



Career and Technical Education 101



Welcome New CTE Coordinators

Kansas leads the world in the success of each student.

CTE 101 - Outline

- CTE Framework – Crystal Roberts
- Developing Quality Pathways – Guy Shoulders
- Connecting CTSOs and CTE – Pam Lamb
- Partnerships and Advisory Committees – Helen Swanson
- Postsecondary Partnerships and Successful Student Outcomes – Nikk Nelson
- Perkins V – Kathleen Mercer
- CTE Pathways & Data – Amanda Williams
- CTE Resources – Crystal Roberts



CTE Framework

Introduction to CTE 101



Kansas CTE Framework

Programs of Study

- In Kansas there are 36 State Approved Pathways available in 16 Career Clusters.
 - Secondary schools may apply annually to offer these Pathways to their students by completing a CPPSA on KSDE's Web Applications platform.
 - Pathway quality is reinforced with CPPSA requirements (Qualified teachers, career-based competencies, articulation agreements, work-based learning, etc.)
- Programs of Study connect to Labor Market needs and post-secondary options.
- Programs of Study help guide course offerings and course planning related to IPS.



What is Career & Technical Education?

- Career and Technical Education (CTE) is a strategic educational program option that emphasizes real-world learning by providing integrated academic, employability, and technical skills within a selected career focus to prepare students to make a successful transition from high school to postsecondary education and/or the workforce.
- Today's cutting-edge, rigorous, and relevant CTE programs of study prepare youth for high-skill, high-wage, and high-demand career opportunities across a wide range of industries.



KANSAS CAREERS

FIELDS • CLUSTERS • PATHWAYS



KANSAS WORK-BASED LEARNING CONTINUUM



CAREER READINESS INDICATORS

GRADUATE WITH
(1 OR MORE
MARKET VALUE ASSETS)

- ★ College Credit Towards a Degree or Certification
- ★ Internship
Client Projects
- ★ Industry-Recognized Credential or Certificate
- ★ Entrepreneurship
- ★ Regionally Vetted Assets or Student Outcomes Example:
Youth Registered Apprenticeship
Service Learning

Why Career & Technical Education?

- Career and Technical Education programs provide students with the academic and technical skills, knowledge, and training necessary to launch them into a successful postsecondary or career track.
 - CTE's rigorous coursework prepares student learners for the world of work by introducing them to workplace competencies and makes core academic content accessible to students by providing it in a hands-on context.
 - CTE can help all students achieve the objectives of the Kansas College and Career Ready Standards (KCCRS) through authentic, applied learning experiences.
 - As such, it helps learners discover their interests and their passions, and empowers them to choose the educational pathway that can lead to success in high school, college, and future career.



CTE and the Future of Work

- CTE provides a strong pathway for learners to prepare for the future of work by:
 - Equipping learners with **real-world skills**, such as entrepreneurial and employability skills, that are foundational and transferable across rapidly shifting sectors and work activities
 - Placing learners on a path to **postsecondary credential attainment** that translates into high-skill, high-wage, and in-demand occupations
 - Bringing **business/industry** to the table to ensure that CTE programs are relevant and future-focused
 - Closing achievement and opportunity gaps by placing an **intentional focus on equity** and providing each learner with an opportunity for career success
 - Supporting learners' efforts to upskill through programs of study that support **stackable and short-term credentials** of value
 - Encouraging **partnerships** between K-12, postsecondary, and industry through program of study frameworks

**Advance CTE – CTE Prepares Learners for the Future of Work (2020)*



Benefits According to Advance CTE

- CTE Students are less likely to dropout of high school.
 - The graduation rate for students concentrating in a CTE pathway in Kansas is 99%.
- Students in a CTE pathway were more likely to complete a college-prep course load.
 - Advance CTE reports that 93% of CTE concentrators in Kansas go on to postsecondary education.
- Once students transition to college, 76% of CTE concentrators earn a credential, certificate, or diploma.
 - Within six months of postsecondary graduation, 84% of students are placed in military service, apprenticeships, or employment related to their CTE pathway.



KSDE CTE Vision

All Kansas students are engaged in quality career pathways to prepare them for a lifetime of opportunities as productive and responsible citizens.



KSDE CTE Purpose

Support and empower schools in developing quality pathways that lead students to college and career readiness.



KSDE CTE Long-Term Goals

1. Providing quality professional development
2. Developing and sustaining partnerships
3. Keeping Pathway standards relevant, rigorous, and reflective of current business/industry standards or practices
4. Provide valid, reliable CTE data to schools in a timely manner
5. Ensure state/federal educational initiatives/mandates are aligned locally



Developing Quality Pathways



What are Pathways?

“Career cluster pathways are designed to provide a smooth transition from high school to postsecondary education (technical colleges, community colleges and universities), apprenticeship opportunities, the military, and/or the workplace.”



What makes a Quality Pathway?

Four Components:

1. Partnerships
2. Professional Development
3. Instructional Strategies
4. Physical Environment



Twelve Elements of a Quality CTE Program of Study

Partnerships

- Business and Community Partnerships
- Work-Based Learning
- Career and Technical Student Organizations

Professional Development

- Prepared and Effective Program Staff
- Sequencing and Articulation
- Engaging Instruction
- Access and Equity

Instructional Strategies

- Standards Aligned and Integrated Curriculum
- Student Assessment
- Data and Program Improvement
- Student Career Development

Physical Environment

- Facilities, Equipment, Technology, and Materials



Evaluating Pathways for Quality

- Quality Pathway Rubric II
 - Self Evaluation tool based on the Four Components
 - Partnerships
 - Professional Development
 - Instructional Strategies
 - Physical Environment
 - Status for each indicated by:
 - Missing or Non-Existent
 - Improving
 - Promising
 - Exemplary



S.M.A.R.T. Goals



You goal should be as specific as possible and answer the questions: **What** is your goal? **How** often or how much? **Where** will it take place?



How will you measure your goal? Measurement will give you **specific feedback** and hold you accountable.



Goals should push you, but it is important that they are **achievable**. Are your goals attainable?



Is your **goal and timeframe** realistic for the goal you have established?



Do you have a **timeframe** listed in your SMART goal? This helps you be **accountable** and helps in **motivation**.

- Three-year improvement plan goals
- List and label each year separately
- Current year must be included
- Avoid “over the next three years”
- Be specific – what, how often, how much, where will it take place



Partnership Example

Instructor(s) will expand relationships with community organizations and businesses to provide work-based learning opportunities.

- 2022-2023: 1 partnership will be formed for student field trips
- 2023-2024: 2 additional partnerships will be formed for guest speakers and career mentors
- 2024-2025: 3 additional partnerships will be formed for student job shadows and internships



Professional Development Example

Instructor(s) will attend at least one professional training and/or conference per year.

- 2022-2023: Summer K-ACTE Conference
- 2023-2024: Regional or national CTE conference
- 2024-2025: KCCTE workshop or virtual series aligned to pathway



Connecting CTSOs & CTE



Pam Lamb
Kansas FCCLA State Adviser

Career & Technical Student Organizations *are* Key to Strong CTE Program

- Integrate into curriculum
- Extend teaching through innovative programs
- Develop business & industry partnerships
- Provide leadership skills/experiences
- Real world application/experiences – authentic application
- Build on employability and career skill





All Kansas Career and Technical Student
Organizations are:

Intra-Curricular

All projects/activities are linked to what is
learned in the classroom.

CTSOs are NOT A CLUB!

All CTSOs. . .

- Develop Leadership, Teamwork, Communication, Problem- Solving and Critical Thinking Skills.
- Develop sense of community, volunteerism – CIVIC ENGAGEMENT
- Provide Career-Related Training
- Link Academic Work to Technical Work



Where might you fit?

BPA

DECA

FBLA

FCCLA

FFA

HOSA

SkillsUSA

TSA

Business Education pathways

Marketing pathways

Business Education pathways

Family & Consumer Science pathways


Agricultural pathways

Health Sciences pathways

Trade, Industrial & Technical pathways

Technology pathways





Integrate a CTSO into your curriculum for a stronger CTE Program!

Partnerships



CTE Advisory Committee Handbook

- Handbook to assist with cluster/pathway approval
- Includes sections on:
 - Activities of advisory committees
 - Partnerships
 - Organization and operation
 - Policies and procedures
 - Recruiting members
 - Sample advisory committee minutes, agenda, SMART goals



Example Advisory Committee Members

Teaching/Training Example:

- Ms. A – Head Start teacher
- Mr. B – Preschool director
- Mr. C – Community after school program
- Dr. D – Early childhood instructor at XYZ tech school
- Ms. E – 1st grade teacher
- Ms. F – 6th grade teacher
- Mr. G – District CTE coordinator
- Mr. H – District pathway instructor

Restaurant and Event Example:

- Mr. A – Local restaurant owner
- Mr. B – Grocery store manager
- Ms. C – Dietician
- Ms. D – Food truck owner
- Ms. E – District nutritional services
- Mr. F – Student
- Ms. G – Parent
- Ms. H – District pathway instructor



Policies and Procedures

- Minimum of two meetings each school year
 - Between March 16th of last year and March 15th of the current year
 - Quorum
 - Meeting minutes are required to be kept locally for 5 years
- Meeting Agenda
 - Updates
 - Review improvement plan goals
 - Discuss needs
 - Work-based learning opportunities



Postsecondary Partnerships & Successful Student Outcomes



Student Outcomes



Beyond concentrator and completer status, the focus of CTE success is postsecondary enrollment and/or career readiness.

Having students complete training in things like employability skills is highly recommended.

Dual Enrollment and Statewide Articulation Agreements



It is critical for a USD to have a solid partnership with its local postsecondary institutions to ensure a seamless transition from secondary to postsecondary.

Students should have the opportunity to earn college credit hours in your pathways and/or redeem college credit hours as a result of completing a pathway.

Carl Perkins V

Kathleen Mercer
Perkins Coordinator

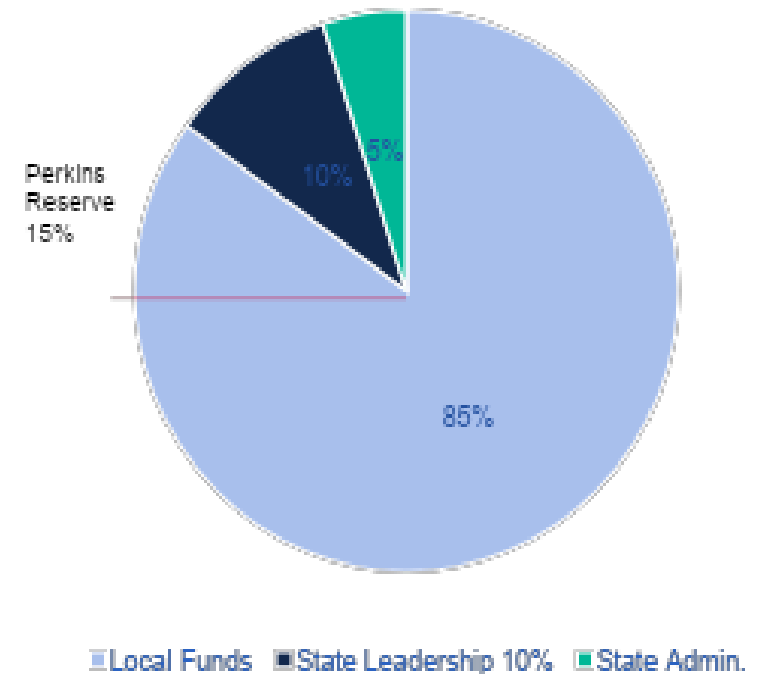


PERKINS

Perkins is Federal Legislation that currently provides nearly \$1.3 billion to the states with the following intended purpose:

- to develop more fully the **academic knowledge** and **technical and employability skills** of secondary education students and postsecondary education students who elect to enroll in career and technical education programs and programs of study

Perkins V Within State Allocation



Perkins Requires a Needs Assessment

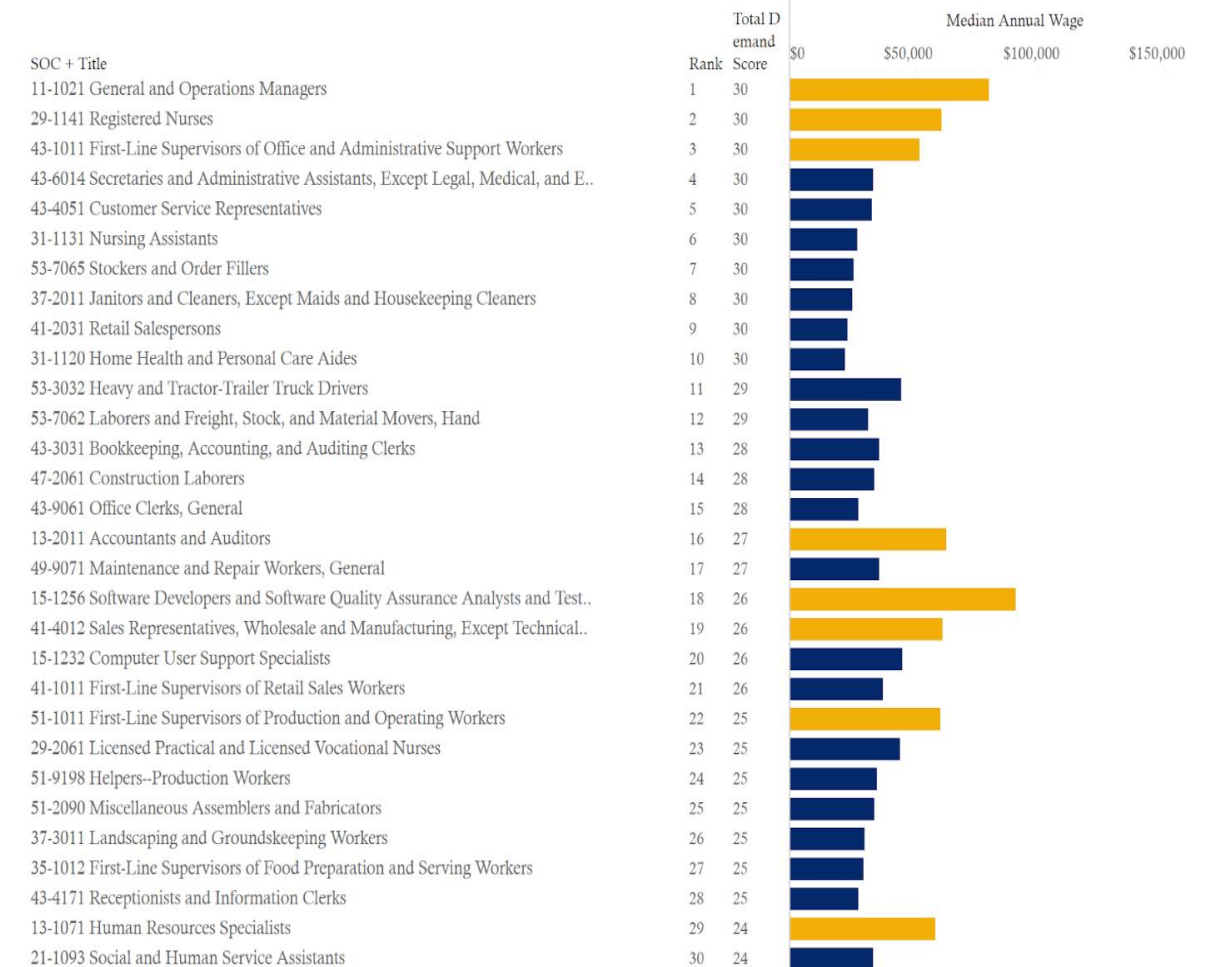
Perkins requires a Comprehensive Needs Assessment (every 2 years) that evaluates:

- The performance of CTE Students
- Quality of Pathways
- Local Labor Market Alignment

High Demand Occupations and Median Wage by Demand Score (High Demand, High Wage jobs in Gold)

(Select a Region)

Kansas Local Area I Local Area II Local Area III Local Area IV Local Area V



Regional Needs Assessment Teams

- 18 Regional teams are centered around Workforce Development Centers.
- Each team has stakeholders representing:
 - Secondary
 - Post Secondary
 - Workforce Development
 - Business and Industry
 - Parents
 - Students
 - Special Populations

The Regional Team is tasked with determining the priorities for each region regarding:

1. Student Performance
2. Labor Market Needs
3. Quality of Pathways

The Local Needs Assessment is reviewed every 2 years. The revised Needs Assessment was submitted February 2022.

Perkins Activities and purchases must align to the Local Needs Assessment.



Advisory Committee Meetings and LCNA

- As you hold your Advisory Committee meetings, please plan to review the **Local Comprehensive Needs Assessment** for your region with all stakeholders.
 - You can offer meetings remotely or in-person, as your needs require!
- Advisory Committees should inform your choice of equipment, supplies, curriculum, and resources for your specific pathway.



What can we spend Perkins Money on?

Perkins supports the 6 activities identified by Perkins. Perkins should provide cutting edge technology to approved Pathways included in the Needs Assessment.

1. **Career** Exploration and Academic Guidance
2. Aligning **Secondary** CTE Pathways and **Postsecondary** CTE Programs to **Labor Market Data**
3. **Size, Scope, and Quality** of CTE Pathways and Programs
4. Aligning **Secondary** CTE Pathways and **Postsecondary** CTE Programs to create a **seamless transition**
5. **PD**: Support the recruitment, preparation, retention, and training of School staff
6. Support **integration of academic skills** into CTE Programs



Pathway Applications (CPPSA)



Amanda Williams
Public Service Administrator

Career Pathway Program of Study Application

- KSDE Authenticated Application (Pathways)
- Often referred to as CPPSA
- Used for Career and Technical Education Data Entry

Who needs access?

- Anyone who will create or update Pathways
- Anyone who will work with/update student data
- Superintendents – for Pathway approval

Pathways Access Levels

School Update – Allows for updating school-level pathways only

School Approve - Allows for working with Student Follow-Up data and Student Data Management only

District/Org Update – Allows for updating all district-level pathways, or pathways within all high schools in the relevant district; **also** allows for working with Student Follow-Up data and Student Data Management

District Approve – Generally superintendents – for district-level approval of pathways

Pathways Connections

- Kansas Individual Data on Students (KIDS)
- Kansas Course Code Management System (KCCMS)
- Educator Data Collection System (EDCS)

CTE Pathways Data



Amanda Williams
Public Service Administrator

Why do we collect student data?

- Supports federal, state, and local **accountability** systems designed to assess the effectiveness of the funding recipients in achieving progress in Career and Technical Education.
- Used to calculate state secondary performance levels on core indicators that are included in our **Perkins State Plan**.
 - KSDE submits this data yearly in the Consolidated Annual Report (CAR).
- It's important to have a clear picture of CTE student achievement in the state so that, with fidelity, we can continue to justify **both** state and federal CTE funding.
- Student data should be used at the local level with administrators and Advisory Committees to drive Pathway improvement.

What data is collected?

Pathway Participants and All Concentrator data which may include:

- Competency Percentage, Average grade of Pathway courses, or Assessment Pass/Fail
- Completer status option for Concentrators Who Exited
- Single Parent Status (if not entered in KIDS)
- Follow-up Student Data
 - Due April 15th each year for previous years' Concentrators who Exited
- All other information is taken from other reporting systems

An end of year document containing all this data could be requested from Teachers before they check out for the Summer.

Important Dates for CTE Pathways Applications & Data

October 15 - CTE Course Nesting Requests Due to KSDE Consultants

November 15 - March 1 - Pathway Application window open

February 1 - April 15 - Student Follow-Up Data window open

May 15 - August 15 - Student Data Management window open

CTE Resources





Career Standards and Assessment Services (CSAS) Menu

The following sub-menu can be used to navigate within the CSAS Team web pages.

[CSAS Home](#)

[Content Area A-E](#)

[Content Area F-L](#)

[Content Area M-Z](#)

Career and Technical Education (CTE)

For several decades, Career and Technical Education (CTE) has been evolving. No longer offering only traditional vocational education, CTE now offers a diverse range of subjects and career fields, including a number of science, technology, engineering, and mathematics (STEM) subjects. In addition, the distinction between CTE and academic programs is slowly disintegrating as integrating academic content into CTE has become a national education priority. CTE has become an indispensable lever for improving students' college and career readiness. CTE plays a powerful role in preventing students from dropping out and provides a variety of opportunities for postsecondary success and employment, including pathways to a bachelor's degree. CTE also can help all students achieve the objectives of the Kansas College and Career Ready Standards (KCCRS) through authentic, applied learning experiences. In short, CTE is a crucial change agent for the success of improving outcomes for all students.

Kansas utilizes the [National Career Clusters® Framework](#). Technological advances and global competition have transformed the nature of work. Tomorrow's jobs will require additional knowledge, improved skills and highly flexible workers who continually update their knowledge and skills. Career Clusters link what students learn in school to the knowledge and skills they need for success in post-secondary education and careers. In Kansas secondary schools, 36 Career Pathways are offered, spanning across all 16 Career Clusters. For specific illustration check out the: [Kansas Career Clusters & Pathways Model \(PDF\)](#)

KSDE CTE Vision

All Kansas students are engaged in quality career pathways to prepare them for a lifetime of opportunities as productive and responsible citizens.
(Summer 2013)

KSDE CTE Purpose

Support and empower schools in developing quality pathways that lead students to college and career readiness
(Summer 2014)

KSDE CTE Long-Term Goals:

1. Providing Quality Professional Development
2. Developing and Sustaining Partnerships
3. Keeping Pathway standards relevant, rigorous and reflective of current business/industry standards or practices
4. Provide valid, reliable CTE data to schools in a timely manner



Career & Technical Education
Quick Links:

[CTE Main Page](#)

[CTE Table of Contents Page](#)

[CTE Listserv Sign-up](#)

[Kansas Civil Rights](#)

[Authenticated Applications](#)

Assistant Director
Career and Technical Education
Vacant
(785) 291-3538

[KSDE Secondary-Level CTE Contacts](#)

Deputy Commissioner
Division of Learning Services
Dr. Ben Proctor
(785) 296-2303

[CTE Table of Contents Page](#)

To get to the KSDE CTE webpage...

→ Go to www.ksde.org

→ Type Career and Technical Education into the Search Bar

→ Click the first link and you will get to this CTE page

From here...

→ Scroll down for NEW CTE Information

→ OR click on the [CTE Table of Contents Page](#)

Important Links – CTE Table of Contents

- [KSDE CTE Contact List](#)
- [Important Dates \(School Year 2022-2023\)](#)
- [16 Career Clusters Webpages](#)
 - On each Cluster's Webpage you will find the Pathway Design Sheets and Competency Profile Sheets for each course.
- [Career Cluster Guidance Handbook FY 2023-2024](#)
- [2023-2024 Summary of Pathway Changes](#)
- [Policy on Combining CTE Courses](#)
- [Pathways Application Checklist](#)
- [Work-Based Learning Digital Reference Guide](#)








KSDE - CTE emailing lists ([LISTSERVS](#)) are available to teachers, administrators, counselors, and CTE Coordinators.

- Information provided through each emailing list may include but is not limited to: Cluster/pathway updates, notice of workshops/conferences relative to their content area, links to various resources, notice of guidance changes, and innovative classroom strategies.
- Please email the contact listed to request the addition or deletion of your email address to the LISTSERV(s).

Listserv	Contact	Email Address
AGTEACHERS (AG Instructors)	Guy Shoulders	gshoulders@ksde.org
ARTAVCOM (Art Audio/Visual Communications)	Nikk Nelson	nikkn@ksde.org
BUSINESS ED	Natalie D. Clark	ndclark@ksde.org
CTE COORDINATORS	Barb Bahm	bbahm@ksde.org
CTECS (Computer Science Group)	Nikk Nelson	nikkn@ksde.org
CTESTEM	Nikk Nelson	nikkn@ksde.org
FCS_TEACHERS (formerly FACSTEACHERS)	Helen Swanson	hswanson@ksde.org
GOVERNMENT_ADMINISTRATION	Nathan (Nate) McAlister	nmcaster@ksde.org
HEALTH_SCIENCE_TEACHERS	Meg Richard	mrichard@ksde.org
KCCMS	Amanda Williams	awilliams@ksde.org
LPSCS (Law, Public Safety, Corrections & Security)	Crystal Roberts	croberts@ksde.org
PATHWAYS_CPPSA (Pathways)	Amanda Williams	awilliams@ksde.org
PERKINS CONTACTS	Kathleen T. Mercer	ktmercer@ksde.org
TRADE_INSTRUCTORS	Crystal Roberts	croberts@ksde.org

Upcoming Cluster Reviews – Fall 2022

CTE Cluster Reviews (Updated July 2022)				
Cluster/Pathway	Lead Consultant	Created	Last Year Reviewed	Next Projected Review
Agriculture, Food & Natural Resources	Guy Shoulders	2012-2013	2017-2018	 2022-2023
Architecture & Construction	Crystal Roberts	2008-2009	2018-2019	2023-2024
Arts, A/V Technology & Communications	Nikk Nelson	2010-2011	2017-2018	 2022-2023
Business Management & Administration	Natalie Clark	2009-2010	2021-2022	2026-2027
Education & Training	Helen Swanson	2007-2008	2018-2019	2023-2024
Engineering	Crystal Roberts		2017-2018	 2022-2023
Finance	Natalie Clark	2008-2009	2018-2019	2023-2024
Government & Public Administration	Nathan McAlister	2010-2011	2021-2022	2024-2025
Health& Bio Sciences	Meg Richard	2007-2008	2018-2019	2023-2024
Hospitality & Tourism	Helen Swanson	2009-2010	2021-2022	2026-2027
Human Services	Helen Swanson	2008-2009	2020-2021	2024-2026
Information Technology	Nikk Nelson	2008-2009	2021-2022	2026-2027
Law, Public Safety, Corrections & Security	Crystal Roberts	2010-2011	2021-2022	2026-2027
Manufacturing	Crystal Roberts	2009-2010	2020-2021	2024-2025
Marketing	Natalie Clark	2008-2009	2020-2021	2024-2025
Transportation, Distribution & Logistics	Crystal Roberts	2010-2011	2020-2021	2025-2026



Q&A Session

Pam Lamb
FCCLA State Advisor
Career, Standards and Assessment Services
(785) 296-2164
plamb@ksde.org

Kathleen Mercer
Coordinator - Perkins
Career, Standards and Assessment Services
(785) 296-2307
kmercer@ksde.org

Nikk Nelson
Education Program Consultant
Career, Standards and Assessment Services
(785) 296-7285
nikkn@ksde.org

Crystal Roberts
Education Program Consultant
Career, Standards and Assessment Services
(785) 296-2221
croberts@ksde.org



Guy Shoulders
Education Program Consultant
Career, Standards and Assessment Services
(785) 296-3956
gshoulders@ksde.org

Helen Swanson
Education Program Consultant
Career, Standards and Assessment Services
(785) 296-4912
hswanson@ksde.org

Amanda Williams
Public Service Administrator
Career, Standards and Assessment Services
(785) 296-4908
awilliams@ksde.org

The Kansas State Department of Education does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: KSDE General Counsel, Office of General Counsel, KSDE, Landon State Office Building, 900 S.W. Jackson, Suite 102, Topeka, KS 66612, (785) 296-3201.

