

GLOBAL COMPETITIVENESS

STUDENT SUCCESS

ENTREPRENEURSHIP
COLLEGE & CAREER
LEADERSHIP
ECONOMIC VITALITY
RATES

HIGHER GRADUATION
HIGH-DEMAND
LEADERSHIP

RIGOR
SKILLED
SUSTAINABLE
WORKFORCE

WORLD CLASS

LEADERSHIP
GLOBAL
COMPETITIVENESS
RELEVANCE

ECONOMIC VITALITY
STUDENT SUCCESS
HIGHER GRADUATION
RATES

LEARNING

LEADERSHIP

TECHNICAL KNOWLEDGE

CAREER PREPARATION

HIGHER GRADUATION RATES
OPPORTUNITY
INNOVATION
RELEVANCE
ECONOMIC DEVELOPMENT

OPPORTUNITY

COLLEGE &

CAREER READINESS

INNOVATION

ECONOMIC VITALITY

RELEVANCE

SUSTAINABLE

SKILLED

WORKFORCE

ECONOMIC DEVELOPMENT

TECHNICAL KNOWLEDGE
LEARNING
INNOVATION

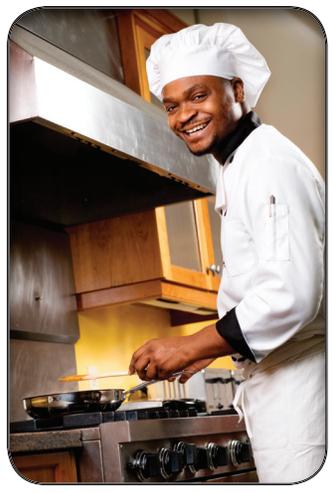
CAREER

PREPARATION
LEARNING
TECHNICAL KNOWLEDGE



Learning that works for Nebraska

CTE™



Nebraska's Career Education System

Overview



CAREER PREPARATION

OPPORTUNITY

SKILLED WORKFORCE

ECONOMIC DEVELOPMENT
STUDENT SUCCESS



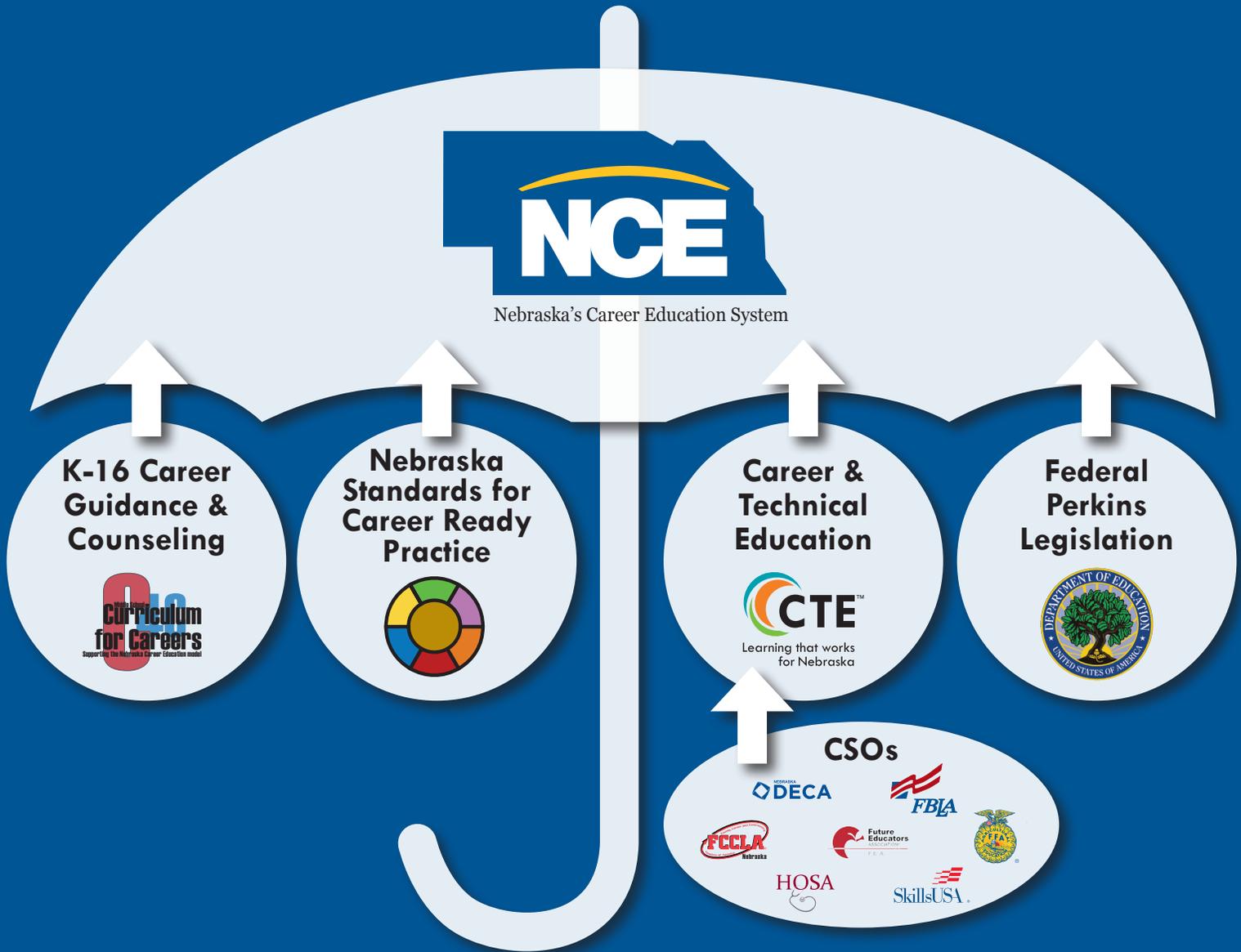
College and Career Readiness is the Focus of Nebraska Career Education.

Nebraska Career Education (NCE) exemplifies the concept of college and career readiness. Building on a foundation of academic and technical skill attainment, students also need career exploration and preparation, whether they are directly entering the workforce, the military or pursuing postsecondary education. NCE is not about forcing students into a “track” that limits their possibilities; in fact just the opposite is true. A well implemented career education system expands their understanding of career possibilities and helps students; in fact, plan for the appropriate postsecondary education to achieve their career goals.

Nebraska Career Education is a system that

- Provides a model for career counseling and exploration
- Offers rigorous career-focused programs of study with seamless transitions to postsecondary education
- Promotes extended learning opportunities for students through components such as Work-based Learning and Career Student Organizations
- Supports professional development for school counselors, teachers and administrators focused on improving student achievement and career education program improvement
- Fosters essential working relationships that link schools with businesses, workforce and economic development, postsecondary institutions and government agencies

Nebraska Career Education is the umbrella for Nebraska's K-14 career preparation system. Components of the system are as follows:





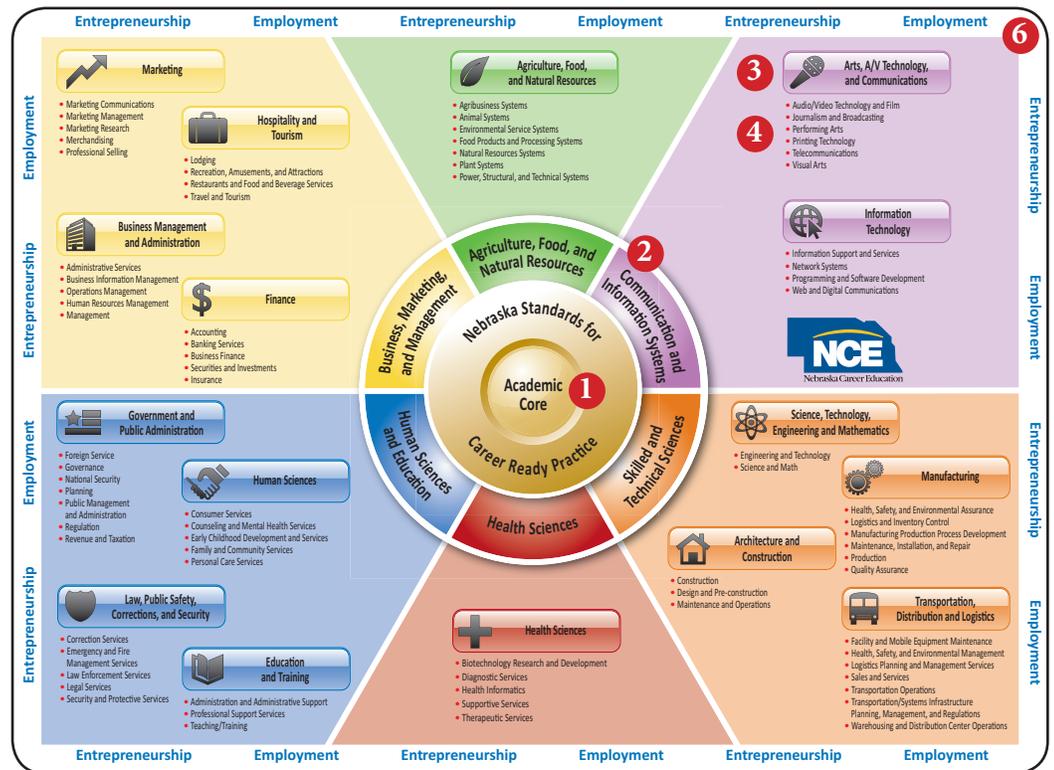
Understanding the Nebraska Career Education Model

The core of Nebraska Career Education is the NCE model; a visual map of “career fields” and “career clusters/pathways.” The model organizes the 16 National Career Clusters into six broad sectors of entrepreneurship/employment:

- Agriculture, Food and Natural Resources
- Business, Marketing and Management
- Communication and Information Systems
- Health Sciences
- Human Services and Education
- Skilled and Technical Sciences

These fields break down into more specific Career Clusters, Pathways and Occupational Specialties. The model provides a way for:

- Students to explore the diversity of career options available to them
- Students to begin to prepare for their career with plans for secondary and postsecondary education
- Schools to organize curriculum into programs of study that prepare students for opportunities in Nebraska’s economy



{1} Academic Core/College and Career Readiness

At the center of the NCE Model is the expectation for all students to develop a solid academic core. The next ring identifies specific college and career readiness standards and practices that prepare students for success in postsecondary education as well as entrepreneurship/employment.

{2} Career Fields

The six career fields represent broad sectors of the job market on which students may choose to focus.

{3} Career Clusters

Each career field is composed of career clusters radiating out from it. The clusters are more specific segments of the labor market. Each cluster is a grouping of careers that focus on similar subjects or similar skills. A basic understanding and exploration of each of the clusters will provide students with a solid foundation for career decision-making to conceptualize the entire world of work.

{4} Career Pathways

Listed below each cluster, career pathways (indicated with red bullets) further define the specific types of career opportunities within the cluster. Each career pathway within a cluster requires mastery of a more specific set of knowledge and skills related to that pathway.

{5} Career Specialties (not shown)

Career Specialties (not shown on the model) are the specific occupation/job titles within a cluster and pathway. With changes in technology, the labor market, and international economy, new job titles will be created while others decline or disappear.

{6} Employability and Entrepreneurship

Career education provides the opportunity to gain the knowledge and skills for both employment AND entrepreneurship. The reality for Nebraska and the United States is that entrepreneurship will help ensure our economic growth and vitality. By infusing entrepreneurship competencies, career education is helping to create the next generation of America's innovators and entrepreneurs.

Programs of Study

The Federal Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV) requires eligible recipients of Perkins Funds to have at least one approved program of study in career education. Programs of study, simply described, create a pathway from secondary to postsecondary education and/or work through a sequence of academic and career technical courses, extended learning opportunities and support activities that prepare students for their chosen career.





Nebraska Career Education Data + Research

Just who are Nebraska Career Education Students?

How are they different from, or similar to, the Nebraska student population generally? Using data collected through the Nebraska Student and Staff Record System (NSSRS) for the 2009-2010 school year, records indicate that, demographically, Nebraska Career Education students closely reflect the overall Nebraska student population.

Compared to all Nebraska high school seniors (12th grade), Nebraska CTE Concentrators are:

- Slightly more male
- Slightly more white
- Slightly less eligible for free or reduced lunch/milk
- Slightly less eligible for gifted programs

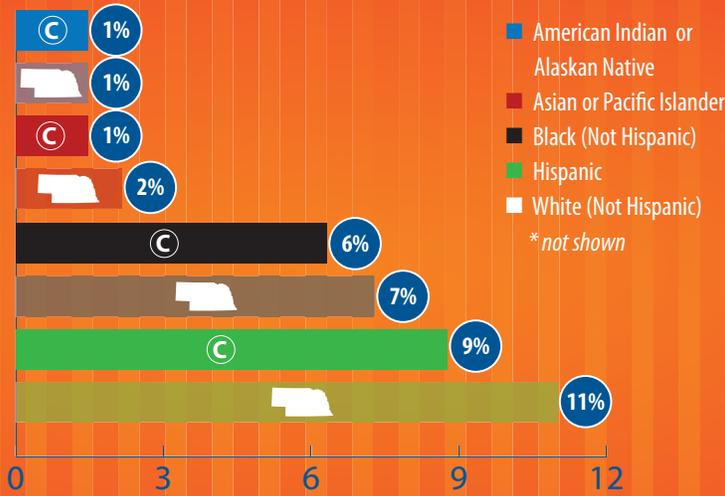
Beyond demographics, we find that, relative to all Nebraska high school seniors (12th grade), a greater percentage of Nebraska CTE Concentrators:

- Take Honors or Advanced Placement (AP) coursework
- Complete high school with a diploma

Further, Nebraska CTE Participants drop out of school at lower rates than the Nebraska student population in grades 7-12 as a whole.

Learn more at: www.education.ne.gov/nce/DRAW/index.html

2009-2010 Nebraska Career Education | Descriptive Statistics

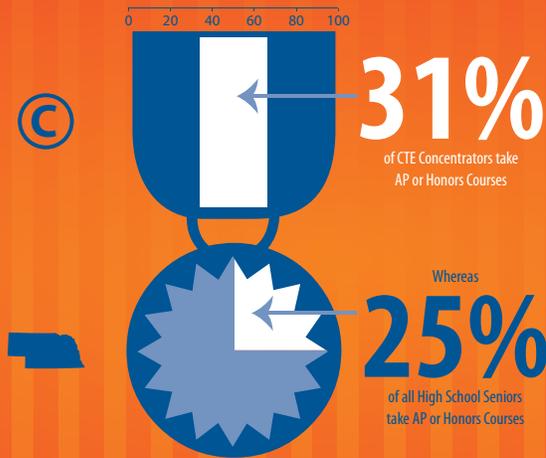


Descriptive Statistics: Ethnicity
Concentrators vs. All High School Seniors



Based on ethnicity, Nebraska Career Education students very closely reflect the Nebraska high school 12th grade population as a whole. Six percent of Black (not Hispanic) students were Career Education Concentrators compared to seven percent of all high school seniors. Students of Hispanic ethnicity make up nine percent of Career Education Concentrators compared to eleven percent of Nebraska CTE Concentrators.

2009-2010 Nebraska Career Education | Descriptive Statistics



Descriptive Statistics: AP or Honors Courses
Concentrators vs. All High School Seniors



Of the CTE Concentrators in our state, 31 percent took AP or Honors courses whereas 25 percent of all high school seniors took advanced courses. Thus, we find about a six percent difference in these two populations of students—one of the largest deviations found using the NSSRS data.





2009-2010 Nebraska Career Education | Descriptive Statistics



82%

Whereas



99%

of Nebraska high school seniors completed an approved program of study and met district/system requirements for a high school diploma

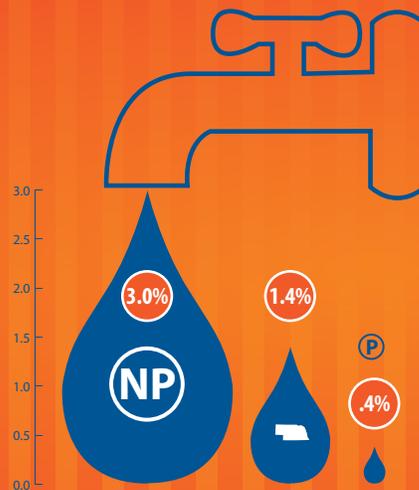
of CTE Concentrators completed an approved program of study and met district/system requirements for a high school diploma

Descriptive Statistics: Completer with Diploma All High School Seniors vs. Concentrators



82 percent of Nebraska high school seniors as a whole completed an approved program of study and met district/system requirements for a high school diploma compared to 99 percent of Career Education Concentrators. Thus, we find a 17 percentage point difference between those two student populations.

2009-2010 Nebraska Career Education | Descriptive Statistics



0.4% of students grades 7-12 participating in Career Education dropped out of school

Compared to

3% of students grades 7-12 *not* Participating in Career Education.

Overall, 1.4% of all Nebraska students grades 7-12 dropped out of school.

Descriptive Statistics: Dropouts Non-Participants, All Students Grades 7-12, Participants



Dropout rates for students in grades 7-12 during the 2009-2010 school year were as follows: Participants (students taking one or more CTE course during an academic year) account for 0.4 percent, Non-Participants consist of 3.0 percent and overall 1.4 percent of all Nebraska students in grades 7-12 (Participants and non-Participants) dropped out.

Extended Learning Opportunities

The connection NCE makes with the real world is what makes it different and exciting. NCE uses extended learning opportunities to provide experiences beyond the traditional classroom/laboratory. Examples of extended learning opportunities include career student organizations, work-based learning and service learning.



Career Student Organizations (CSOs)

Nebraska Career Student Organizations (CSOs) include **DECA, Family, Career and Community Leaders of America, Future Business Leaders of America, Future Educators Association, FFA, Health Occupations Students of America** and **SkillsUSA**. CSOs are an extension of classroom instruction—applying classroom learning to real-world experiences. They are not clubs. They are connected to middle school and high school instructional programs and do not exist outside of classroom involvement.

Benefits to Students

- Opportunities for all students with all ability levels
- Apply academic and technical learning and skills to real life situations
- Awards, competitions and scholarships
- Development of the whole person, from technical skills to leadership qualities
- Physical and financial well-being, making decisions in real life application
- Career awareness
- Exposure to local, state, national and global opportunities, develop cultural competence
- Discovery and utilization of individual strengths and talents
- How to be responsible, understand organization functions and how to carry those out to completion

Benefits to School

- Engaged and involved students
- Continual sense of school pride through organization involvement
- Enhanced public relations between school, community, students and parents
- Increased parental engagement, involved because of children's involvement
- Leadership opportunities for students that transcends to other areas, apply CSO knowledge to student council, athletic teams and more
- Creates a way to "bridge" classes, all age groups work together for a common purpose

Benefits to Teachers

- Professional development opportunities for growth
- Build relationships with students that enhance classroom and out-of-class experiences
- Connects real-life situations into the classrooms
- Added support and validation of what is taught in the classroom

Benefits to Community

- Student involvement through community development and service projects
- Career awareness in community, students aware of local careers which may encourage them to return to local area for future employment or entrepreneurship
- Engage local businesses in school events and activities
- Foster a level of respect for what community members, business leaders and employers offer to the community

Benefits to Business and Industry

- Ensures that local education and training programs meet business and industry needs
- Prepares students for technical, skilled and service careers
- Teaches students to become world-class employees and responsible American citizens





Work-based and Service Learning

The connection NCE makes with life as it is lived in the world of work is what makes it different and exciting. The ties between what happens today in the schools and what happens to students when they enter the workforce are most directly demonstrated when schools send their students into local workplaces to learn.

One of the pillars of NCE is the idea that the best way to get high school students to consider their real-life future is to give them a taste of it right now. Work-based learning can be done at any grade level and it can take a variety of forms depending on students' needs and what local businesses are able to do. NCE treats these extended activities not as extracurricular sidelines to the business of schooling but as central elements of career-oriented education. The most common type of extended learning is work-based learning. Common examples of work-based learning in Nebraska include:

Cooperative/Diversified Occupations Education

This is an arrangement in which teachers coordinate classroom instruction with students' part-time work in the field. Students spend part of the day at school and part of the day on the job honing their career skills.

Apprenticeships

Apprenticeships are on-the-job training coordinated with courses of academic study leading to certified mastery of particular skills. Certification can lead directly to employment or may be part of a larger strategy of building a set of certified skills to take to the workplace.

Job Shadowing

Job shadowing is an experience in which students seeking a better understanding of particular jobs follow experienced workers through the course of a workday. Job shadowing provides middle and high school students the opportunity to explore career options.

Internships

Internships are part-time, on-the-job learning experiences that reinforce classroom instruction. Interns can experience a career from the inside and sometimes parlay the experience into full-time employment.

Mentoring

Mentoring establishes long-term relationships between students and mentors in businesses designed to teach good work habits, work ethics and other foundational skills. These “soft skills” are as important as technical proficiency in landing and holding a job.

Service Learning

Volunteer service projects give students useful work experience while benefiting the community. Many students, for example, have been involved in service learning while building homes for Habitat for Humanity, raising funds for charitable organizations or other community service projects.





What is Postsecondary's Role?

NCE doesn't stop with high school graduation. Because learning is a lifelong process, Nebraska has taken steps to ensure that high school students can easily make the transition to two-year colleges, four-year institutions, the military or other postsecondary education.

More than 100 school districts participate in offering dual-credit career education courses through Nebraska's Community Colleges. These allow students to take sequences of courses beginning in high school and continuing at community colleges without having to repeat material already mastered. Nebraska Career Education also partners with four-year institutions to provide dual-credit offerings in career education.

Annually, over 95 percent of Nebraska Career Education concentrators (those students taking three or more courses in a particular career education program of study) go on to postsecondary education, military or are employed, as reported through the Perkins Career Technical Education Act performance measures.

Nebraska Community College Partners

- Central Community College
- Metropolitan Community College
- Mid-Plains Community College
- Northeast Community College
- Southeast Community College
- Western Community College

Nebraska Standards for Career Ready Practice

“A career ready person capitalizes on personal strengths, talents, education and experiences to bring value to the workplace and the community through his/her performance, skill, diligence, ethics and responsible behavior.”

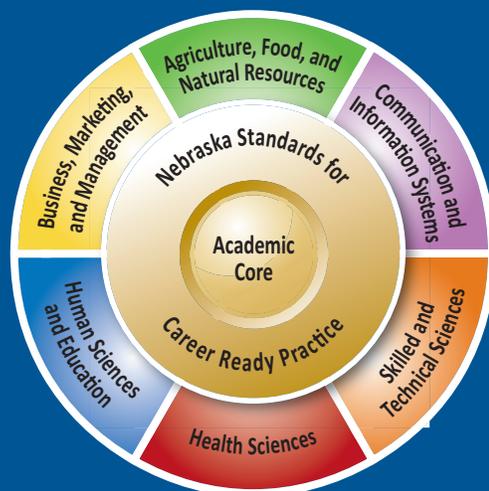
— Definition of career readiness adopted by the Nebraska State Board of Education on May 5, 2010.

The Nebraska Career Readiness Standards describe varieties of expertise that educators at all levels should seek to develop in their students. These standards rest on important “practices and proficiencies” with long-standing importance in career education. These standards and related practices are not limited to formal CTE programs nor to the middle school or high school level. Rather, these standards and practices should be used over and over again with increasing complexity and relevance by students as they progress through their educational pathway. The standards themselves do not dictate curriculum, pedagogy or delivery of content. Schools and colleges may handle the teaching and assessing of these standards in many different ways.

The Nebraska Career Readiness Standards were derived from extensive input from business and industry representatives expressing the most critical skills needed for employee and/or entrepreneur success. The standards were developed in conjunction with the National Career Clusters Framework. The Career Cluster Framework has been developed over the past decade with input from national business and industry committees representing the 16 comprehensive Career Clusters. In short, the Nebraska Career Readiness Standards provide a valid source of workplace expectations for all students to be career ready.

The Nebraska Standards for Career Ready Practice were unanimously adopted by the Nebraska State Board of Education on December 8, 2011.

Learn more at: www.education.ne.gov/nce/Standards.html





The career ready individual...



1. Applies appropriate academic and technical skills



2. Communicates effectively and appropriately



3. Contributes to employer and community success



4. Makes sense of problems and perseveres in solving them



5. Uses critical thinking



6. Demonstrates innovation and creativity



7. Models ethical leadership and effective management



8. Works productively in teams and demonstrates cultural competency



9. Utilizes technology



10. Manages personal career development



11. Attends to personal and financial well-being

Update of Nebraska Career Education Projects and Activities

NCE Standards/Program of Study Revision Process

In cooperation with Partnerships for Innovation, statewide Perkins Consortium, NDE is continuing to revise our state standards and programs of study. Standards and Programs of Study that are completed to date are:

- Architecture and Construction
- Agriculture, Food and Natural Resources
- Business, Management and Administration
- Education and Training
- Finance
- Health Sciences
- Manufacturing
- Transportation, Distribution and Logistics

Areas to be completed in the summer of 2012 are:

- Arts, AV Technology and Communication
- Hospitality and Tourism
- Human Services
- Information Technology
- STEM with emphasis in energy and engineering

The process has resulted in an alignment of curriculum between secondary and postsecondary career technical education course areas. The high school program of study concludes with a capstone course that is dual-credit where possible.





Career Readiness Modules



In cooperation with the Nebraska Department of Labor, we have developed a series of eleven career readiness modules to assist secondary students, Adult Basic Education participants and job seekers in developing the career skills necessary to become employable. The modules were developed in partnership with Nebraska Educational Television. They may be used as self-directed modules or infused in classroom activities.

Topics covered are:

- Seeking Employment
- Workplace Success
- Communication Skills
- Effective Presentations
- Conflict Resolution
- Decision Making Skills
- Teamwork and Leadership
- Workplace Ethics
- Social and Cultural Awareness
- Financial Well-being
- Personal Well-being

The modules will be unveiled at the June 2012 Nebraska Career Education Conference and available for use during the 2012-2013 school year. The development of the modules is being funded through the Incentive Grant the Department of Labor received by virtue of WIA, Perkins and Adult Basic Education all meeting performance measures for the year.

Teacher Effectiveness Modules

The Department of Labor Incentive Grant also provided funds for the development of professional development modules for teachers, Adult Basic Education instructors and DOL Career Center staff to help enhance their skills.

The modules being developed are:

- Classroom Management
- Reflective Practice and Assessment
- Creating a Personalized Learning Environment
- Using Technology in the Classroom
- Understanding WIA Literacy and Numeracy Measures
- Understanding the Adult Learner

Career Academies

Nebraska Career Education continues to work with the development and coordination of career academies. In collaboration with Partnerships for Innovation, NCE is providing professional development for academy coordinators as well as working toward common administration expectations of career academies. The number of academies offered and number of students participating continues to grow.

Future plans include the development of longitudinal study of academy participants to determine the impact of the academy on student achievement, college going rate and career selection.

Partnership with Economic Development and Workforce Development

Nebraska Career Education continues to partner with the Departments of Labor and Economic Development to coordinate activities and implement the recommendations found in the Battelle Study. An initiative currently in development is the creation of an NCE evaluation and visionary process entitled reVISION. This process will challenge school to align programs of study with the industries identified in the Battelle Study.

The targeted industry sectors are:

- Agricultural Machinery
- Agriculture and Food Processing
- Biosciences
- Business Management & Admin
- Financial Services
- Health Sciences
- Hospitality and Tourism
- Precision Metals Manufacturing
- Renewable Energy
- Research, Development & Engineering
- Software & Computer Services
- Transportation, Distribution & Logistics





Who Wins with NCE?

The benefits of NCE are designed to spread from schools and students across families and communities until they bring positive change to the entire state. Here's how everybody wins with NCE.

Students Win

By starting with an assessment of each student's goals and crafting an education with those personal objectives in mind, NCE creates customized pathways to success that combine rigorous academic instruction with career education relevant to each student's needs. Whether those pathways lead to community college, on-the-job training, a four-year college or on to graduate school, NCE gives students the tools they need to build their futures.

Parents Win

NCE involves parents in new and effective ways to prepare their children for success in life. By seeking their participation in the design and annual review of their children's Personal Learning Plans, NCE puts parents at the table as their children chart their futures. Parents can make sure their children get the best education possible, both in terms of academic excellence as well as practical preparation for real life.

Educators Win

NCE revitalizes education by connecting schools with the life of the community. Teachers forge closer ties with students as they help them form and execute their personal plans for success. School counselors find increased professional satisfaction as they carry out the essential task of career counseling. Principals and administrators have new opportunities to build community partnerships as schools set up extended learning in local businesses and seek guidance on local workforce needs.

Employers Win

NCE aims to ensure that business and industry have a highly educated pool of people from which to hire. By focusing students on career options early, NCE allows young people the time to pick and choose the right careers for them. It introduces them to the real world of work with rigorous and relevant on-the-job experience such as internships, cooperative education and service learning. The result is that graduates entering the workforce are ready to contribute to their organizations right away.

Communities Win

NCE builds schools that are better able to serve the workforce needs of communities throughout Nebraska. By producing graduates with first-rate academic and technical skills and excellent work habits, schools maximize their effectiveness as engines of local economic development.



Revised on February 14, 2012.



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