



Ohio State University Extension Action Brief

Skills for Success in the Knowledge Economy

Graham Cochran, Assistant Professor

Kristi Lekies, Assistant Professor

Ohio State University Extension

In recent research publications, white papers, and the popular press, concern about a “skills gap” has been a common topic. Whether in K-12 education, higher education, or the business sector, the message is the same: The nature of work has changed, there is a widening gap between the skills employers need and the capabilities of the workforce, and the issue is very important for our future. How do we best describe the skills individuals need for success in an economy that is in transition?

While studies over the last twenty years have described skills in similar ways, we saw a need to synthesize across sources and identify a framework and a set of descriptors of the necessary skills. To add validity, we identified a group of Ohio State University Extension professionals to review the key literature. The team consisted of professionals from across Ohio representing expertise in youth development, workforce development, and community development. This group came to consensus on a framework of skills that support successful employment in the knowledge economy. Drawing from the current literature and programming experience in Ohio, six general categories of skills were identified.

Skills for Success:

Thinking Skills Thinking skills include critical thinking, problem-solving, creativity, and innovation. These skills involve the ability to:

- evaluate relevance, assess accuracy, and use information to solve problems.
- think creatively and to generate new ideas and innovative solutions.
- understand how systems (e.g., social, organizational) work, how to operate within them, and make improvements.

Communication The ability to communicate effectively using the range of methods and tools available in today’s environment. Communication skills include an ability to:

- listen, interpret and convey information to others.
- articulate thoughts/ideas clearly and effectively orally and in writing (e.g., one-on-one communication and larger group/public speaking skills, write memos and reports).

Teamwork and Leadership The interpersonal skills to work effectively in a team and provide leadership include the ability to:

- work cooperatively with others and contribute to a group effort.
- build collaborative relationships, work with diverse teams, negotiate and manage conflict.
- motivate an individual or group.
- bring out the best in those around them to inspire innovation and performance.
- leverage the strengths of others to achieve common goals; use interpersonal skills to coach and develop others.

Lifelong Learning and Self-direction Continually improving capabilities by:

- taking responsibility to set goals and improve skills through mentoring, training, formal education, or other learning activities.
- showing initiative by soliciting and receiving feedback, and learning from one’s mistakes.

Technology Adoption and Application A firm foundation of technology skills includes:

- a sound understanding of technology concepts, systems, and operations.
- selecting and using appropriate technology to accomplish a given task.
- identifying and solving problems with technology.

Professionalism and Ethics The ability to maintain an appropriate level of professionalism and ethical behavior through:

- demonstrating accountability and effective work habits (e.g., punctuality, working effectively with others, time and workload management).
- ethical behavior (e.g., acting responsibly with larger community in mind).

Increasingly Important Skills & Content Areas:

When asked about skills that will become more important and emerging content areas most critical for the future, employers frequently cite the skills for success described above and add:

- Foreign Languages – as a tool for understanding other cultures.
- Health and Wellness – nutrition, exercise, stress reduction, and work life balance.
- Personal Financial Responsibility – managing finances and planning for the future.
- Entrepreneurial Skills – enhance productivity and expand career options.
- Diversity – ability to learn from and work with individuals representing diversity in its broadest sense.

In summary, knowing what is needed to be successful in the workforce is not the barrier. Although different terms are used, there is widespread agreement as to the type of skills and personal qualities required for 21st century work and life. Research from the 1990's through today has built a solid foundation. Employers, supervisors, workers, young people, and other key stakeholders have spoken and their message is consistent. A wide spectrum of stakeholders has identified a skills gap that will be compounded by changing demographics. The stakes are high for individuals, businesses, communities and our country. The time is right for key stakeholders who may be parents, educators, business leaders, policy makers, and youth themselves to engage in conversations that will lead to enhanced and expanded opportunities for developing skills for success in the knowledge economy.

Sources & Recommended Reading:

American Society for Training and Development. (2006). *Bridging the skills gap: How the skills shortage threatens growth and competitiveness...and what to do about it*. Retrieved from <http://www.astd.org>

Business-Higher Education Forum. (2003). *Building a nation of learners: The need for changes in teaching and learning to meet global challenges*. Retrieved from http://www.bhef.com/publications/2003_build_nation.pdf

Casner-Lotto, J., & Barrington, L. (2006). *Are they really ready to work? Employers' perspectives on the basic knowledge and applied skills of new entrants to the 21st Century workforce*. The Conference Board, Inc.

International Society for Technology in Education (ISTE). (2007). *National technology education standards for students: The next generation*. Retrieved from http://www.iste.org/inhouse/nets/cnets/students/pdf/NETS_for_Students_2007.pdf

Levy, F., & Murnane, R. J. (2006). Why the changing American economy calls for twenty-first century learning: Answers to educators' questions. *New Directions for Youth Development*, 110, 53-62.

The Secretary's Commission on Achieving Necessary Skills. (1991). *What work requires of schools: A SCANS report for America 2000*. Washington DC: U.S. Department of Labor. Retrieved from <http://wdr.doleta.gov/SCANS/whatwork/>

Acknowledgements:

The authors would like to acknowledge our colleagues who reviewed and synthesized skills key literature for the success in the knowledge economy (Dave Boulay, Kathy Cox, Theresa Ferrari, Nadine Fogt, Larry Hall, Jeff King, Rick McCann, Carol Smathers, and Jerry Thomas).

Ohio State University Extension embraces human diversity and is committed to ensuring that all research and related educational programs are available to clientele on a nondiscriminatory basis without regard to race, color, religion, sex, age, national origin, sexual orientation, gender identity or expression, disability, or veteran status. This statement is in accordance with United States Civil Rights Laws and the USDA.

Keith L. Smith, Ph.D., Associate Vice President for Agricultural Administration and Director, Ohio State University Extension
TDD No. 800-589-8292 (Ohio only) or 614-292-1868