

College and Career Readiness

NASDCTEc believes that there is great commonality between the knowledge and skills individuals need to be ready to successfully transition into postsecondary education and into the workforce. Historically, it was believed that individuals required a certain set of academic skills for entry into postsecondary education and that a separate set of technical and employability skills were needed to enter the workforce. Employers today need different skills and abilities from their workforce than what was needed in the past. This has resulted in an alignment of requirements for individuals to be ready to enter both postsecondary education and the workplace.

With the support of a grant from the U.S. Department of Education in 2000, NASDCTEc and its member states convened employers, educators at the secondary and postsecondary levels and other relevant community groups to craft and validate a set of national knowledge and skill statements that define what individuals need to know and be able to do at varying points along a career path.

This rigorous development and validation process resulted in the identification of what we refer to as '[essential knowledge and skill statements](#).' These statements outline the broad knowledge and skills all individuals need to be successful in the workforce and postsecondary education, regardless of their chosen Career Cluster and should be integrated into the career specific training rather than taught outside these courses. These essential knowledge and skill statements represent a comprehensive definition of what constitutes the core of initial college and career readiness. The essential knowledge and skills are organized in the following categories:*

- Technical skills
- Academic foundations (minimally defined as a state's graduation requirements)
- Communications
- Problem-solving and critical thinking
- Information technology applications
- Systems
- Safety, health and environmental
- Leadership and teamwork
- Ethics and legal responsibilities
- Employability and career development

As individuals identify a career area of interest, whether by declaring a postsecondary major, enrolling in a certification program or pursuing a job in the workplace, additional competency will be needed in some, if not all, of the above 10 categories of knowledge and skills. For example, if an individual chooses to enroll in an environmental engineering program, s/he will require additional academic courses beyond most state graduation requirements. Many colleges are also requiring portfolios or work-based learning experiences documenting technical competency. Similarly, if an individual chooses to enter the workforce immediately after high school and wishes to enter the medical field as a radiology assistant, his/her high school education would have to include additional academics such as anatomy and physiology, as well as technical content such as imaging procedures.

Today's workplace requires that all workers be learners throughout their careers. Therefore, it is logical that there be a shared body of knowledge and skills that all individuals must have to make the initial transition into postsecondary education or the workplace a successful one. Career focus, whether directed at postsecondary experiences or the workplace, will dictate the amount and type of additional knowledge and skills (above and beyond core college and career readiness) necessary for the individual to acquire in order to be successful in their chosen field.

*definitions of each of these ten areas is attached

States' Career Cluster Initiative

Essential Knowledge and Skill Statements

TECHNICAL SKILLS: Use of technical knowledge and skills required to pursue careers in all career clusters, including knowledge of design, operation, and maintenance of technological systems critical to the career cluster.

ACADEMIC FOUNDATIONS: Achieve additional academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within a career cluster.

COMMUNICATIONS: Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.

PROBLEM-SOLVING AND CRITICAL THINKING: Solve problems using critical thinking skills (analyze, synthesize, and evaluate) independently and in teams. Solve problems using creativity and innovation.

INFORMATION TECHNOLOGY APPLICATIONS: Use information technology tools specific to the career cluster to access, manage, integrate, and create information.

SYSTEMS: Understand roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment. Identify how key organizational systems affect organizational performance and the quality of products and services. Understand global context of industries and careers.

SAFETY, HEALTH AND ENVIRONMENTAL: Understand the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. Follow organizational policies and procedures and contribute to continuous improvement in performance and compliance.

LEADERSHIP AND TEAMWORK: Use leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.

ETHICS AND LEGAL RESPONSIBILITIES: Know and understand the importance of professional ethics and legal responsibilities.

EMPLOYABILITY AND CAREER DEVELOPMENT: Know and understand the importance of employability skills. Explore, plan, and effectively manage careers. Know and understand the importance of entrepreneurship skills.