

The Career Clusters Initiative: Three States Outline Implementation Progress

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OF ALL AGES FOR
THE INFORMATION
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THE NATIONAL ASSOCIATION OF State Directors of Career Technical Education Consortium (NASDCTEc) continues to drive the career clusters initiative—one that began as several federal projects in the late 1990s and early 2000s.

Rich Katt, Nebraska career education director and president of NASDCTEc, said the association plans to continue the development of curricula and assessments for each of 16 broad occupational groupings known as career clusters.

Career clusters represent a nationwide effort to help learners obtain the knowledge and skills they need for career success, mobility and advancement by aligning what is taught in the classroom to business and industry expectations. Pam Kirk, career clusters director for the states' Career Clusters Initiative, defined career clusters as "tools used to organize instruction and learner experiences (Pre-K through career) in community and technical colleges, career academies, work-based learning programs, small learning communities, magnet schools, charter schools and high schools that are restructuring around career themes."

In this article, Bonnie Sibert, Nebraska Department of Education; Anne Rowe, Virginia Department of Education; and Paggie McSpadden, Alabama Department of Education, will explain how their respective states are implementing career clusters that impact business education teachers and students with whom they work.

Why Nebraska Implemented Career Clusters

Nebraska's public schools are doing their part in building the foundation for the

state's workforce, said Doug Christensen, Nebraska's commissioner of education. The mission of Nebraska's public schools is to ensure that all students graduate and are prepared to take three steps: continue learning throughout their lives; enter a career field; and contribute to our democratic society. In other words, schools prepare students for learning, earning and living.

Many Nebraska schools are helping students explore jobs, career fields or occupation opportunities that complement their individual talents and interests. In the near future, Nebraska is planning to have all students have personal learning plans which will be in both policy and accreditation rules. Personal learning plans are developed in seventh and eighth grade to help students plan the coursework they should take to meet their education and career goals and to pursue their interests and talents. Personal learning plans help students meet high school graduation requirements and encourage them to take rigorous classes to develop their literacy. The real strength of a personal learning plan is the conversation that it starts between students, their parents and counselors.

The Nebraska State Board of Education created an "Essential Education" policy; this was defined as providing equitable opportunities for an essential education for all students in Nebraska's public schools. Through a series of public forums, career and technical education (CTE) emerged as a topic of discussion within the essential education policy. The policy outlines that all students must have access to career education as defined in the Nebraska Career Education (NCE) model (See figure 1).

The NCE concept starts with core foun-

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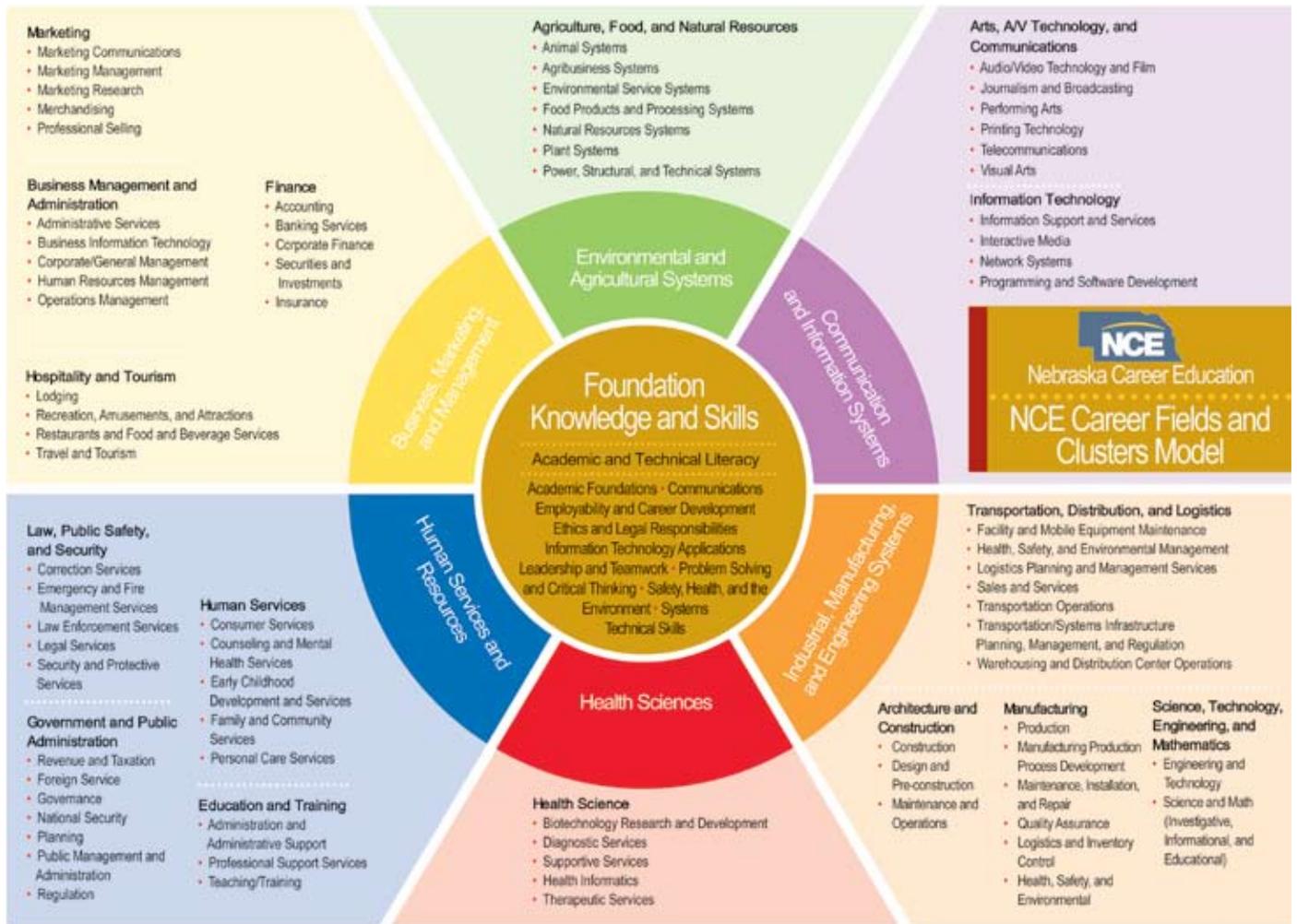
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Figure 1

Nebraska Career Education Model



DEVELOPED BY THE NEBRASKA DEPARTMENT OF EDUCATION

Foundation knowledge and skills that each student is expected to learn. This includes ethics, systems teamwork, problem solving, critical thinking, information technology application and communication, in addition to fundamental academic skills.

The NCE model then surrounds the core foundation and knowledge and skills with six different career fields:

- Environmental and Agricultural Systems
- Communication and Information Systems
- Industrial, Manufacturing and Engineering Systems
- Health Sciences
- Human Services and Resources

- Business, Marketing and Management

Each career field contains career clusters, 16 in all. For example, the career field called Business, Marketing and Management includes four career clusters:

- Business Management and Administration
- Finance
- Marketing
- Hospitality and Tourism

Nebraska's Business, Marketing and Management Career Field

In March 2007, MarkED/Career Paths released reports that define both business and marketing education within the broader parameters of the new business

administration model. MarkED's business administration model was explained by James Gleason in "Contemporary Business Administration Curricula" in *Techniques*, October 2006.

Bonnie Sibert, Nebraska's career field specialist for business, marketing and management, is utilizing MarkED's business administration model with input from business and marketing teachers to develop frameworks for the career clusters within the Business, Marketing and Management career field.

Nebraska's Partnerships

All secondary curricula are being organized around the NCE model, not just career education. Academic and career education courses, which align to the



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career fields, demonstrate the need for instruction that provides students with preparation for postsecondary education and the career of their choice. The model is providing a common language used by school counselors, teachers and administrators. No longer are students just meeting graduation requirements; they are preparing for their future. The NCE model continues to be a central part of rethinking the high school experience in Nebraska.

The NCE model has also been adopted by workforce development as a common language to eliminate confusion as clients move from one system to another. The Nebraska Department of Education is continuing to build on this relationship through the new Nebraska Career Connections Web site—an integrated, comprehensive online Web portal designed for all Nebraskans to manage their career and education.

FutureForce Finance is a newly formed steering committee operating under the direction of FutureForce Nebraska. This partnership with financial business representatives meets regularly to enhance awareness and provide career preparation and training for students (K–20) and adults in the area of finance. The steering committee includes two- and four-year

postsecondary educators and business and industry representatives in each of the Finance Career Cluster pathways. FutureForce Finance will address all five pathways of the Finance Cluster—Accounting, Banking Services, Corporate Finance, Insurance, and Securities and Investments. During the summer of 2007, 40 Nebraska business educators (K–16) worked with business partners to develop dual-credit courses for College Principles of Financial Accounting, College Introduction to Business, and College Personal Financial Management.

Virginia's Career Cluster Initiative

Virginia identified all 16 career clusters to be included in the career clusters initiative early in the 2000s. Work on the clusters, pathways, and plans of study began in earnest in 2005–2006. It was decided to include all clusters at the state level so that local school divisions would have all options available to them to identify their career pathways and plans of study for students. The goal for Virginia is to have at least one model career pathway template for a plan of study for each career cluster. All local school divisions are required to have a minimum of one plan of study that includes middle (if applicable), secondary and postsecondary education

for the 2007-2008 school year. Two model plans were delivered to CTE administrators at regional meetings in April 2007.

Leadership for the clusters initiative at the state level has been very involved and very supportive. The Office of Career and Technical Education at the Virginia Department of Education reorganized in spring 2006 to include two new positions: CTE cluster coordinators. Newly appointed State Superintendent for Public Instruction (K–12) Billie K. Cannaday Jr. is very supportive of all students having plans of study that contain rigorous academic and career and technical preparation. Virginia State CTE Director Elizabeth M. Russell serves on the NASDCTE advisory committee for the career clusters initiative; one of the CTE cluster coordinators served on the national MarkED advisory group for career clusters for business and marketing.

Virginia's Definition

Working closely with the Virginia Community College System (VCCS), the following definition of “career pathway” was developed and is pending approval from the chancellor of VCCS and the state superintendent for public instruction (Pre-K–12):

A career pathway is a model that articulates learning and training requirements for careers. Career pathways are a partnership among secondary, community college, college/university, and the business/industry communities. These pathways facilitate the learning process for students and lead to an industry recognized credential, licensure and/or degree.

Virginia's Characteristics

Virginia will use the career cluster concept to identify pathways from secondary school to two- and four-year colleges, graduate school and the workplace. All students will be included in this preparation for college and careers. The characteristics include the following components:

1. Middle School Pathways

- Career assessment
- Plan of Study initiated for all learners

2. The High School Pathways

- Meet state academic standards and grade-level expectations
- Meet high school testing and exit requirements
- Meet postsecondary (college) entry/ placement requirements
- Provide foundation knowledge and skills in a chosen career cluster
- Provide opportunities for students to earn industry credentials or state licensure
- Provide opportunities for students to earn college credit through dual/concurrent enrollment or articulation agreements

3. The Postsecondary Pathways

- Provide industry recognized skills and knowledge
- Articulate with baccalaureate programs or to higher levels of training or professional credentialing
- Provide advanced opportunities for students to earn industry credentials or state licensure, associate or baccalaureate degrees
- Provide opportunities for formal work-based learning (i.e., internships, co-ops, project-based learning, service-learning and apprenticeships) and college credits for work-based experiences

4. Pathway partners ensure that a culture of empirical evidence is maintained by

- Regularly collecting qualitative and quantitative data
- Using data for planning and decision-making for continuous pathway improvement
- Ongoing dialog among secondary, postsecondary and business/industry partners

Note: Industry-based credentialing,

such as certification and licensure, are critical components in Virginia's career pathways definition and process.

Virginia's Identification of Program Areas to Clusters

For each of the Career Clusters listed below, Virginia has assigned the attached program areas.

- *Agriculture, Food and Natural Resources:* Agricultural Education, Family and Consumer Sciences, and Trade and Industrial Education
- *Architecture and Construction:* Technology Education, and Trade and Industrial Education
- *Arts, AV, Technology and Communications:* Business and IT, Technology Education, and Trade and Industrial Education
- *Business Management and Administration:* Business and IT, and Marketing
- *Education and Training:* Career Connections, and Family and Consumer Sciences
- *Finance:* Business and IT, Family and Consumer Sciences, and Marketing
- *Government and Public Administration:* Identification in process
- *Health Science:* Agricultural Education, Health and Medical Sciences, and Technology Education
- *Hospitality and Tourism:* Family and Consumer Sciences and Marketing
- *Human Services:* Agricultural Education, Health and Medical Sciences, and Trade and Industrial Education
- *Information Technology:* Business and IT, Marketing, Technology Education, and Trade and Industrial Education
- *Law, Public Safety and Security:* Health and Medical Sciences, Technology Education, and Trade and Industrial Education
- *Manufacturing:* Technology Education, and Trade and Industrial Education
- *Marketing, Sales and Service:* Marketing
- *Science, Technology, Engineering and Mathematics:* Technology Education,

and Trade and Industrial Education

- *Transportation, Distribution and Logistics:* Technology Education, and Trade and Industrial Education

Next Steps

In December 2006, work sessions were conducted for some of the cluster groups (containing representatives from secondary education, two- and four-year postsecondary institutions, and business and industry) to meet to agree on a model template for a plan of study for one pathway in each cluster. Virginia is now using the NASDCTEc model plans of study developed nationally and the VCCS Tech Prep plans of study as the models for its templates. Through career pathways and individualized plans of study identified early with assistance from guidance counselors at the middle school level, educators may use a curriculum framework that can be adapted to meet local needs.

The Changing Workforce in Alabama

Governor Riley stated in his State of the State Address in January 2006 that during the past three years, the number of Alabamians with jobs has grown by more than 100,000, and more Alabamians have jobs now than ever before. The state has successfully recruited 1,200 new and expanding industries that are creating 50,000 new jobs. A lower unemployment rate has been obtained in all 67 counties, and in rural counties unemployment rates have been cut almost in half.

Officials note that the state has one of the best workforce development programs in the nation, has a strong economy, and is forging partnerships between business and government. This has brought record economic development for Alabama, according to Alabama Development Office Director Neal Wade. Ed Castile, director of Alabama Industrial Development Training, champions CTE as the greatest and largest source for new workers. He says that if students gain the skills they

need before graduation, they are already linked to the workforce and they are going to keep Alabama one of the best places in the nation to start and grow a business.

Alabama's CTE students are fortunate to have the leadership of major corporations and state government agencies when it comes to providing highly qualified training for the future workforce.

PROVIDING LEARNERS WITH RELEVANT CONTEXTS BY LINKING SCHOOL-BASED LEARNING WITH CAREER-RELATED EXPERIENCES MOTIVATES LEARNERS TO WORK HARDER AND ENROLL IN MORE RIGOROUS COURSES.

CTE Programs Earn Certification

In 1998, the Alabama State Board of Education mandated that by 2003 every CTE program in Alabama would earn its Business and Industry Certification and would remain in compliance with the standards that earned them that certification. In 2003, Alabama's Department of Education was awarded certification from the International Organization for Standardization for its Business and Industry Certification process.

"Having this certification lets the business community know that the process used to evaluate our career and technical education programs is as thorough as the process they use to evaluate their companies," said State Superintendent of Education Joe Morton.

Meeting the Challenge

The challenge for Alabama remains to help each student reach his or her individual excellence while meeting the demands of the expanding economy. The Alabama career clusters strategy offers a practical way to provide all students the academic preparation, guidance, career-related knowledge and flexibility to assist them with programs of study that align with their interests, abilities and

career goals. Career pathway skills and knowledge statements provide a smooth transition to specific postsecondary, occupational education, and training. This strategy provides the organizational structure that Alabama needs to revise the curriculum.

Alabama teachers follow a mandated curriculum that is revised on a five-year cycle. The developmental process for the

2007–2012 curriculum began August 2006 with the adoption of a framework that includes all 16 career clusters. Paggie McSpadden, Alabama's CTE administrator for Business and Marketing Education, and her staff members are facilitating the developmental process that began by conducting research, and using MarkED's business administration model as a guide for each of the four career clusters within the Business and Marketing Education unit: Marketing, Business Management and Administration, Finance, and Government and Public Administration.

Last fall, three focus groups comprised of more than 75 business partners met to review the career pathways and skill and knowledge statements available at www.careerclusters.org. They identified specific industry trends and issues and presented them to the curriculum writing taskforce earlier this year. (The writing will be completed January 2008). Prior to submission to the Alabama Department of Education for adoption, the curriculum will be available for public review and input. The new rigorous and relevant curriculum will support academic achievement, prepare students for today's and future careers, be based on career clusters and career pathways, and have a strong

business influence.

According to Kirk, "Technological advances and global competition have transformed the nature of work. Careers require more knowledge, better skills and more flexible workers than ever before. Employees must be prepared to change positions and careers several times, continually updating their knowledge and skills.

"Career clusters prepare learners of all ages for the information age as schools, colleges and employers strive for higher achievement in science and math, technical skills and communication skills. One key to improving learner achievement is providing learners

with relevant contexts by linking school-based learning with career-related experiences. This connection to future goals motivates learners to work harder and enroll in more rigorous courses."

Career awareness is the initial step. Awareness begins early in the schooling process and evolves into exploring careers, planning career options, and matching students' education to their broad career goals by selecting those courses and experiences that will develop the integrated skills needed for the 21st century.

The choice to implement career clusters has already been made by many. NASDCTEc believes one of the strongest reasons for making this choice is that career clusters are one solution to closing the skill gap. They form a common language that education, workforce and economic development systems can use to better communicate on supply and demand issues. They help learners gain relevancy in their learning, broaden their options and prepare them for the ever-changing demand of a global economy. Career clusters are an adaptable, flexible framework for ensuring that CTE meets the needs of today's and tomorrow's economy. ■