



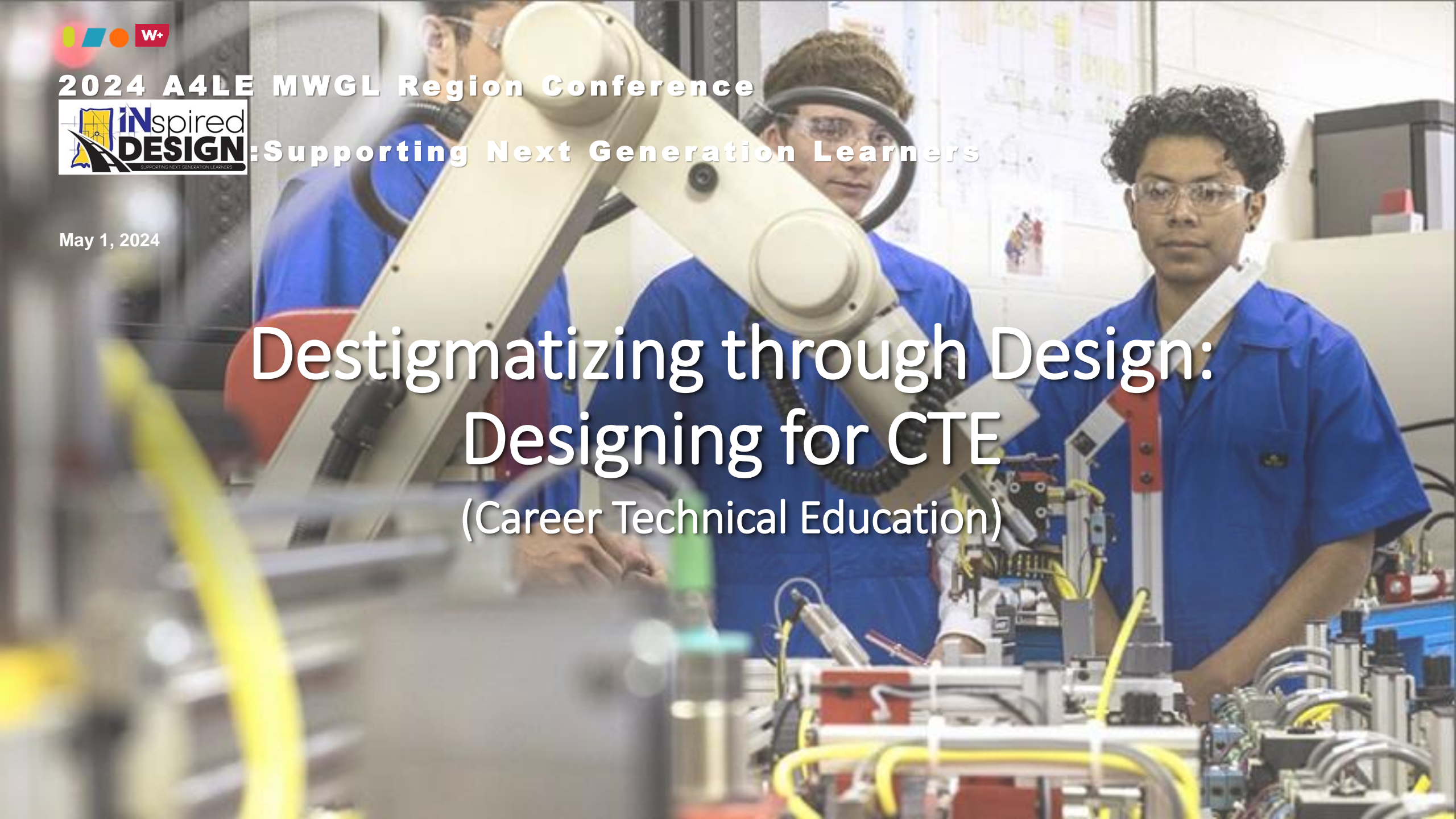
2024 A4LE MWGL Region Conference



Supporting Next Generation Learners

May 1, 2024

# Destigmatizing through Design: Designing for CTE (Career Technical Education)



# Presenters



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## AGENDA

- 1** What? CTE
- 2** The Stigma!
- 3** Why? Change
- 4** Building Communities



## Definitions

**What types of students are  
CTE spaces for?**

SHIFT

# SHIFT FROM

VOCATIONAL EDUCATION TO CTE

**THEN**

VOCATIONAL  
EDUCATION

vs.

**NOW**

CAREER TECHNICAL  
EDUCATION



## AGENDA

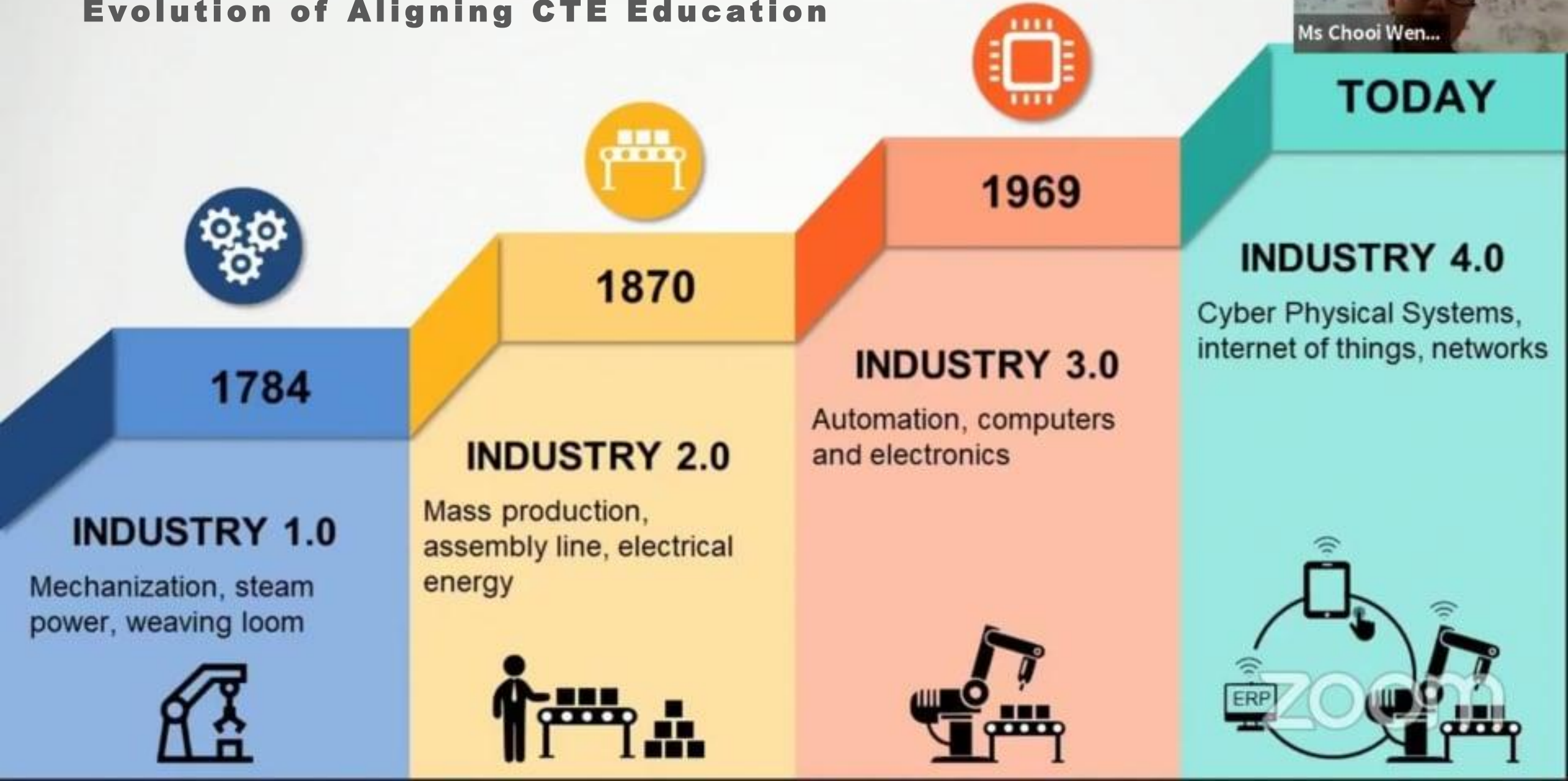
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# Evolution of Aligning CTE Education



Ms Chooi Wen...





# THE IMPORTANCE OF WORK IN AMERICA

Kudlow



**Mike Rowe: Works Foundation: What's the problem?**





## Mike Rowe: Works Foundation

- We've got a PR problem.
- What's the problem?
- We've made work the enemy.
- Over the last 30 years, America has come to view the **best path** for most people is **an expensive four-year degree**. Pop culture has **glorified the "corner office" lifestyle** and **intentionally belittling the jobs that helped build the middle class**. As a result, our society has devalued any other path to success and happiness. Community colleges, trade schools, and **apprenticeship programs are labeled as "alternatives"** for well-intended parents and guidance counselors. These programs are **consolation prizes,** best suited **for those not cut out for the brass ring: a four-year degree.** The **push** for higher education has coincided with **the removal of vocational arts from high schools** nationwide. And the effects of this one-two punch have laid the foundation for a **widening skills gap and massive student loan debt.**



**WE NEED TO CHANGE THE LANGUAGE!**



## Understanding the Stigma of Vocational Education

- Vocational education—or “voc ed”—was **low quality**. The academic content was weak, the skills imparted were limited, and the jobs for which students were prepared were often low-wage and low-skill.





## Understanding the Stigma of Vocational Education

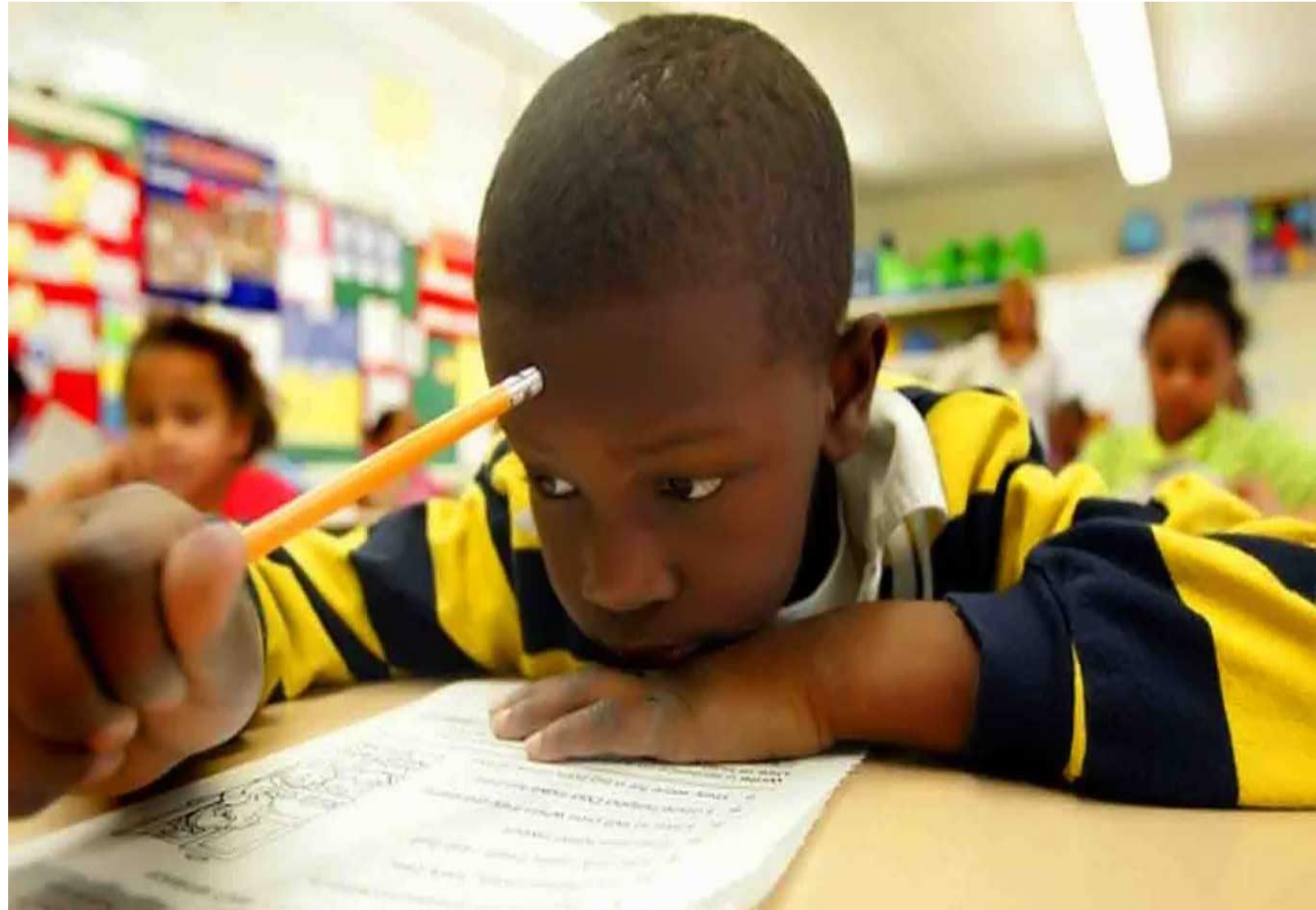
- Voc ed was where students went if they were not “college prep,” and it was seen as a **last-resort** option.
- “The early vocational education was driven by a philosophy of **fitting people to their probable destinies**,” says Jim Stone, director of the [National Research Center for Career and Technical Education](#).





## Understanding the Stigma of Vocational Education

- There was a long tradition of tracking those with **lower perceived achievement** into voc ed. In many cases, race and class, as opposed to measured achievement through test scores, determined the tracks into which students were sorted.
- Minority and lower-income children were **tracked into voc ed** much more often than whites and middle-class students.
- Voc ed and tracking came to be viewed as mechanisms through which historical patterns of **social stratification were maintained** or even strengthened in secondary schools.





## Understanding the Stigma of Vocational Education

- During the 1960s, this type of tracking became politically controversial. Both parents and advocates for minorities and the poor fought against it. Unfortunately, opportunities for needed **career preparation in high school were eliminated**, along with the often-pernicious tracking system





## Understanding the Stigma of Vocational Education

- The School-to-Work Opportunities **Act of 1994** promoted similar goals, and the associated efforts to provide **work-based learning** and prepare students for a rapidly evolving labor market appeared to be **making a difference**.





## We Were Told: “The Only Road to Success is College!”

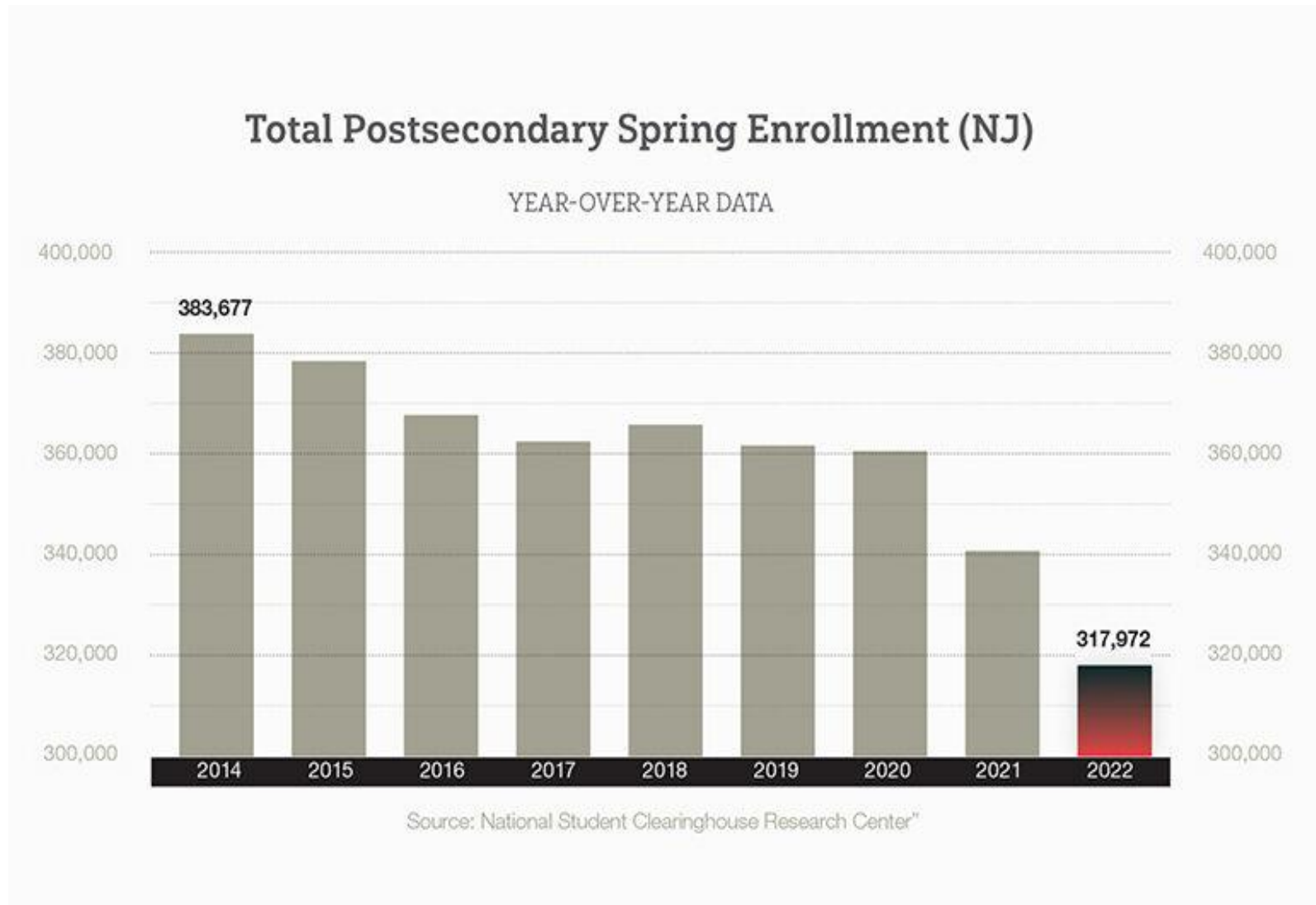
- According to the Wall Street Journal (03/2024), the average cost for College is **\$36,000/year**
- 1965 **“college for all”** government loans available to college-bound 18-year-olds
- Between 1965 and 2011, university enrollment increased fourfold to 21 million
- Of 100 college freshmen today, **40 will not graduate**
- 60 that earn a degree in six years, **20 will end up chronically underemployed**
- So, for **every 5 students** who enroll in a four-year college, **only 2 will graduate and find a job based on their degree**





## We Were Told: “The Only Road to Success is College!”

- Real cost of College for a degree is **\$300,000**
- The **MATH** doesn't work: high school graduates who enrolled in college **fell from 70% in 2016 to 62% in 2022**
- A 2022 poll asked parents if they would rather their child attend a four-year college or a three-year apprenticeship that would train them for a job and pay them while they learned. **Almost 50% chose the apprenticeship.**
- Government financial support for universities outstrips apprenticeships by about **1,000 to one**
- **“degree reset,”** elimination of degree requirements for jobs







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# Why Change?





## Valuable High School Experience + Pay-off After Graduation

### HIGH SCHOOL GRADUATION RATE

Source – Department of Education

**95%**

Students who concentrate in CTE in Illinois

**85%**

non-CTE students in Illinois

### GET NOTICED BY EMPLOYERS

Source – Advance CTE

**96%**

of employers who have heard about CTE have a favorable view of CTE applicants

### STUDENT PARTICIPATION

Source – Department of Education

**77%**

of employers who have heard about CTE have a favorable view of CTE applicants

### MALE AND FEMALE STUDENTS

Source – Department of Education

**54%**

Of CTE participants are male

**46%**

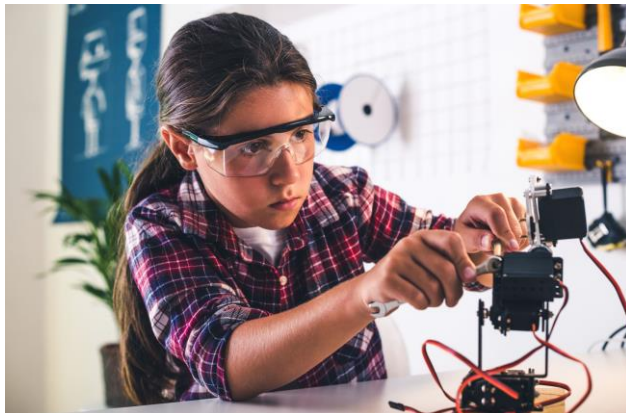
Of CTE participants are female



## Preparing for the Real World

### REAL-WORLD SKILLS

**3x** more likely to report being "very satisfied" with ability to learn real-world skills



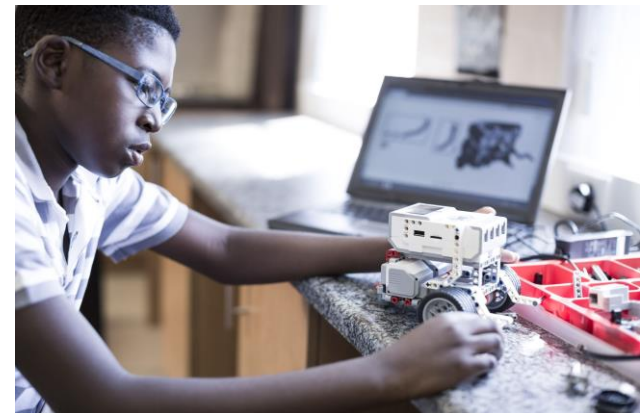
### GET NOTICED BY EMPLOYERS

**2x** more likely to report being "very satisfied" with high school education experience



### FUTURE OPTIONS

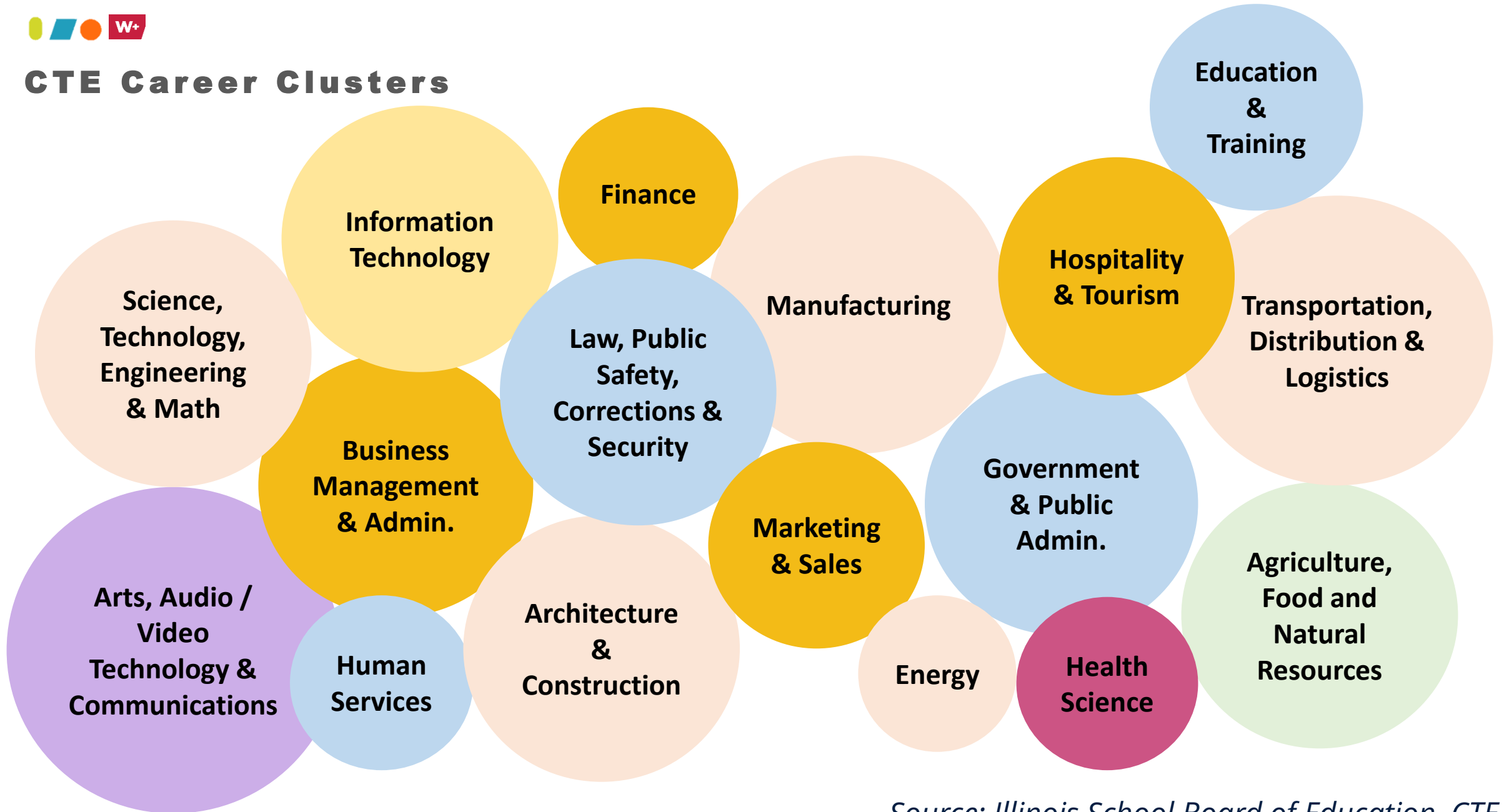
Increased likelihood of having a post-high school plan – including college



*Source: Illinois School Board of Education, CTE*



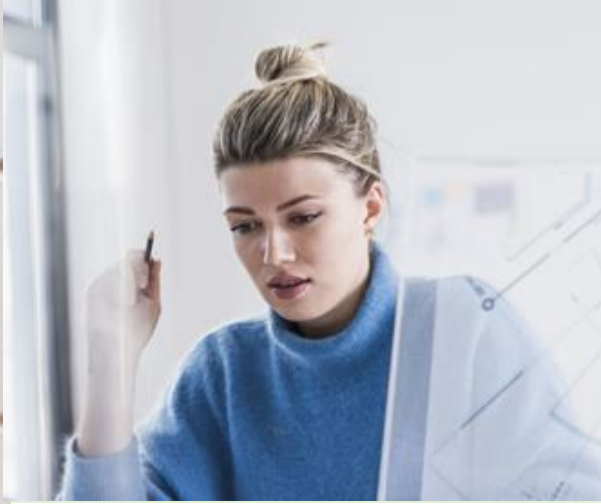
## CTE Career Clusters



*Source: Illinois School Board of Education, CTE*



## What do the Following People look like?



*Source: Illinois School Board of Education, CTE*



## Gender Stereotype Career Decisions

- Unconscious career decisions based on gender stereotypes
- Nontraditional career fields are when 75% of members are the opposite gender.

### FOR MEN

Early Childhood Teacher  
Social Worker  
Registered Nurse

### FOR WOMEN

Mechanical Engineer  
Architect  
Software Developer



# Understanding the Stigma of Vocational Education

## HIGH SCHOOL RESUME

### *Interests*

- *Sports*: Football Kicker, Soccer
- *Welding*: 4 years of welding classes
- *Automotive*: 3 years of classes
  - o ½ a year of getting in trouble in class
- *Woodshop*: 2 years of classes
- *Video Games*

### *Personal Challenges*

- *On the Autism Spectrum*: Struggles social and emotionally, but never have had to study for anything because it's all too easy including Calc

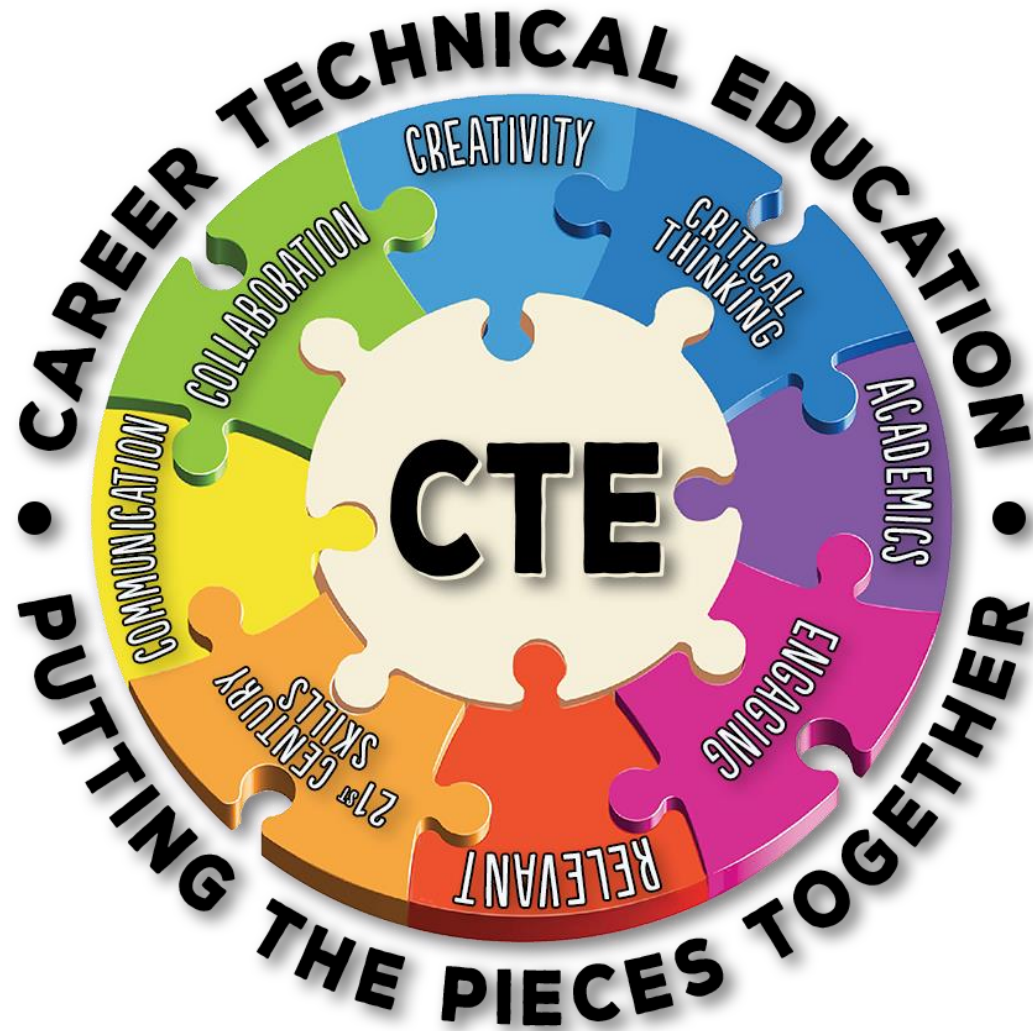




## Understanding the Stigma of Vocational Education



## Putting the Pieces Together



## Top 10 skills of 2025

### Type of skill

- Problem-solving
- Self-management
- Working with people
- Technology use and development

-  Analytical thinking and innovation
-  Active learning and learning strategies
-  Complex problem-solving
-  Critical thinking and analysis
-  Creativity, originality and initiative
-  Leadership and social influence
-  Technology use, monitoring and control
-  Technology design and programming
-  Resilience, stress tolerance and flexibility
-  Reasoning, problem-solving and ideation



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# Galesburg Junior Senior High and Vocational Center





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# Galesburg Junior Senior High and Vocational Center



## Building Communities

1. How to **engage multiple diverse communities** for a common goal, Experiential Learning opportunities for all students
2. Developing a **Leadership Team** to execute educational opportunity gaps for both students and the community
3. Learn how to **lead a diverse cross-section of stakeholders in a community engagement process**, including education, government, business, non-profit, and spiritual entities, and develop consensus.



# Starting With The Why



requires a Master's degree or more

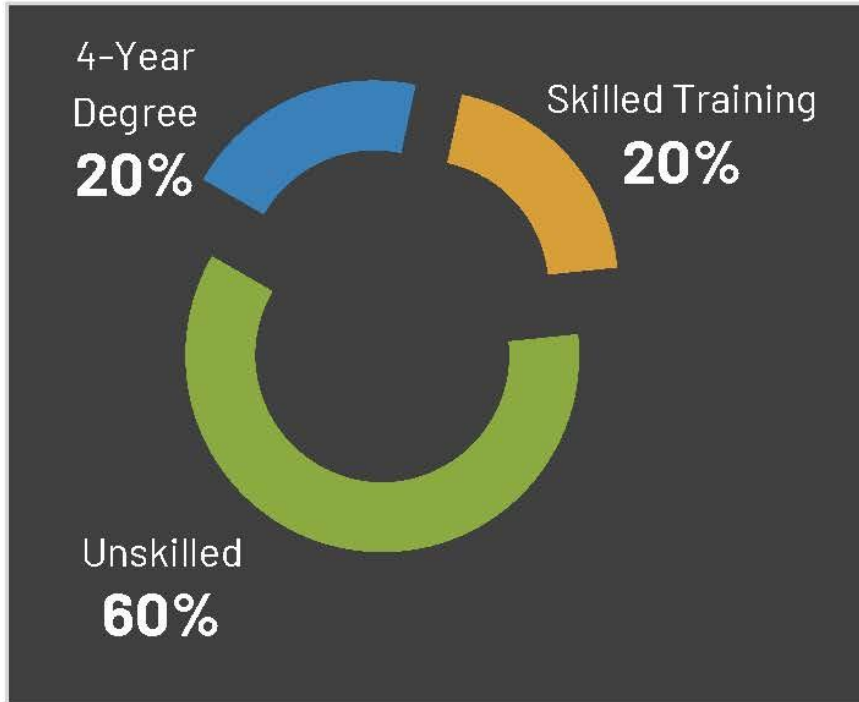


require a Bachelor's degree



require a professional/skilled trades  
1-year certificate or 2-year degree

# A Changing Economy



**1960 JOBS**



**2018 JOBS**

Source: (Re)Defining the Goal: The True Path to Career Readiness in the 21st Century, Kevin J. Fleming, Ph.D. July 2016

## 21<sup>st</sup> Century Skills Identified by Regional Employers: Most Valuable



### SELF-MANAGEMENT

Taking initiative, personal accountability, punctuality, strong work ethic, self-directed, integrity, empathy, perseverance



### COMMUNICATION

Good listening skills, ability to present ideas, good reading and writing skills



### PROBLEM SOLVING

Ability to identify problems and suggest solutions, setting goals, managing workloads, willingness to ask questions



### CRITICAL THINKING

Analyzing, comparing options, independent thinking, understanding logical connections



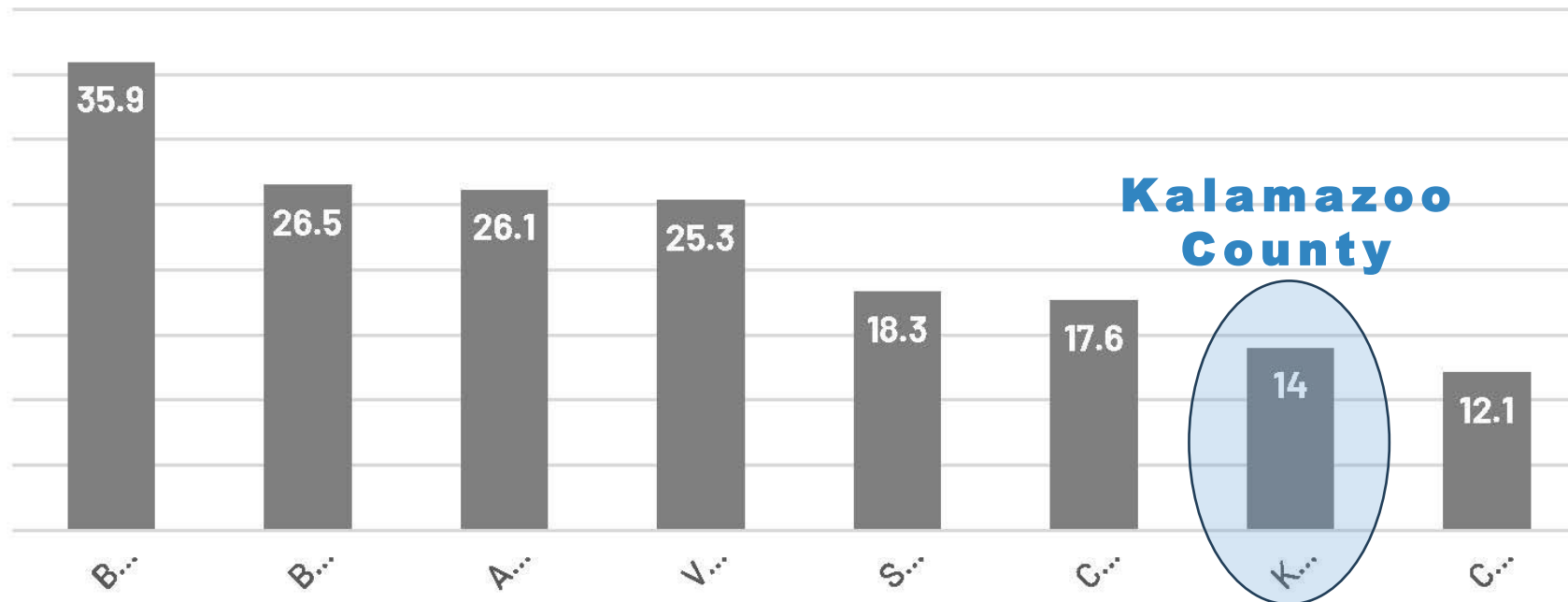
### COLLABORATION

Working in teams, building relationships, valuing diversity, exercising leadership

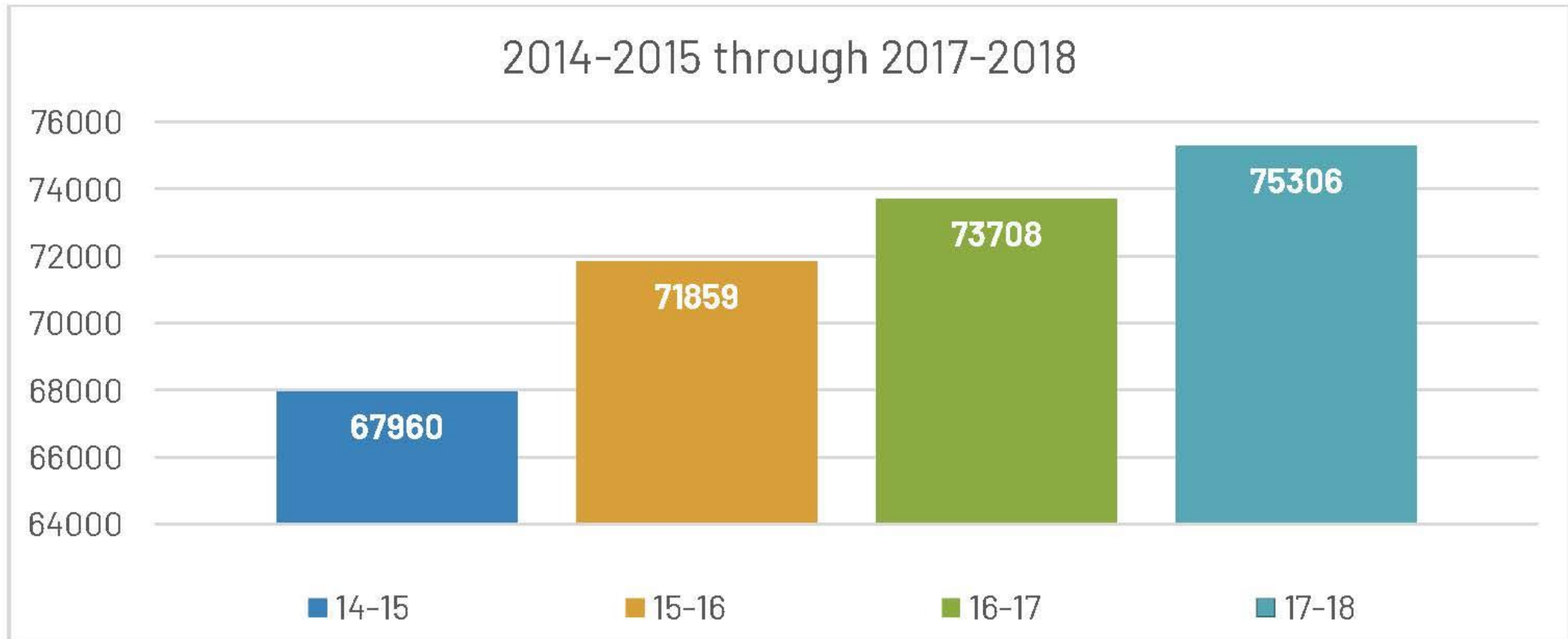
# Enrollment Trends | Participation Rate

COUNTYWIDE CTE ENROLLMENT AS A PERCENTAGE OF TOTAL 10TH-12TH GRADE ENROLLMENT IN TRADITIONAL/COMPARABLE PROGRAMS

2017-2018



## STATEWIDE CTE ENROLLMENT TREND





## Our Commitment to the Community

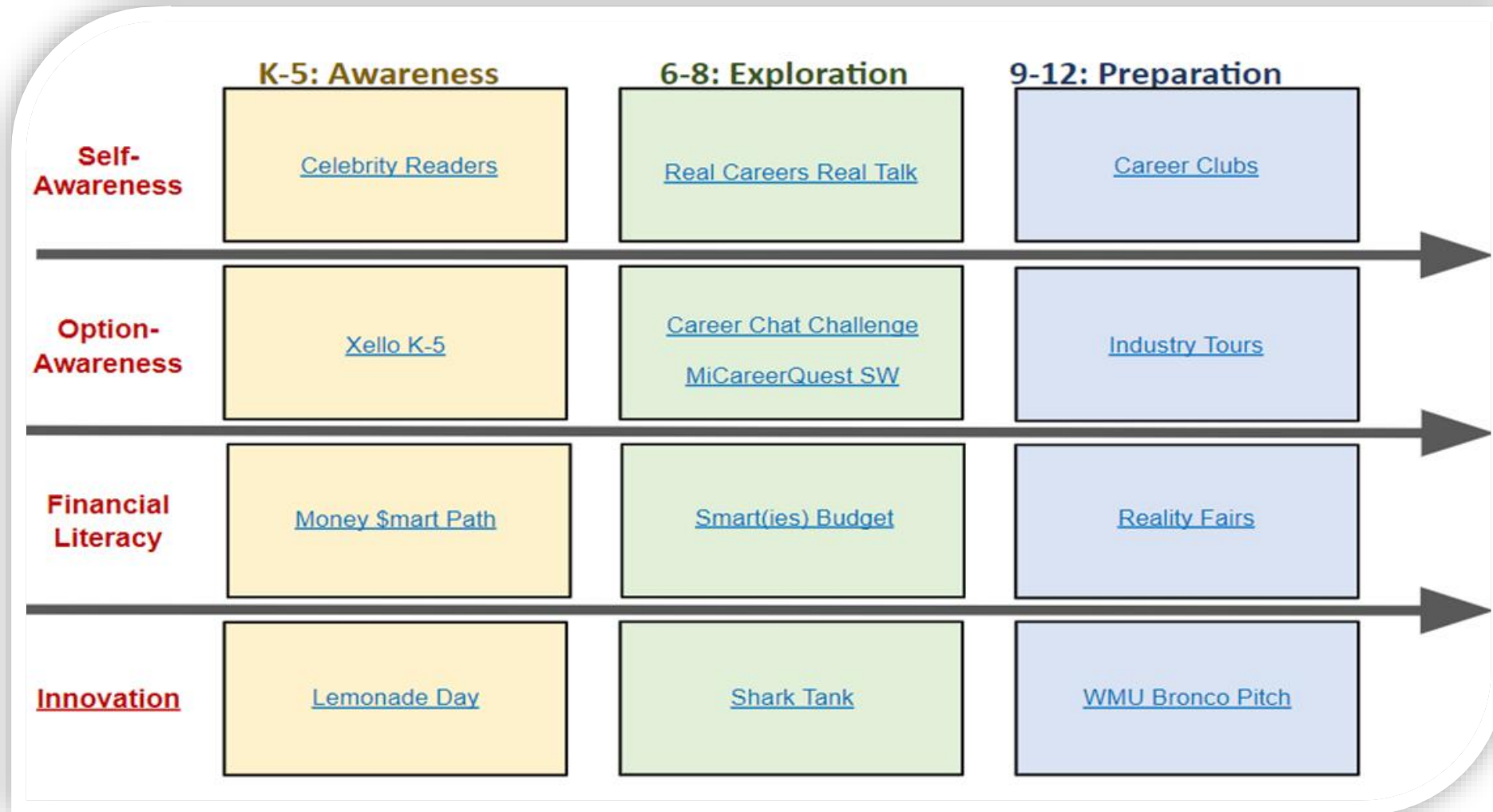


KRESA is committed to offering CTE programs that:





# Career Awareness & Exploration Continuum of Services



# Lemonade Day



business skills



responsibility



financial literacy



goal setting



teamwork

## SET A GOAL



Spending Goal, Saving Goal, Sharing Goal

## MAKE A PLAN



Make Spending Decisions, Plan their Product and Stand, Brand and Advertise, Find an Investor, Create a Business Plan and Budget

## WORK THE PLAN



Purchase their Supplies, Make Lemonade and Build their Stand, Setup and Run their Business, Provide Good Customer Service

## ACHIEVE SUCCESS



Account for Business Results, Spend Some, Save Some, Share Some, Contemplate their Future Plans.





# Aligning Career Center Pathways to the Regional Economy



**Purpose:** Analyze Southwest Michigan economy and compare local labor market to state and national trends

**Partner:** University of Michigan

**Purpose:** Identify industry clusters with high-growth, well-paying positions in Southwest Michigan

**Partner:** Upjohn Institute for Employment Research

**Purpose:** Identify in-demand program/course areas as well as near-term employment projections. Evaluate current employer perceptions of CTE

**Partner:** Upjohn Institute for Employment Research

**Purpose:** Share employer survey results + deeper dive by industry into specific credentials / skillsets desired + assess desire for engagement

**Partner:** Southwest Michigan First & Upjohn Institute for Employment Research

## Scoring Criteria

### Well-paying occupations

- An occupation is well-paying if the annual wage exceeds **\$41,600** (2019).
- This threshold represents earnings of **\$20 per hour** for full-time, full-year work.

### High-growth occupations

- An occupation is considered to be high-growth if its projected growth is **more than 3%** over the projection period.
- 3% is below the growth rate for the 2016-2019 period for the US (4.6%), for Michigan (3.1%), and for **Kalamazoo Portage (5.3%)**
- 3% is below the growth rate projected for the US over 2019-2029 (3.7%) but well above the rate for the 2018-2028 projections for **Michigan (0.1%)**

### High-Job Openings

- Job openings can result from both **net employment growth** (aka, more jobs) and the need to **replace workers who retire** or otherwise leave an occupation.
- Job openings provide **a measure of the full opportunity** set faced by individuals to find a job in their chosen occupation
- An occupation is projected to have high job openings if the **number is greater than the average change** across all occupations over the projection period.



# Course Recommendations

## COURSES AT CAREER CENTER

### Agriculture, Food and Natural Resources

- 01.0903 Animal Health and Veterinary Sciences
- 01.0000 Agriculture, Agricultural Operations and Related Sciences

### Architecture and Construction Trades

- 46.0000 Construction Trades
- 46.0301 Electrical and Power Transmission Installation
- 46.0503 Plumbing Technology
- 47.0201 Heating, Air Conditioning, Ventilation and Refrigeration

### Energy

- 46.0303 Line Worker

### Health Science

- 51.0000 Health Sciences/Allied Health/Health Sciences, General
- 51.1000 Clinical/Medical Laboratory Science/Research and Allied Professions
- 51.0707 Health Information/Medical Records Technology/Technician
- 26.0102 Biomedical Sciences, General

### Hospitality and Tourism

- 12.0500 Cooking and Related Culinary Arts, General

### Information Technology

- 11.0801 Digital/Multimedia and Information Resources Design
- 11.0201 Computer Programming/Programmer
- 11.0901 Computer Systems Networking and Telecommunications

### Law, Public Safety and Protective Services

- 43.0100 Public Safety/Protective Services

### Manufacturing and STEM

- 48.0501 Machine Tool Technology/Machinist
- 48.0508 Welding, Brazing, and Soldering
- 14.4201 Mechatronics

### Transportation, Distribution and Logistics

- 47.0399 Heavy/Industrial Equipment Maintenance Technologies
- 47.0603 Collision Repair Technician (ASE Certified)
- 47.0604 Automobile Technician (ASE Certified)

### New

- Supply Chain
- Design

## COURSES AT SATELLITE LOCATIONS

### Agriculture, Food and Natural Resources

- 03.0000 Natural Resources and Conservation

### Human Services

- 12.0400 Cosmetology

### Transportation, Distribution and Logistics

- 49.0101 Aeronautics/Aviation/Aerospace Science and Technology

## COURSES AT LOCAL SCHOOL DISTRICTS

### Business Management and Administration

- 52.0299 Business Administration Management and Operations

### Education and Training

- 13.0000 Education General

### Finance

- 52.0800 Finance and Financial Management Services

### Marketing

- 52.1999 Specialized Merchandising, Sales, and Marketing Operations, Other



# Our Timeline

- JUNE, 2017    EFE Continuous Improvement Data
- JAN., 2018    **Phase One:** Visioning process with educators
- JAN., 2019    **Phase Two:** Three Design Teams with 75 education, business and community members

- 2020
  - Consult with Marc Tucker, NCEE
  - Restructure Leadership Team
  - Begin Local and National Labor Market Analysis
  - Launch focus groups and business surveys
- 2021    **Refining the Design of World-Class CTE**
  - Continue Employer Engagement Processes

NOV. 5, 2019

## Election Day:

60% Yes

40%

- 2020    **Retine the Design and Begin Implementation**
  - Career Exploration: Hire career coaches, develop curriculum, and implement during pandemic

- 2025    **Cut the Ribbon on the new CTE Center**

## New Career Center | Important Considerations

- **Attractive curb appeal that communicates the value of CTE to:**
  - Students
  - Families
  - CTE Educators
  - Employers
- **Adaptable space** allows for changes to classroom functionality, equipment to align with labor market shifts, and how work is conducted at local businesses
- Accommodating to phased facility growth and expansion
- Provides **use to the greater community** during non-peak school hours
- **Centrally located** in the county for ease of student transportation and proximity to Kalamazoo's industrial center for students' work-based learning experiences
  - Sprinkle Road – Portage Road, I-94 corridor
- Facility must facilitate the development of **21st Century Skills**





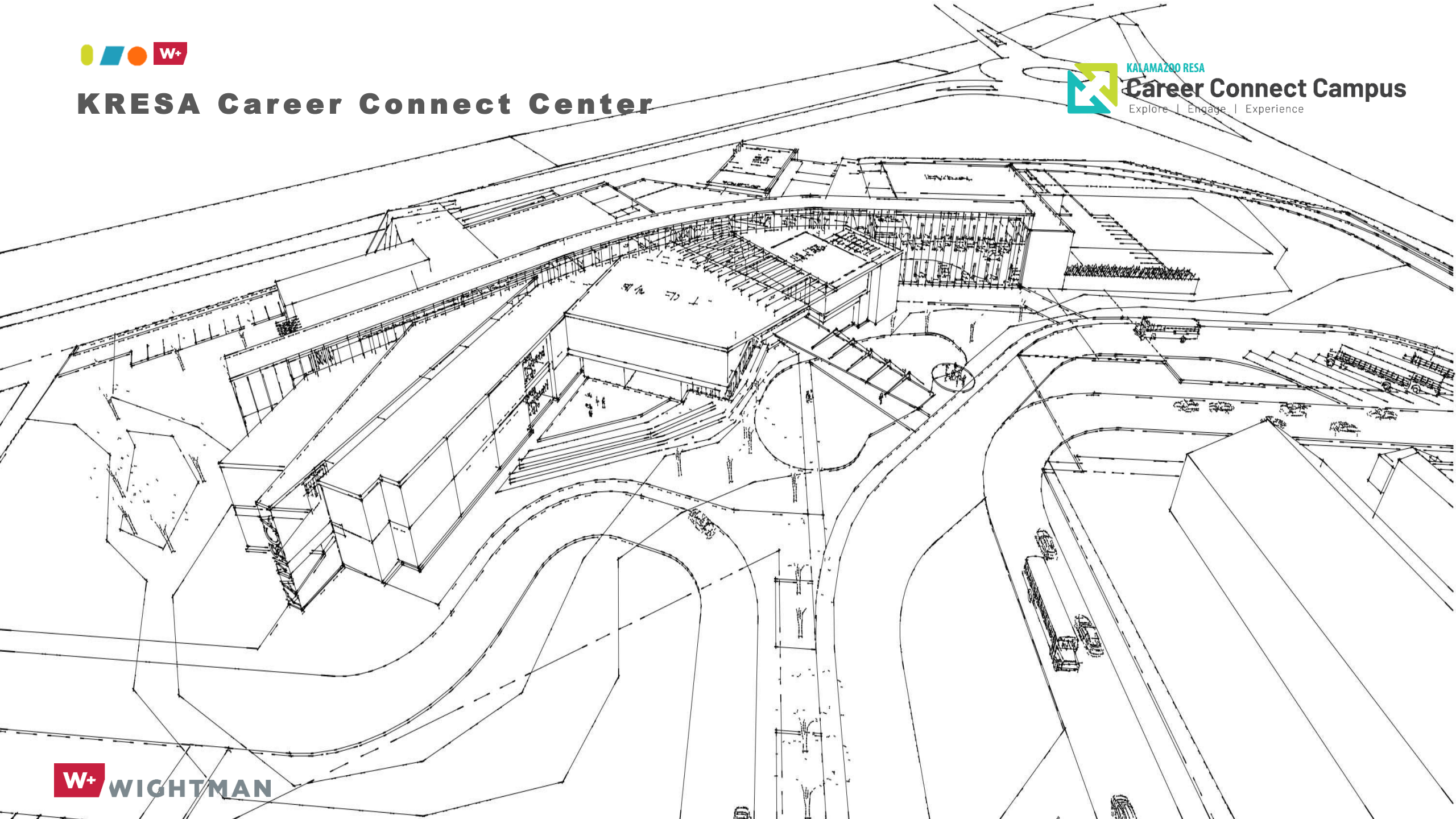
# KRESA Career Connect Center



KALAMAZOO RESA

**Career Connect Campus**

Explore | Engage | Experience







# KRESA Career Connect Center



KALAMAZOO RESA

## Career Connect Campus

Explore | Engage | Experience



QA

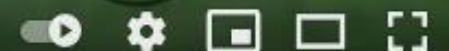


# CHERRY CREEK: IN THE NEWS

CHERRY CREEK INNOVATION



0:06 / 5:28





# CHERRY CREEK: IN THE NEWS





## Questions & Answers





## Destigmatizing through Design: Designing for CTE

A close-up photograph of a hand holding a grey marker, writing the words 'Thank you' in a cursive, handwritten style on a white surface. The marker is positioned at the end of the word 'you', and the text is slightly blurred, suggesting motion or a shallow depth of field.

Thank you