

GLOBAL COMPETITIVENESS

STUDENT SUCCESS

ENTREPRENEURSHIP
COLLEGE & CAREER
LEADERSHIP
ECONOMIC VITALITY
RATES

HIGHER GRADUATION
HIGH-DEMAND
RIGOR
SKILLED
SUSTAINABLE
WORKFORCE

WORLD CLASS

LEADERSHIP
GLOBAL
COMPETITIVENESS
RELEVANCE

STUDENT SUCCESS
HIGHER GRADUATION
ENTREPRENEURSHIP
RATES

LEARNING

LEADERSHIP
TECHNICAL KNOWLEDGE

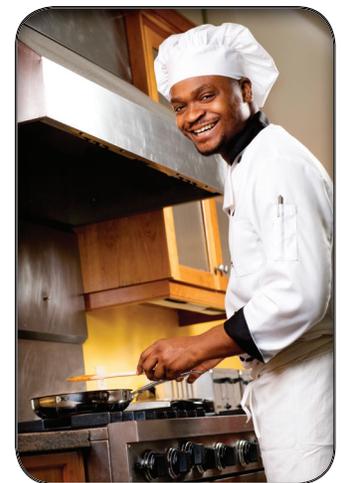
CAREER PREPARATION

HIGHER GRADUATION RATES
OPPORTUNITY
INNOVATION
RELEVANCE

ECONOMIC DEVELOPMENT

Learning that works for Nebraska

CTE™



Nebraska's Career Education System

Data and Research



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

VITALITY
WORLD CLASS
LEADING CHANGE
ECONOMIC DEVELOPMENT
LEADERSHIP

TECHNICAL KNOWLEDGE
LEADERSHIP

TECHNICAL KNOWLEDGE



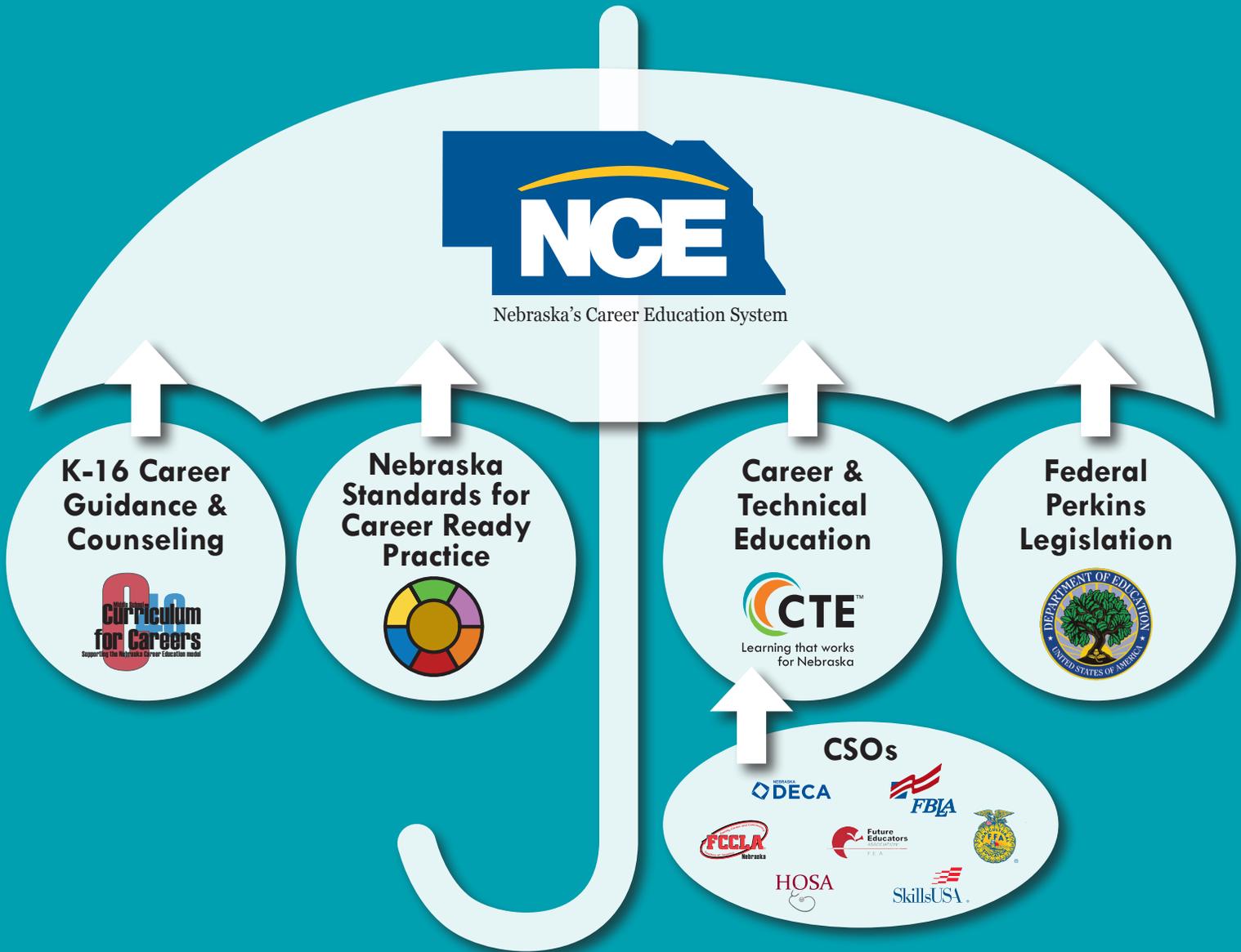
College and Career Readiness is the Focus of Nebraska Career Education.

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 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:





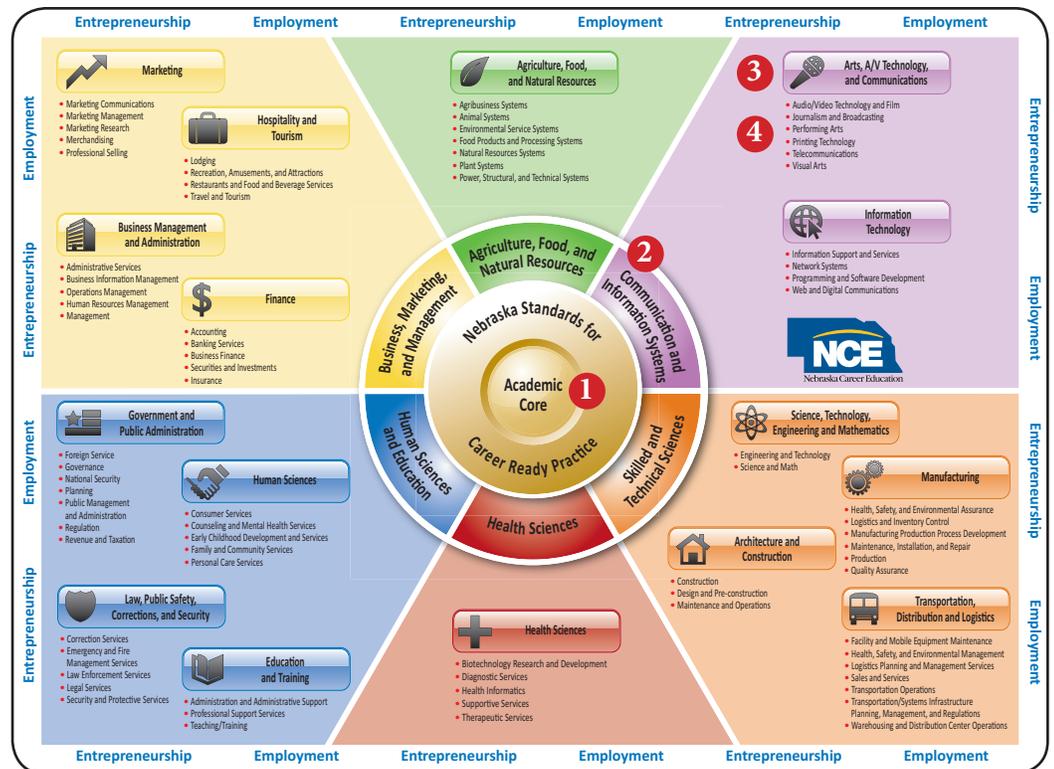
Understanding the Nebraska Career Education Model

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 their preparation for their career choice with appropriate education 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 job market. Each cluster is comprised of groups of careers that focus on similar subjects or call for similar skills. Collectively, the clusters provide a framework for understanding the entire world of work. 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

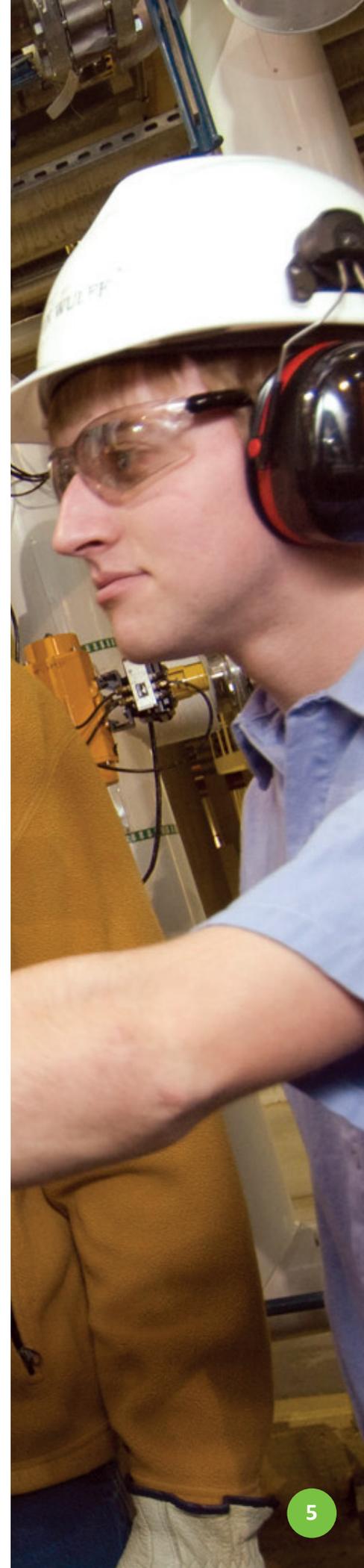
Listed below each cluster, career pathways (indicated with red bullets) further define the specific types of career opportunities within the cluster. Each career pathway within a cluster requires mastery of a more specific set of knowledge and skills related to that pathway.

{5} Career Specialties (not shown)

Career Specialties (not shown on the model) are the specific occupation/job titles within a cluster and pathway. As the career development process becomes more specific and defined within a chosen cluster, awareness of the current employment opportunities helps students pick a specific career pathway. With changes in technology, the labor market, and international economy, new job titles will be created while others decline or disappear.

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.





Nebraska Career Education Data + Research

Longitudinal Analysis of CTE Programs in Nebraska: A 30-Year Evaluation of the NDE Curriculum Report

The Nebraska Department of Education's Curriculum Report was established during the 1979-1980 school year to validate compliance with Rules 10 and 14, i.e. Instructional Units and Percent of Teachers teaching in their Endorsed Area. However, with the development of the Student Grades Template as part of the Nebraska Student and Staff Record System (NSSRS), the need for the annual Curriculum Report was eliminated and the report was discontinued following the 2010-2011 academic year.

The Curriculum Report was used to collect information from schools such as course codes, minutes per session, and sessions per year in order to determine the number of "instructional units" offered by a school. Officially, an instructional unit is defined as "15 clock hours (900 minutes) of classroom instruction in a course offered in the secondary school."

In this study, career education program information was extracted from NDE Curriculum Report data collected between the 1982-1983 (the earliest year of digitized information available) and 2010-2011 school years. Data from over a nearly 30-year period is analyzed yielding the aggregate number of high schools that reported offering 1) at least 40 instructional units, and 2) at least one, but not more than 39 instructional units in CTE programs for each school-year. As such, taken as a whole, this analysis describes the relative ebb and flow of "full-time" and "part-time" CTE programs in Nebraska since 1982.

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 over-all 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

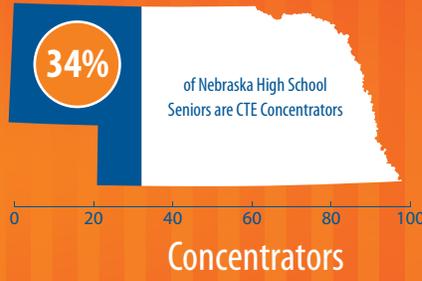
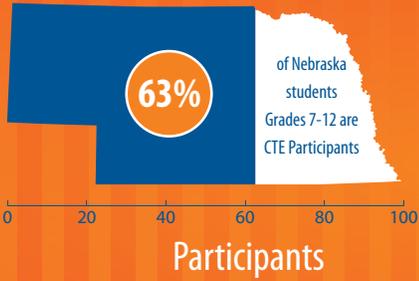
Beyond demographics, we find that, relative to all Nebraska high school seniors (12th grade), a greater percentage of Nebraska CTE Concentrators:

- 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



Nebraska Total (Grades 7-12): 141,869
NCE Total (Grades 7-12): 89,275

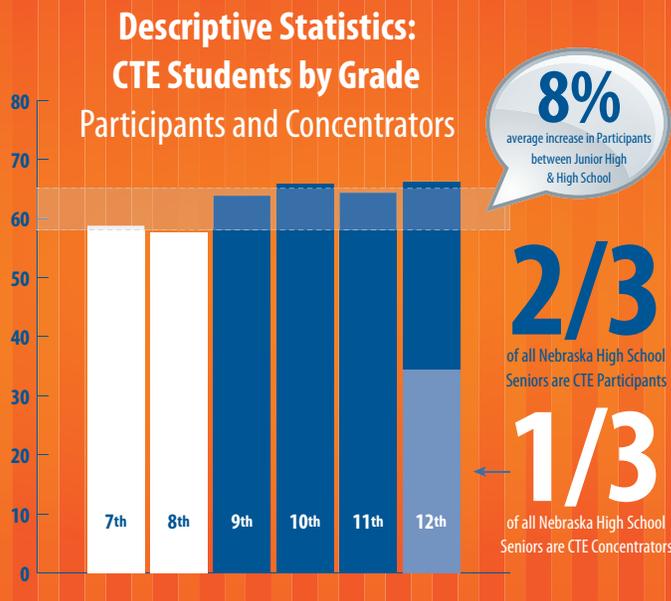
Nebraska Total (12th Grade): 24,215
NCE Total (12th Grade): 8,164

Descriptive Statistics: CTE Students Participants and Concentrators



In the 2009-2010 Nebraska school year, 63 percent of Nebraska students in grades 7-12 were CTE Participants (taking at least one CTE class during the 2009-2010 academic year). In the same year, 34 percent of Nebraska high school seniors were CTE Concentrators (taking at least three CTE courses throughout their academic career within a particular Career Education program of study).

2009-2010 Nebraska Career Education | Descriptive Statistics

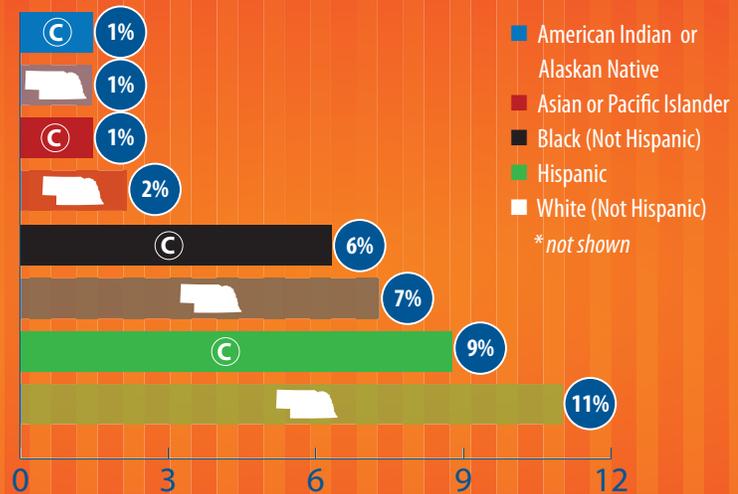


About 58 percent of Nebraska junior high students (7-8th grades) were classified as Career Education Participants. About 66 percent of Nebraska high school students (9th-12th grades) were classified as Career Education Participants. This reveals an average eight percent increase in Career Education Participant rates between junior high (7-8th grades) and high school. In addition, one third of all Nebraska high school seniors were Career Education Concentrators.





2009-2010 Nebraska Career Education | Descriptive Statistics

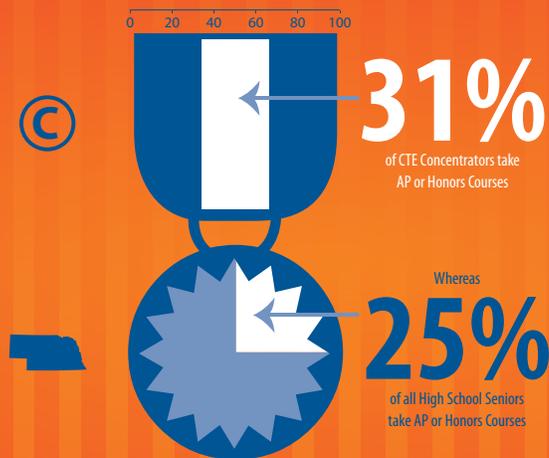


Descriptive Statistics: Ethnicity
Concentrators vs. All High School Seniors



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

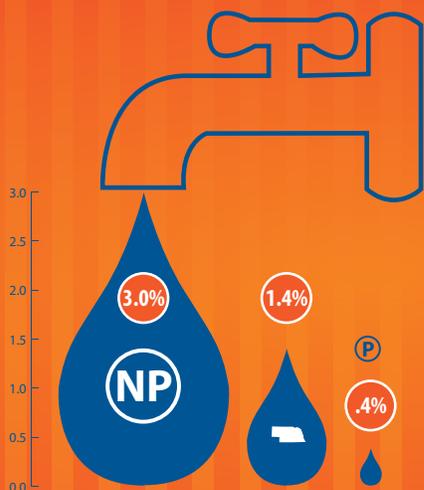
All High School Seniors vs. Concentrators



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

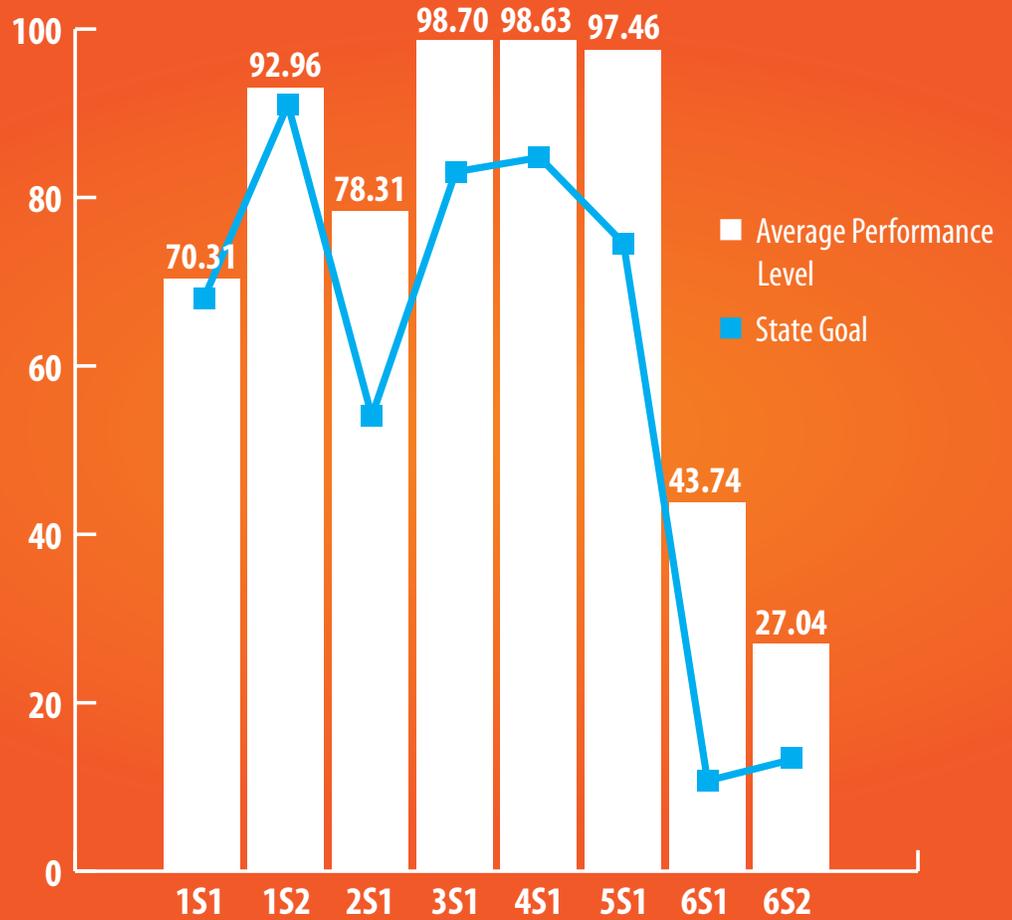


Dropout rates for students in grades 7-12 during the 2009-2010 school year were as follows: Participants (students taking one or more CTE course during an academic year) account for 0.4 percent, Non-Participants consist of 3.0 percent and overall 1.4 percent of all Nebraska students in grades 7-12 (Participants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





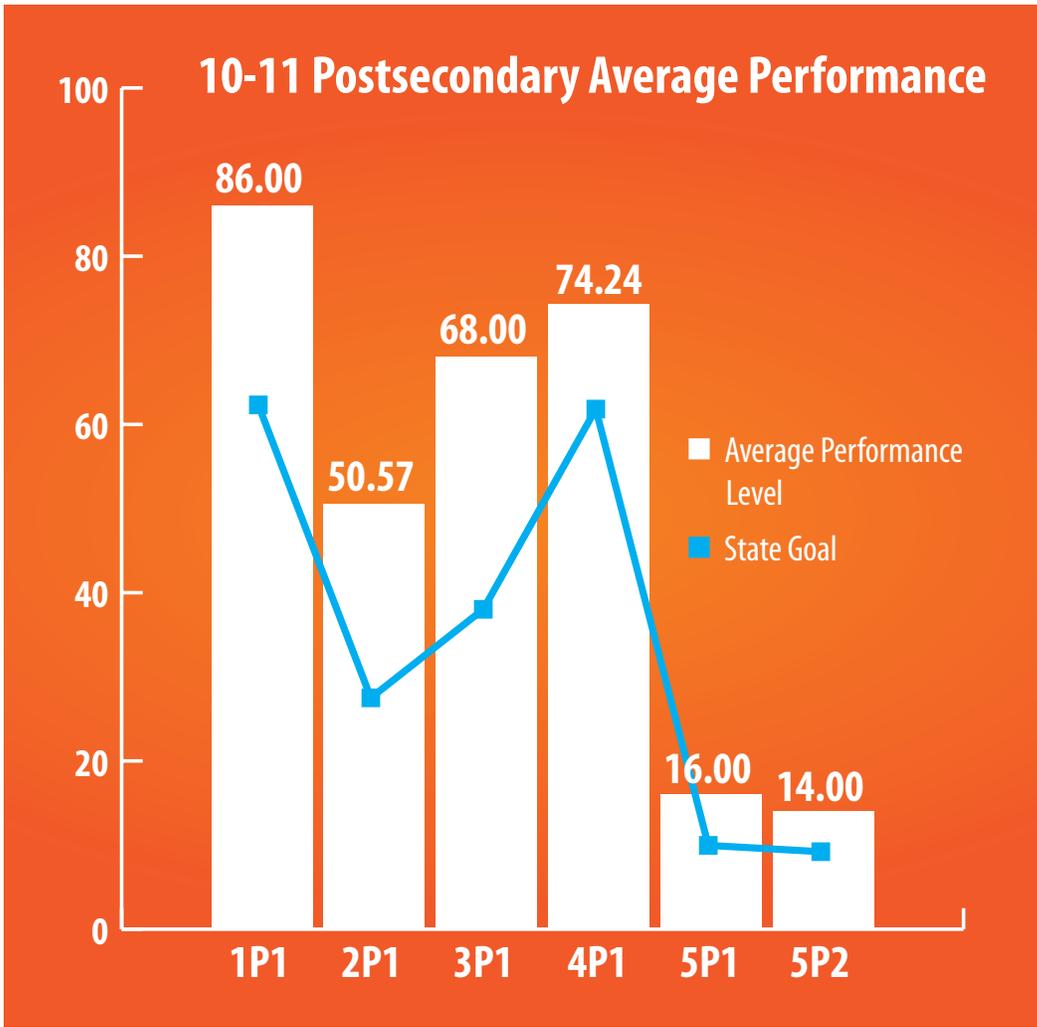
10-11 Secondary Average Performance



10-11 Secondary Average Performance

Nebraska's average Perkins performance among secondary students for the 2010-11 school year is depicted in this combination bar/line chart. The bars represent the average statewide performance for each Perkins core indicator while the line indicates Nebraska's respective federally negotiated performance goals for the 2010-11 school year. As shown in the figure above, for each measure of performance, Nebraska exceeded the negotiated goals. For the indicator measuring nontraditional participation (6S1), Nebraska exceeded the federal goal by more than 30 percentage points. Over all indicators, Nebraska exceeded federal goals by an average of nearly 26 percentage points.

Performance Measure	State Goal (%)	State Avg Performance
1S1 Academic Reading	68.00	70.31
1S2 Academic Math	91.00	92.96
2S1 Technical Skill Attainment	54.00	78.31
3S1 Completion	83.00	98.70
4S1 Graduation Rate	84.70	98.63
5S1 Post School Placement	74.50	97.46
6S1 Nontraditional Participation	10.75	43.74
6S2 Nontraditional Completion	13.25	27.04



10-11 Postsecondary Average Performance

Nebraska’s average Perkins performance among postsecondary students for the 2010-11 school year is depicted in this combination bar/line chart. The bars represent the average statewide performance for each Perkins core indicator while the line indicates Nebraska’s respective federally negotiated performance goals for the 2010-11 school year. As shown in the figure above, for each measure of performance, Nebraska exceeded the negotiated goals. For the indicator measuring student retention (3P1), Nebraska exceeded the federal goal by nearly 29 percentage points. Over all indicators, Nebraska exceeded federal goals by an average of more than 17 percentage points.

Performance Measure	State Goal (%)	State Avg Performance
1P1 Technical Skill Attainment	62.50	86.00
2P1 Completion	27.75	50.57
3P1 Student Retention	38.25	68.00
4P1 Student Placement	62.00	74.24
5P1 Nontraditional Participation	10.25	16.00
5P2 Nontraditional Completion	9.50	14.00





Examining the Perceptions of Career and Technical Education in Nebraska - Survey of Educators (February 2010)

This report contains the findings of the survey: “Examining the Perceptions of Career and Technical Education (CTE) in Nebraska.” The purpose of the survey was to measure the perceptions of Nebraska Educators regarding CTE in Nebraska. The results of the study are intended to inform standards revisions in Nebraska Career Education. The survey was administered to Administrators, Math and Science Teachers, Counselors and CTE Instructors in Nebraska during November and December, 2009. Over 1,000 Nebraska Educators participated in the survey. The relatively large sample size allows for multiple comparisons to be made of various groups of educators in the state.

The results show that, in general, Nebraska Educators are positive about the current state of CTE in Nebraska. The results also show, however, that there are some important differences in how different groups of educators feel about the ability of CTE to prepare students for life after high school. In general, CTE Teachers and Administrators are more positive about CTE, while Math and Science Teachers and Counselors tend to be more ambivalent. Because Math and Science Teachers and Counselors tend to be most ambivalent, the findings suggest that it would be beneficial to follow up with these groups regarding their attitudes toward CTE. In addition, the results of the survey point to a number of areas where it might be beneficial to conduct further statistical analyses so that a greater understanding of these between-group differences might be obtained.

To view the full report and research summary, please visit:

www.education.ne.gov/nce/DRAW/Perceptions_Edu.html

Examining Public Perceptions of Career and Technical Education in Nebraska - Survey of General Public (July 2010)

This report presents the findings of the survey: “Examining Public Perceptions of Career and Technical Education (CTE) in Nebraska.” In Nebraska, CTE is also commonly referred to as “Career Education,” but for the purposes of this report, the term “CTE” will be used. There are six subject areas that fall under the umbrella of CTE: 1) Agricultural Education (Environmental and Agricultural Systems); 2) Business and/or Marketing (Business Marketing and Management); 3) Computer Education/Information Technology; 4) Family and Consumer Sciences (Human Services); 5) Health Science; and 6) Industrial Technology (Industrial Manufacturing and Engineering Systems).

The purpose of the survey is to inform possible revisions to CTE standards in Nebraska. Thus, the results herein provide a snapshot of public perceptions of CTE among a randomly selected portion of the public in Nebraska. This survey was conducted during March, April and May, 2010. Both landline and cell phone users were surveyed. Of the 535 respondents, 447 (84%) were landline users, while the other 88 (16%) were cell phone users. The response rate for landline users was 33.9% and was 17.7% for cell phone users. The margin of error for this study is 4.23%. The mean age for the entire sample was 55; the mean age for landline users was 57 and the mean age for cell phone users was 44. Respondents were primarily female (59%) and white (95%). Respondents were roughly evenly split between rural (52%) and urban (48%) areas of the state; urban areas were defined as Douglas, Lancaster and Sarpy Counties, and rural areas were defined as any other county. Finally, 29% of respondents indicated that they had children in school in Nebraska. Where possible, researchers worded questions to allow for comparisons to responses to a similar survey that was administered to Nebraska educators in late 2009; these comparisons are included within this report.

To view the full report and research summary, please visit:

www.education.ne.gov/nce/DRAW/Perceptions_Pub.html





Nebraska School Counseling State Evaluation Study (Spring 2010)

A statewide evaluation of Nebraska school counseling programs was recently conducted to address the following questions:

1. Do school counseling programs in Nebraska high schools contribute significantly to students' educational outcomes?
2. What aspects of school practice contribute the most to students' educational outcomes?
3. Based upon these results, how might school counseling practice in Nebraska be improved?

This study found evidence that school counseling programs in Nebraska high schools contribute significantly to students' educational outcomes, including:

- Suspension Rate
- Discipline Incidence Rate
- Attendance Rate
- Dropout Rate
- Graduation Rate
- Nontraditional Program of Study Participation Rate
- Average ACT Score
- Math Proficiency
- Reading Proficiency
- Technical Career Skills
- Program of Study Completion
- Nontraditional Program of Study Completion Rate

School counseling programs are effective in helping to achieve important student educational outcomes when they: engage in systematic planning and evaluation, focus school counselor efforts on the professional work of school counseling, enable counselors to spend most of their time in work that directly benefits students, intentionally address educational attainment for all students, possess resources to support professional development, are integrated into the academic work of the school and coordinate with parents. While the findings cannot assure that given practices are causally related to improvements in student outcomes, this evaluation model identifies practices that are likely to result in improvements in student outcomes.

This study assesses the contribution school counseling programs have on student educational outcomes after controlling for demographic differences among schools. Actual school-level outcome data and demographic data were obtained from the Nebraska Department of Education. School counseling practices and programs were collected through an internet-based survey of high school counselors and principals. The survey response rate was 48.9% (115) for counselors and 26.0% (68) for principals. Due to low participation of principal responses, results are based on counselor surveys only.

For additional resources visit:

www.education.ne.gov/CARED/research.html

Career Education Status of Special Populations in Nebraska Public Secondary Schools and Community Colleges (January 2009)

This report is one component of a research project to examine barriers to success for Special Populations in Nebraska Career Education programs at the secondary and postsecondary levels and to identify opportunities and strategies to overcome these barriers. The Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV) requires Nebraska to continue to focus on the performance of Special Populations in career education. Special Populations, as defined by Perkins IV, include English Language Learners (including migrant students), students with disabilities, economically disadvantaged (including foster students), single parents/ displaced homemakers, and students in programs that are non-traditional for their gender.

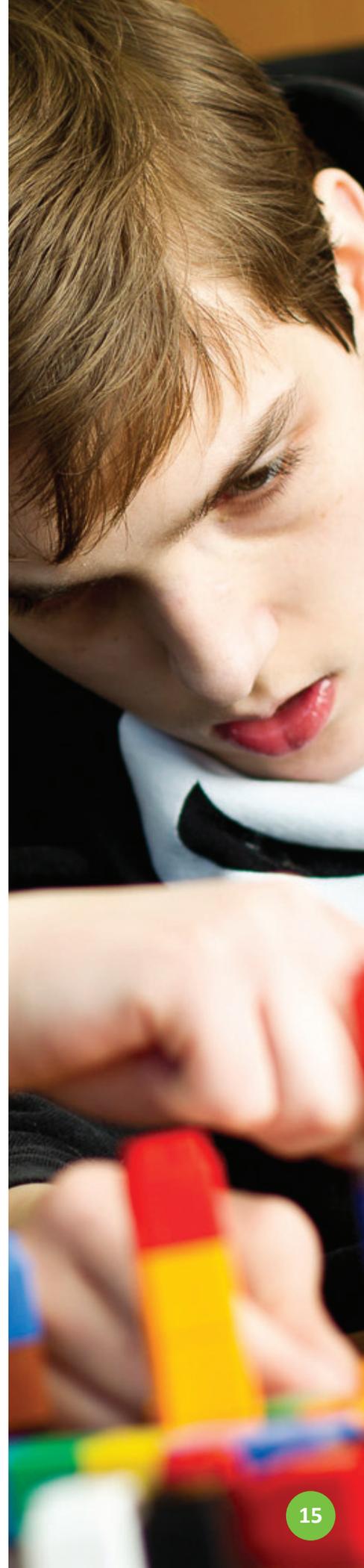
In initiating this research study, the Nebraska Department of Education recognized that there are career education disparities for Special Populations in the state, and that progress in meeting the career education goals for these groups has been inadequate. This report summarizes current data on the career education status of Special Populations in Nebraska: first, for those groups that are considered to have educational disadvantages, and then for students pursuing career paths that are nontraditional for their gender.

The results of this survey contributed to the development of the project strategic plan: *Overcoming Barriers to Career Education for Special Populations: A Strategic Plan for Nebraska, 2009*. The other companion research reports for this project are *Career Education Plans and Obstacles: A Survey of 9th and 12th Grade Nebraska High School Students, 2009*; and *Career Education Plans and Obstacles: A Survey of Nebraska Community College Students, 2009*.

For more information:

www.education.ne.gov/nce/DRAW/Special_Populations.html

Revised on February 14, 2012.





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www.education.ne.gov/nce/DRAW