills. The certificate reports the results of tests that measure the level of a worker's skill proficiency within a work-related context, and can be used along with other education, training, and job experience criteria for hiring and development purposes.

Proficiency in basic skills is a prerequisite to successfully learning other skills necessary for career advancement and adaptation to new technologies.

Many other states have career readiness programs, workforce development centers, one-stop centers, and apprenticeship programs that utilize available federal funding (e.g., WIA and No Child Left Behind) that are designated for workforce development. These resources test and document a worker's proficiency in foundational skills as well as train and develop the skills needed for employment. These programs are used to attract employers to specific geographic areas due to increased foundational skills in the local workforce. They also serve to retain an employer's interest in continuing to provide jobs in the community.

In order to establish a U.S. economy that will have a competitive advantage in an increasingly technical global economy, there needs to be the mutual commitment from workers, companies, education systems, and governments to lifelong learning<sup>14</sup>. This commitment should not only be concerned with job-specific technical skills, but should have a strong emphasis on the acquisition and incorporation of foundational skills that enable workers to succeed in education, training, and work.

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<sup>1</sup> Emken, McDougall, & Clayman, 2004; Gimpel, Boulet, & Errichetti, 2003

<sup>2</sup> Chao, 2004

<sup>3</sup> Chao, 2004

<sup>4</sup> Bates & Phelan, 2002

<sup>5</sup> ATP, 2004

<sup>6</sup> Barrett, 2004

<sup>7</sup> Barrett, 2004

<sup>8</sup> Carnevale, 2005

<sup>9</sup> NAM, 2004

<sup>10</sup> Gimpel, Boulet, & Errichetti, 2003

<sup>11</sup> Schechter, et al., 1996; Woolliscroft, Stross, & Silva, 1984

<sup>12</sup> AACC, 2005

<sup>13</sup> NCHL, 2003

<sup>14</sup> Carnevale, 2005

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