



**A4LE LearningSCAPES CONFERENCE**

**New Horizons in Learning Environments**



# Destigmatizing CTE through Design: Designing for Career Technical Education



October 29 - November 1, 2025

## Presenters



**Eric Stewart**  
Assistant Superintendent  
Career and Talent Development  
KALAMAZOO RESA



**GEORGE M. KACAN, AIA**  
EDUCATION SECTOR LEADER  
Principal Architect  
WIGHTMAN





## 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



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# Evolution of Aligning CTE Education



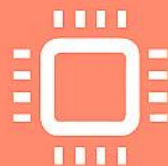
## INDUSTRY 1.0

Mechanization begins:  
steam power,  
weaving loom



## INDUSTRY 2.0

Mass production:  
assembly line,  
electrical energy



1969

## INDUSTRY 3.0

Automation and  
electronics:  
computers, robotics



## INDUSTRY 4.0

Cyber-Physical Systems: IoT, ERP,  
networks



# 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 convinced the **best path** for most people is **an expensive degree**. Pop culture has **glorified the "corner office"** and **intentionally belittling the jobs that helped build the country**. 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. Apprenticeships and on-the-job training opportunities are seen as **"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**.



## 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.





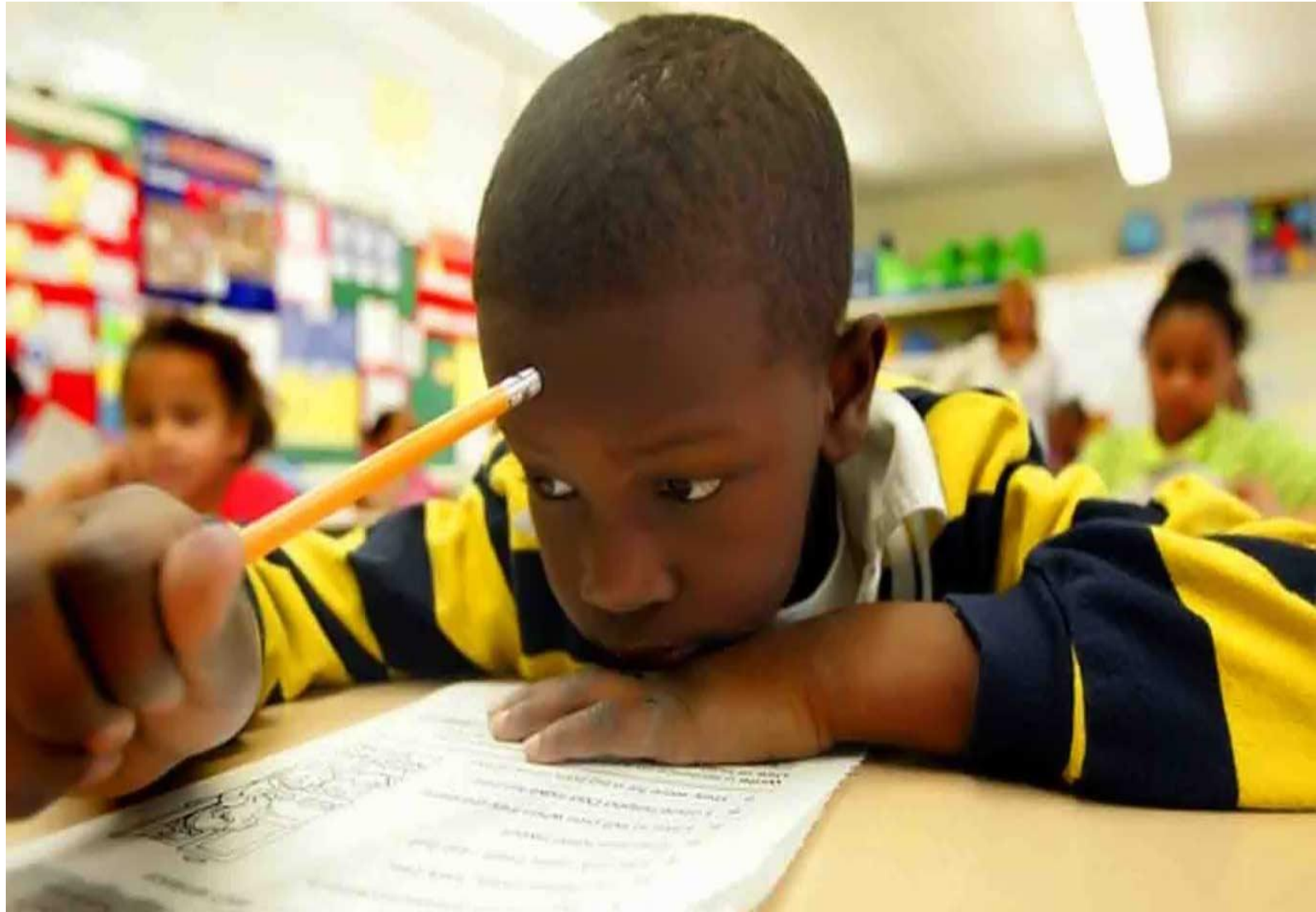
## Understanding the Stigma of Vocational Education

- 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.
- Minoritized 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 minoritized populations 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!”

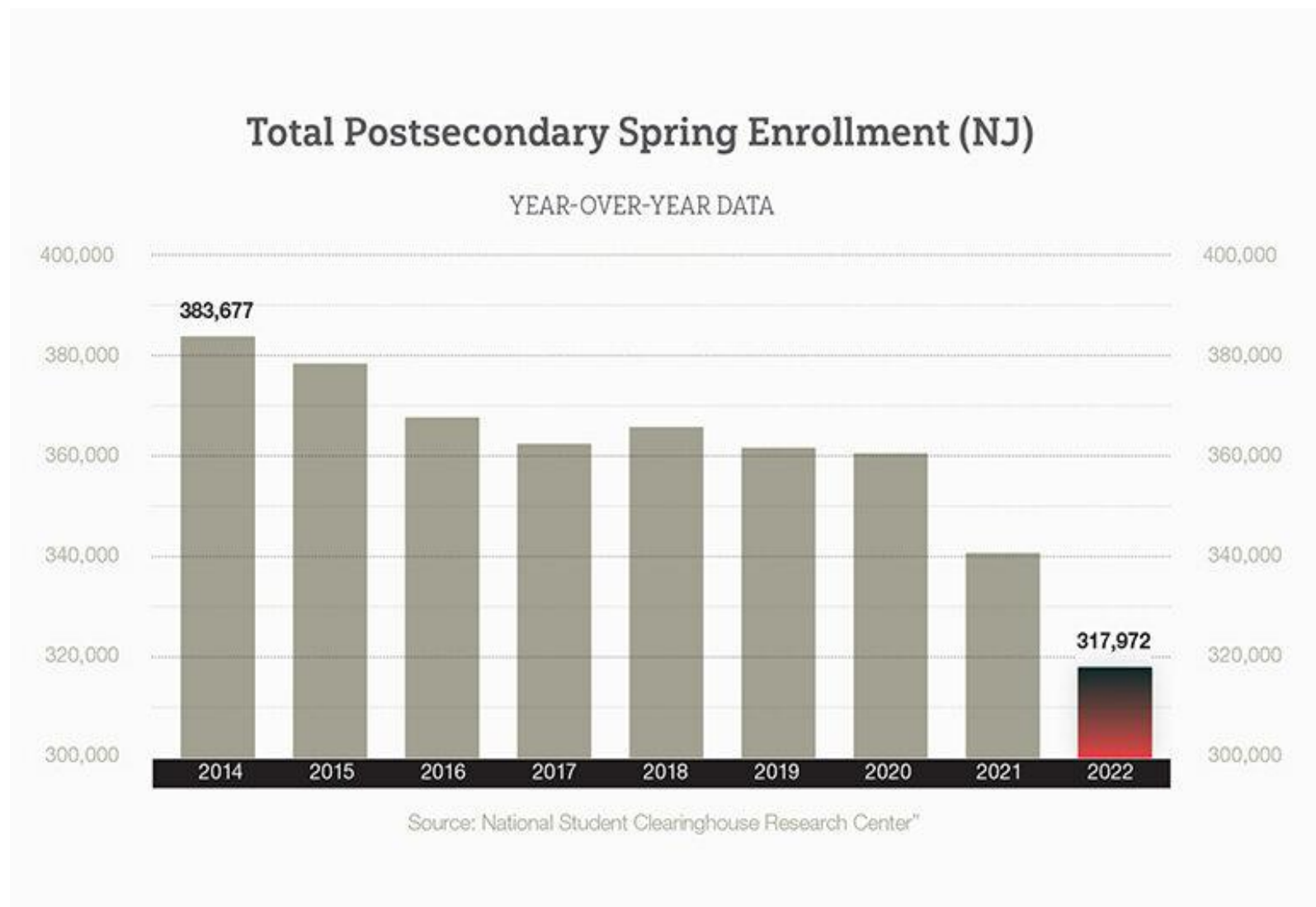
- According to the Wall Street Journal (03/2024), the average cost for College is **\$36,000/year**
- 1965 **“college for all”** government loans available to college-bound 18-year-olds
- Between 1965 and 2011, university enrollment increased fourfold to 21 million
- Of 100 college freshmen today, **40 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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## Valuable High School Experience + Pay-off After Graduation

### HIGH SCHOOL GRADUATION RATE

*Source – Department of Education*

**97%**

CTE  
concentrators  
in Michigan

**82%**

non-CTE  
students in  
Michigan

### GET NOTICED BY EMPLOYERS

*Source – Advance CTE*

**96%**

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



# Exposure leads to expansion

## 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**





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# KALAMAZOO RESA: CAREER CONNECT CAMPUS





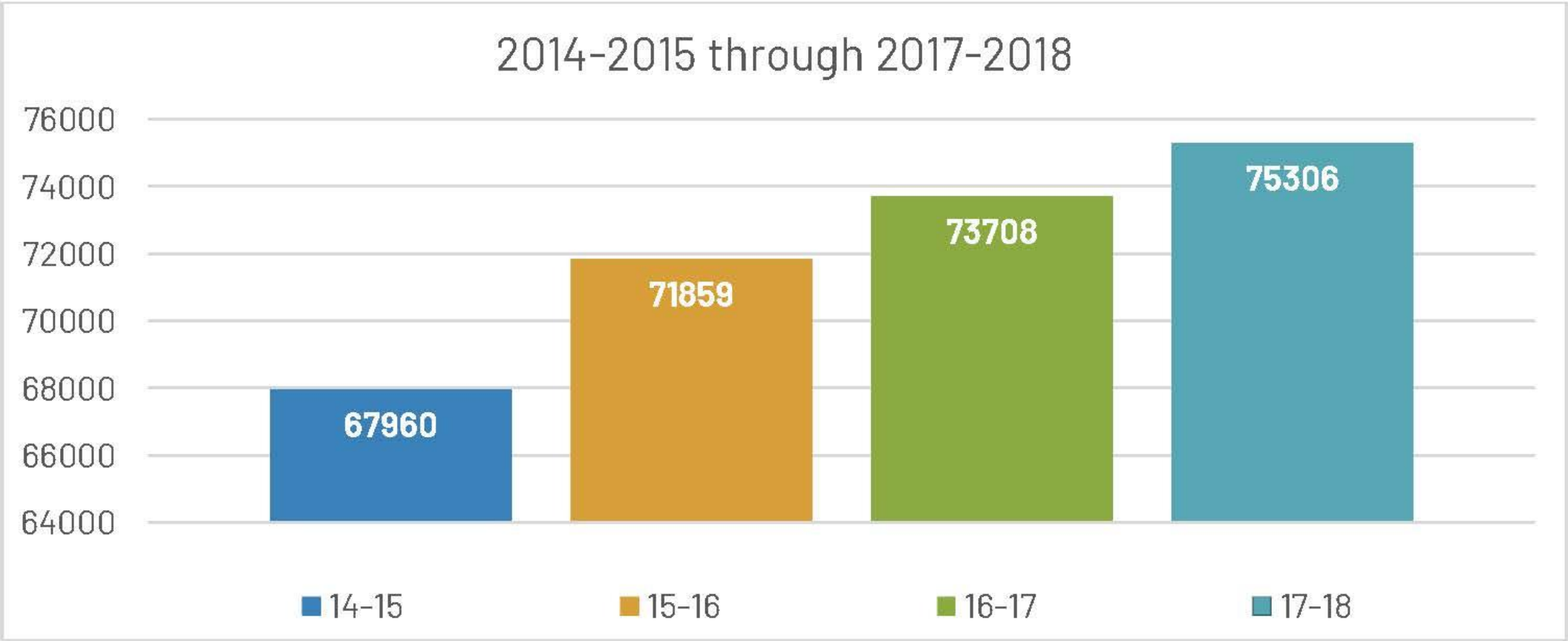


## KALAMAZOO RESA: CAREER CONNECT CAMPUS

**It all started with  
continuous improvement  
data.**

# Enrollment Trends | Statewide

## STATEWIDE CTE ENROLLMENT TREND

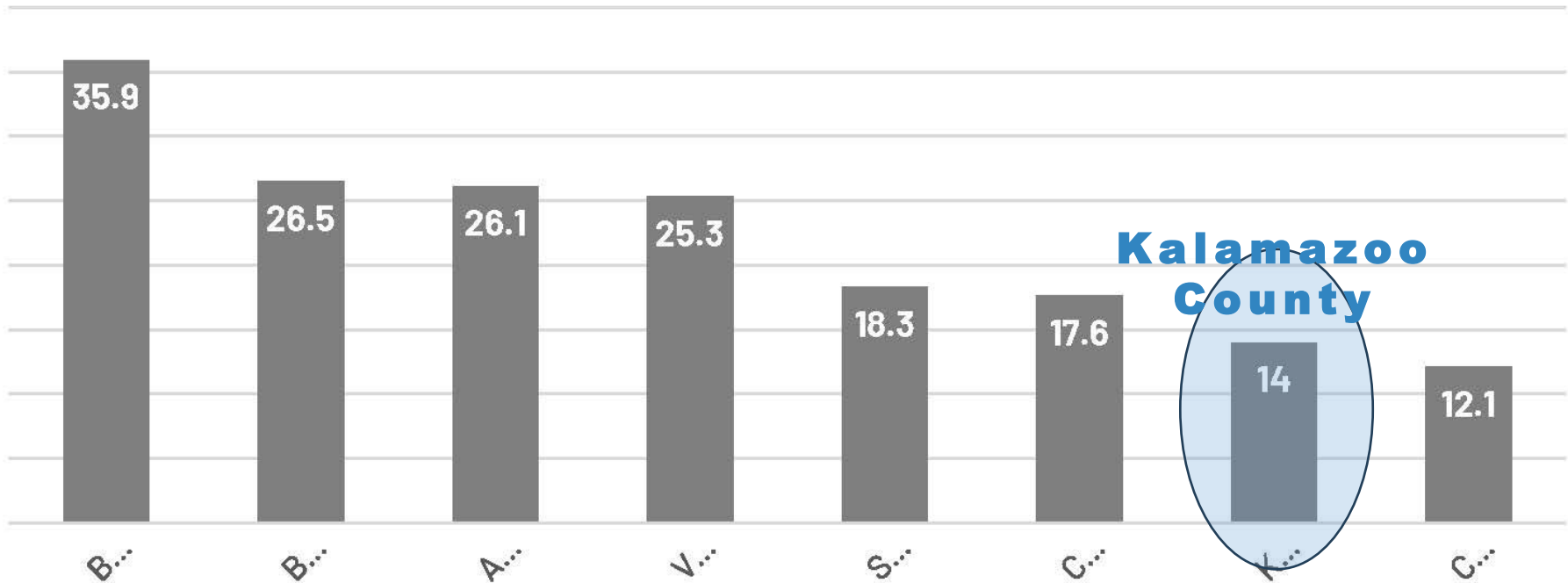




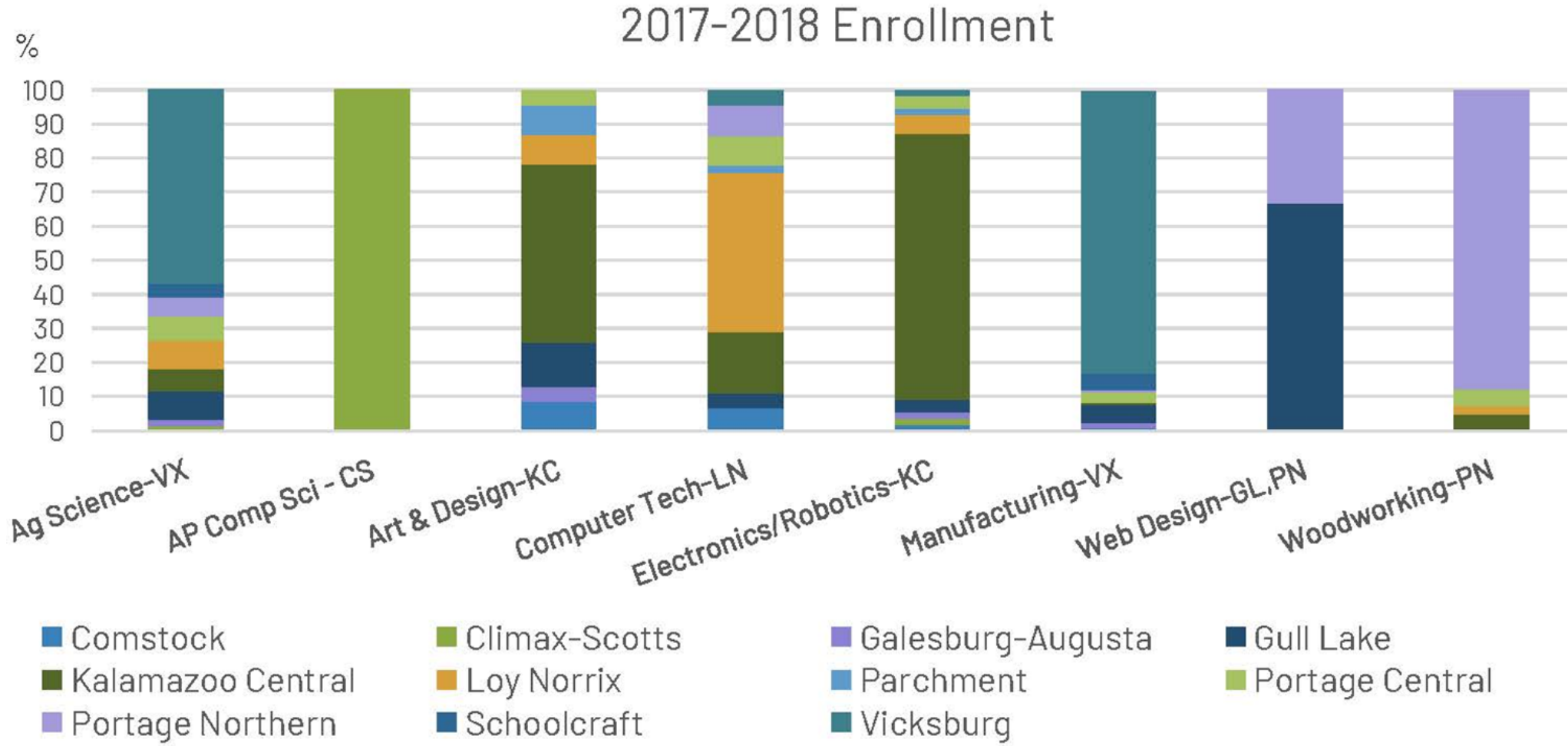
# Enrollment Trends | Participation Rate | Southwest Michigan

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

2017-2018



# Kalamazoo County: Enrollment Trend by High School



## KALAMAZOO RESA: CAREER CONNECT CAMPUS

The data pointed to challenges, so we got curious and dug a little deeper.



## KALAMAZOO RESA: CAREER CONNECT CAMPUS

**Why were we seeing lower enrollment in CTE compared to our peers in Michigan?**

**Why were we seeing “enrollment clusters” within high schools?**

# Because...

- Decentralized model with bulk of programs in local high schools
- Inefficient and complicated transportation system
- Lacking countywide career awareness and exploration strategy
- Arms-length relationship to instructional quality and student experience - teachers employed by local schools or training partners with programs administered by KRESA
- Lacking a unified / aspirational vision

BUT....

Serving a community with energy, commitment, and resources to redefine CTE in Kalamazoo County

## KALAMAZOO RESA: CAREER CONNECT CAMPUS

# The big question...

How do we achieve world-class Career and Technical Education (CTE) in Kalamazoo County?



## KALAMAZOO RESA: CAREER CONNECT CAMPUS

# ...led to more questions:

- How can we make CTE more equitable, accessible and welcoming for all kids?
- How can we create a robust and well coordinated system of career development focused on four areas:
  1. Self-Awareness
  2. Option Awareness
  3. Skill Development
  4. Career Pathway Planning
- How can we engage and activate an ecosystem of industry, education and community in this work?
- How can we provide what business and industry need from us in terms of skills, credentials, and numbers?
- How can we attract and retain highly effective staff?
- How can we create a state-of-the-art home for our programs?
- How can we reshape narratives around CTE and specific occupations?
- How do we “build the plane while we are flying it”?

## KALAMAZOO RESA: CAREER CONNECT CAMPUS

**These questions became  
our strategic imperatives,  
shaped in partnership with  
key stakeholder groups.**

# Starting With The Why



1 

requires a Master's degree or more



2  

require a Bachelor's degree



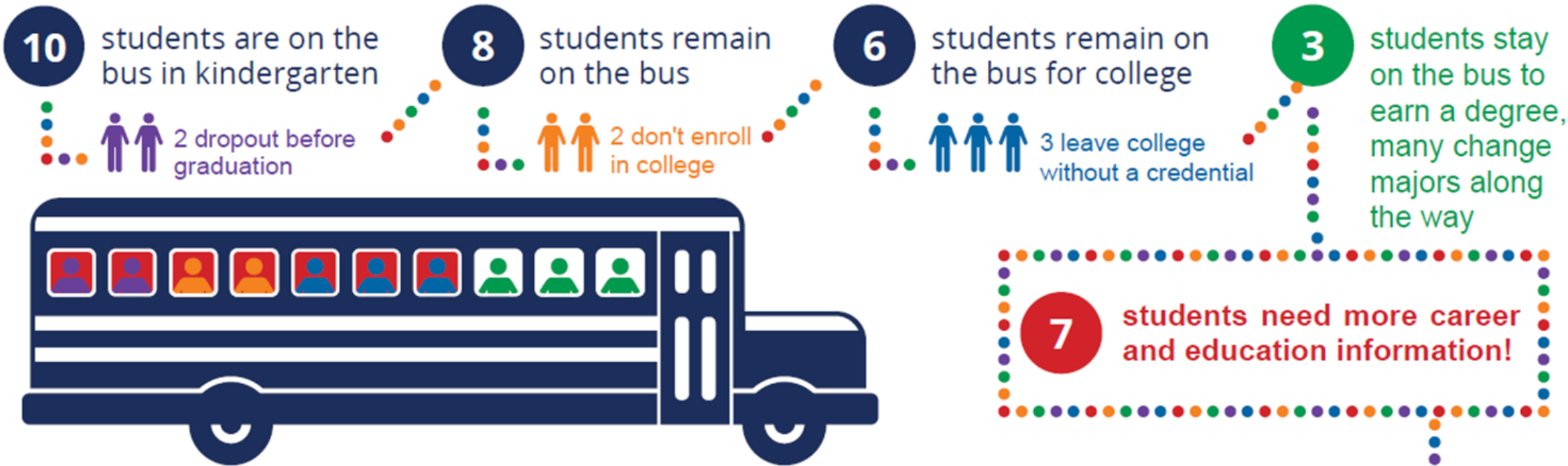
7       

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



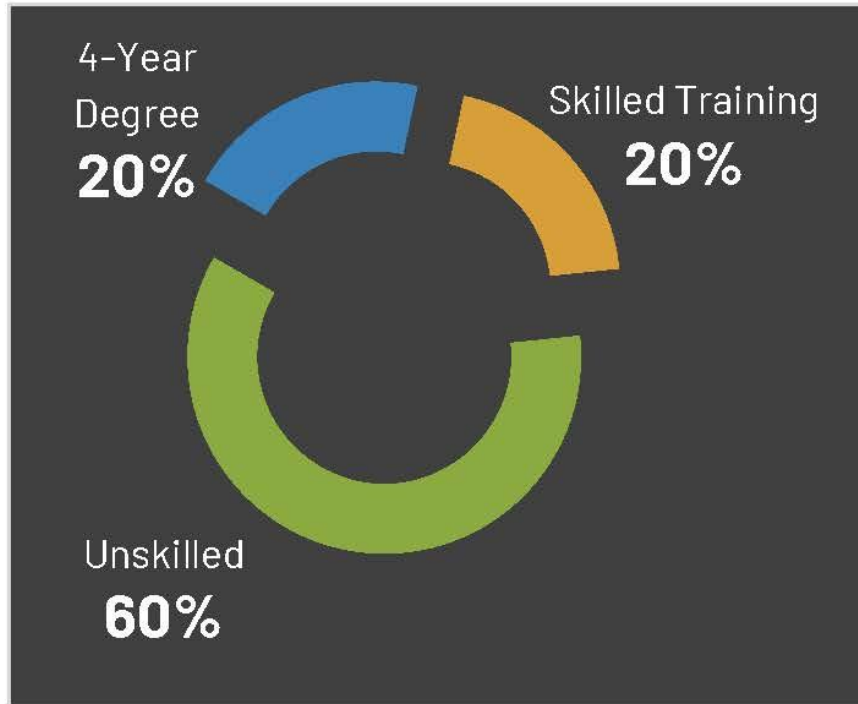
# Starting With The Why

Students must know what they *CAN* be before they must choose a career!



Let us help you change this statistic to ensure all students are successful!

## A Changing Economy



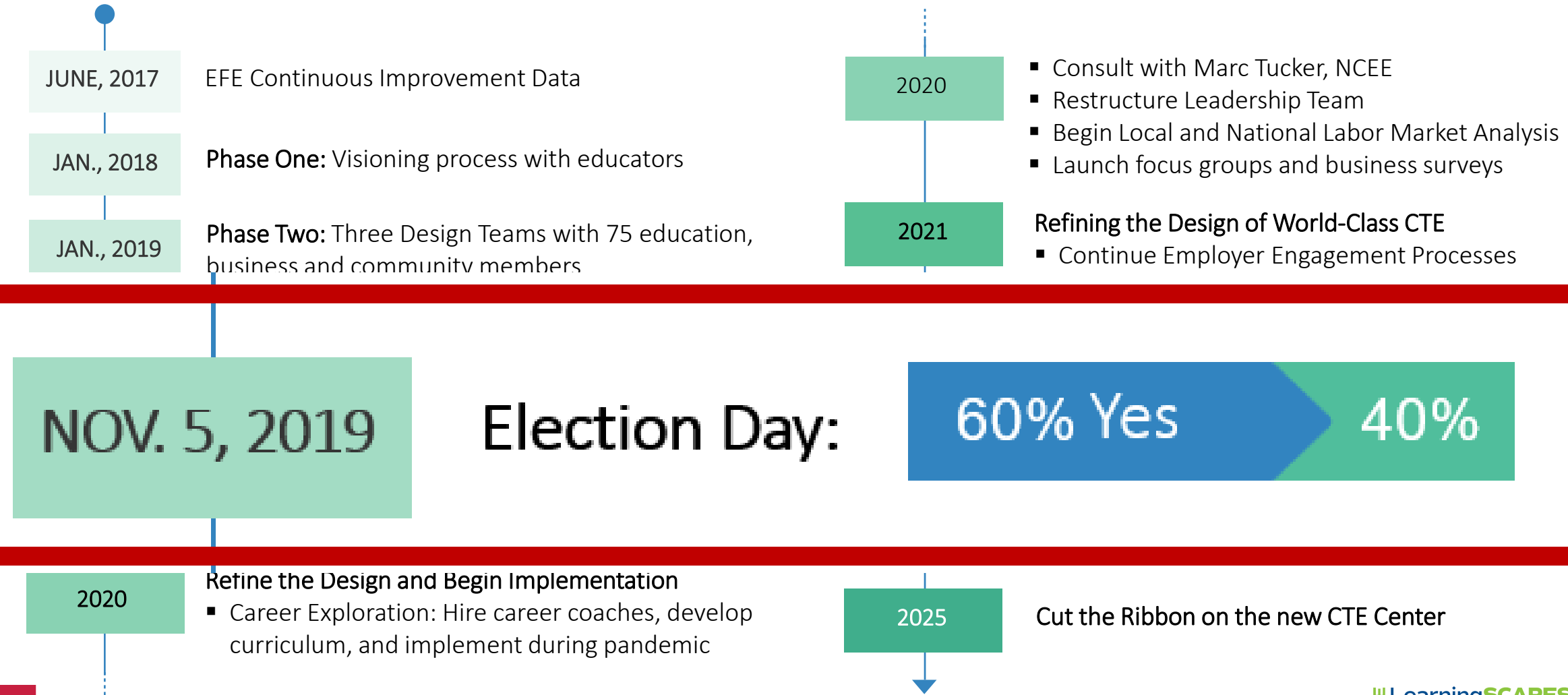
**1960 JOBS**



**2018 JOBS**

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

# Our Timeline





# KALAMAZOO CAREER CONNECT RESA - VISION



**"There are no new ideas  
under the sun, just better  
execution."**

## Our Commitment to the Community

KRESA is committed to offering CTE programs that:





# KALAMAZOO CAREER CONNECT RESA - VISION



# Career Connect

## Vision

Career Connect envisions our community transformed by empowered learners building fulfilling careers.

## Mission

Career Connect provides learners with transformative experiences, skills, relationships, and resources needed to support lifelong career development.

## Aligning Career Center Pathways to the Regional Economy

### National Labor Study

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

**Partner:** **University of Michigan**

### Labor Market Analysis

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

**Partner:** **Upjohn Institute for Employment Research**

### Employer Survey

**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**

### Employer Focus Groups

**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

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



**COLLABORATION**



**COMMUNICATION**



**CRITICAL THINKING**



**PERSONAL MANAGEMENT**



**PROBLEM SOLVING**



## Building Communities: Envisioning a Home for the Work

1. Craft a strategy to **engage multiple diverse communities** for a common goal and create a home for experiential learning opportunities for all learners leading to well-paying, in-demand jobs in our County
2. **Lead a diverse cross-section of stakeholders in a community engagement process**, including education, government, business, non-profit, and spiritual entities, and develop consensus.



## 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**





# New Career Center | Community Engagement







# New Career Center | Community Engagement





## SMALL GROUP PHOTOSORT – BUILD EMPATHY

Which images **resonate** with you from the toured facilities?

- Intentional and inspirational branding
- Outdoor learning spaces
- Real-world working environment
- Natural lighting
- Flexible spaces
- Wow! Factor
- Open/ Visible spaces
- Modern & Warm (wood) material
- Purposeful placement of overhead equipment
- Teacher consideration
- Conference space for public
- Multi-story layout

How are you going to **conquer the challenges** identified?

- Give students a voice
- “Never go dark”
- Hands-on problem-based learning
- Engage with industry partners
- Community Space
- Centralized common space
- Diversity training
- Ease of navigation and proximity
- Natural and organic collaboration
- Make the building **VISIBLE** and inviting to all
- Provide support services for learners



# DESIGN CHARRETTE- **BUILD EMPATHY**



KALAMAZOO RESA

**Career Connect Campus**

Explore | Engage | Experience



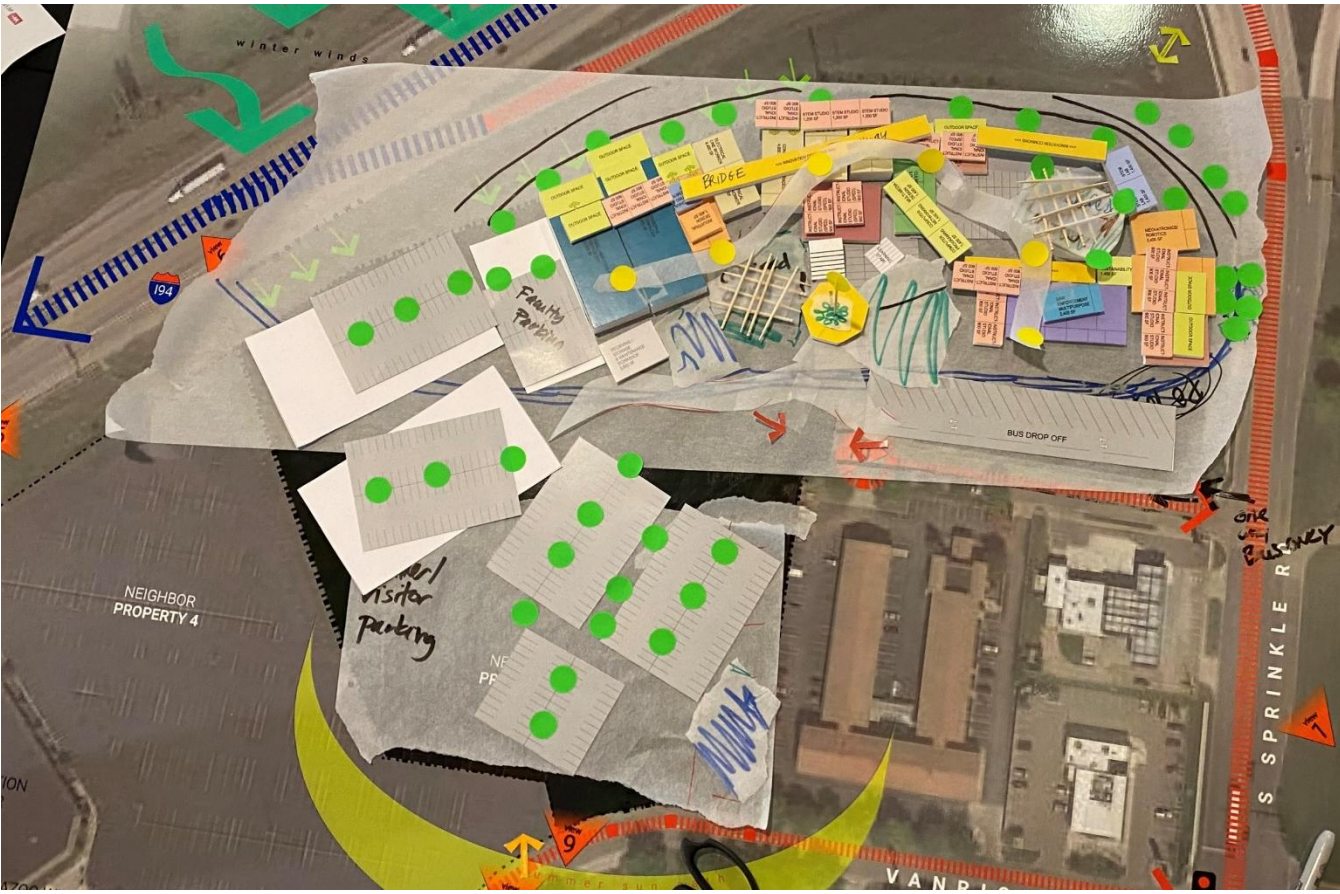
DELIGATING LEADERSHIP





## SUPPORTING LEADERSHIP





## Recommendation

The outcome of the visioning workshops and the design charrette, based upon voting of the entire group, is the recommendation of **Visioning Option No. 3, 'Discovery Trail,'** as the preferred option to further develop during conceptual design.

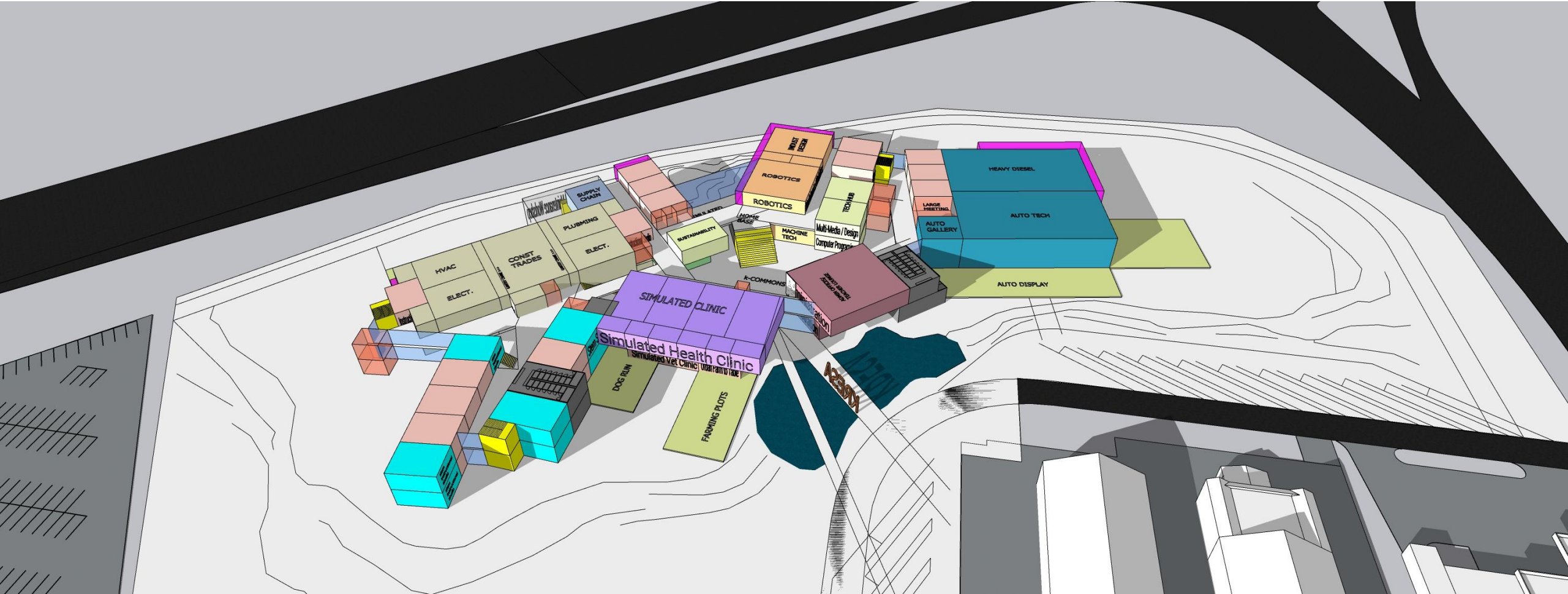
Vote Breakdown - Top 3 Tables	
Table #1	33 Points
Table #3	38 Points
Table #5	32 Points

DELEGATING LEADERSHIP

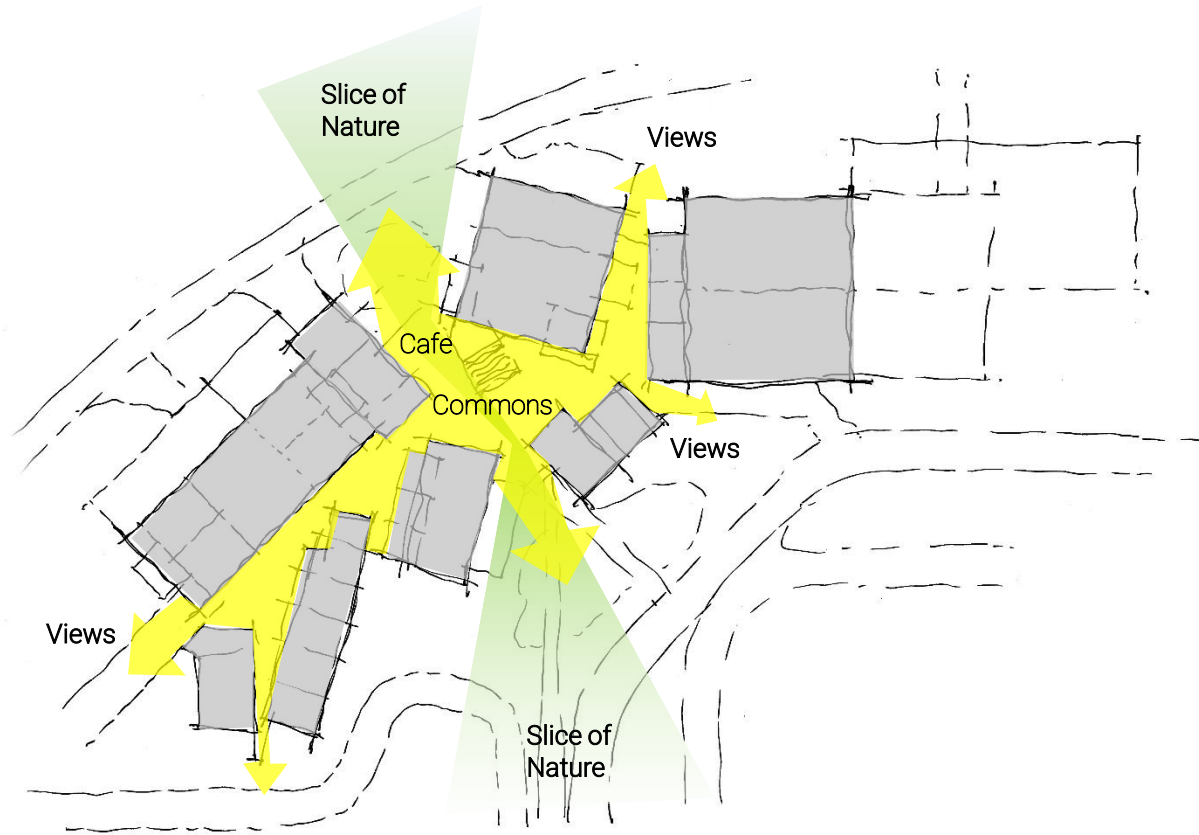




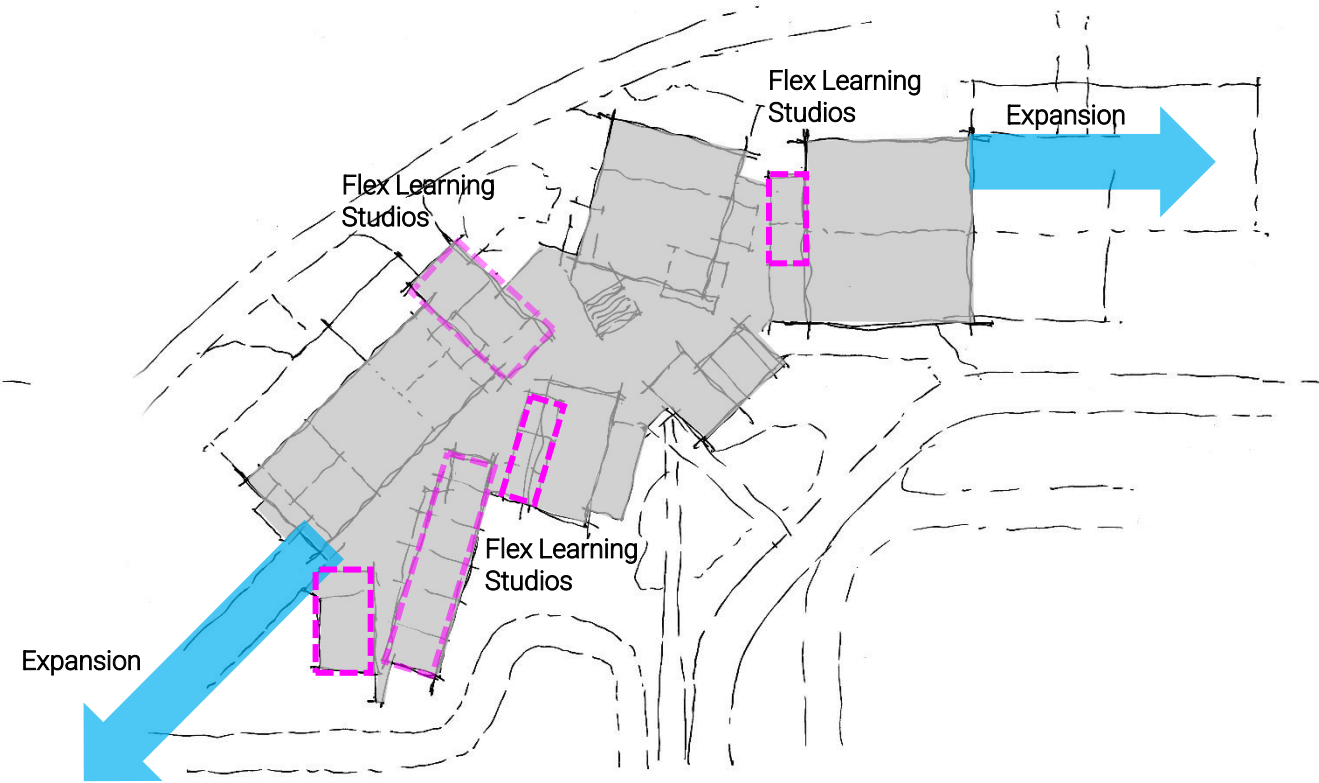
# New Career Center | Concept Design



# New Career Center | Concept Design



Commons



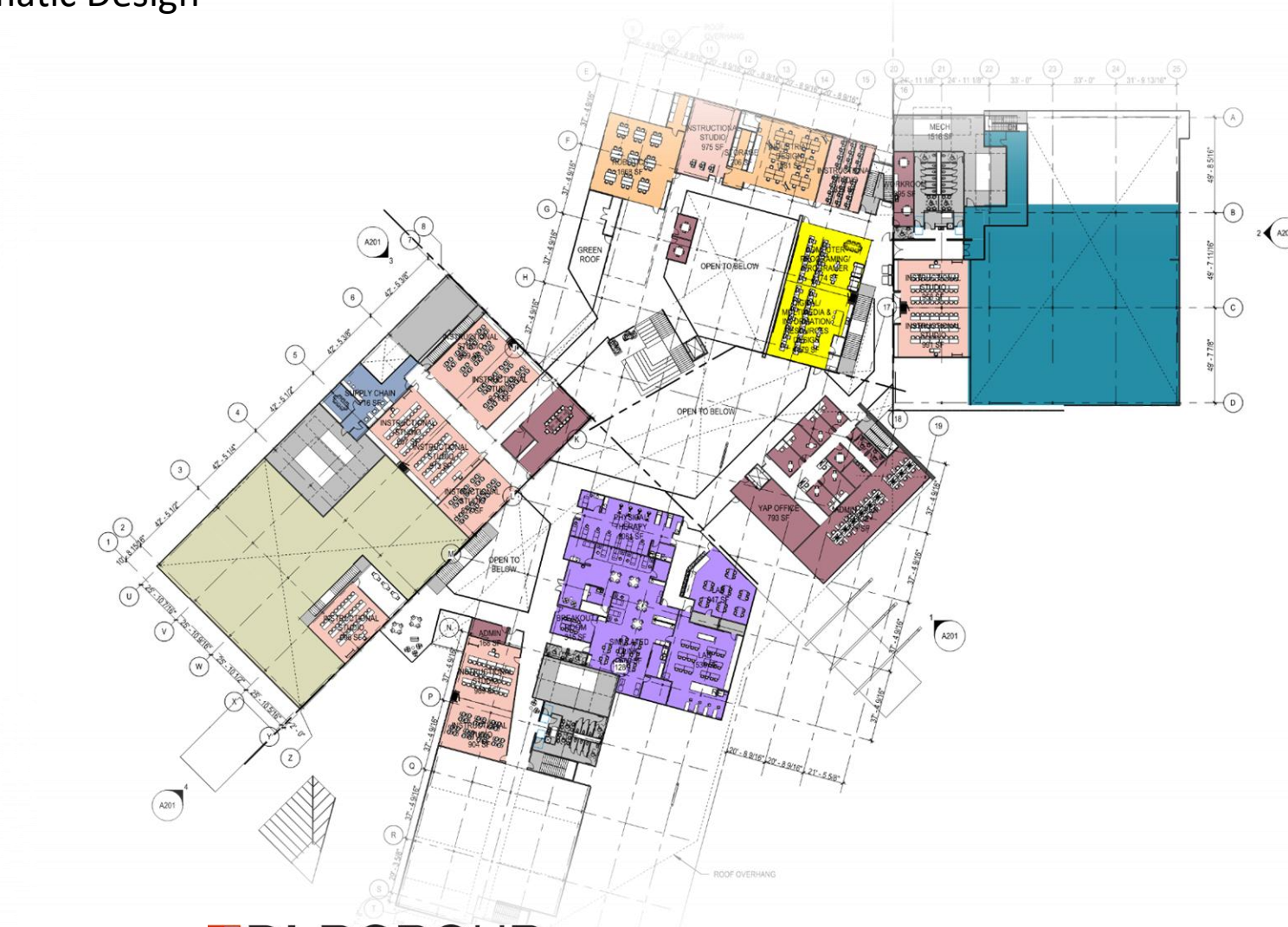
Future Proofing





# Learning Experience | Second Floor Plan

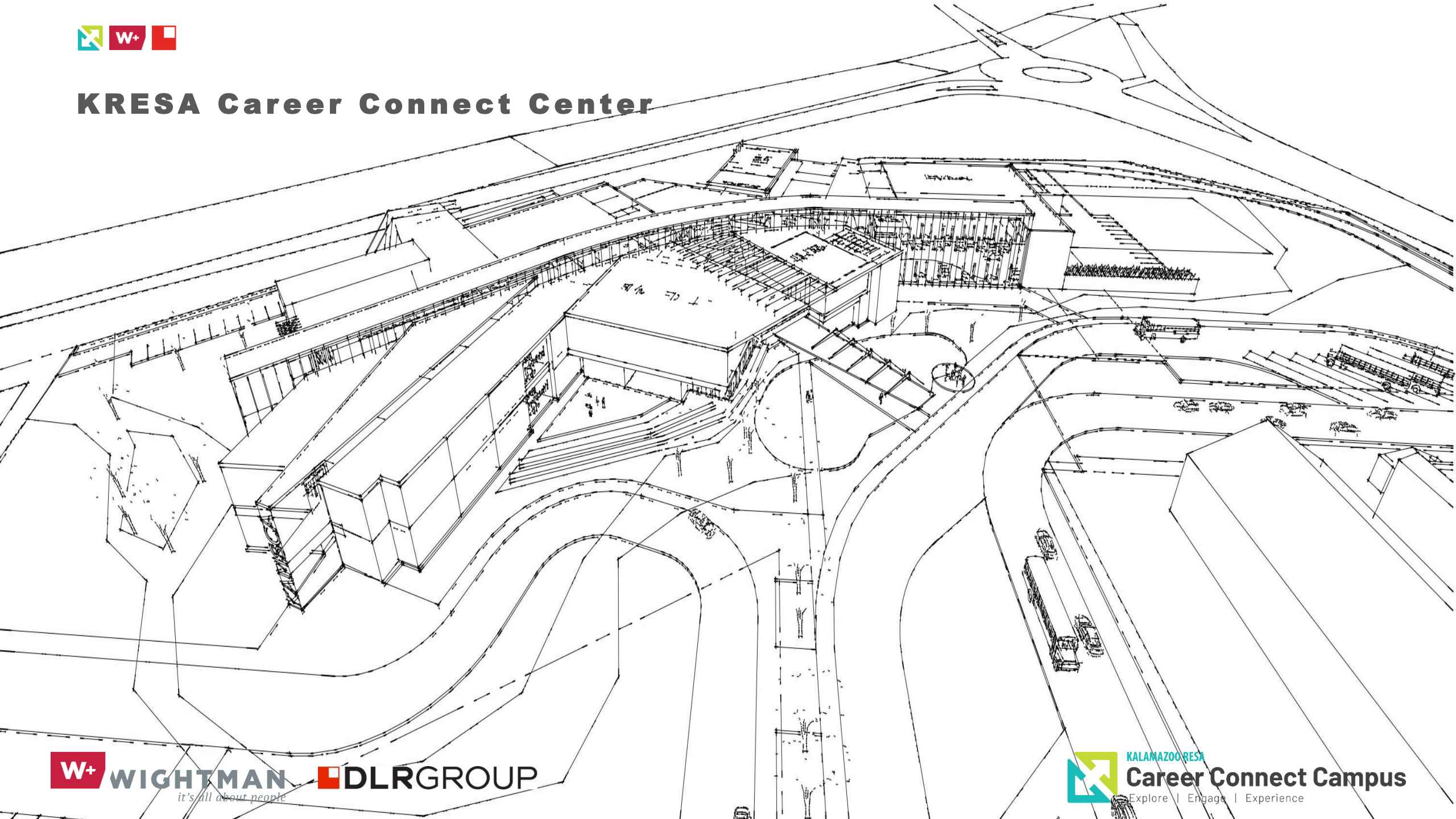
- Schematic Design





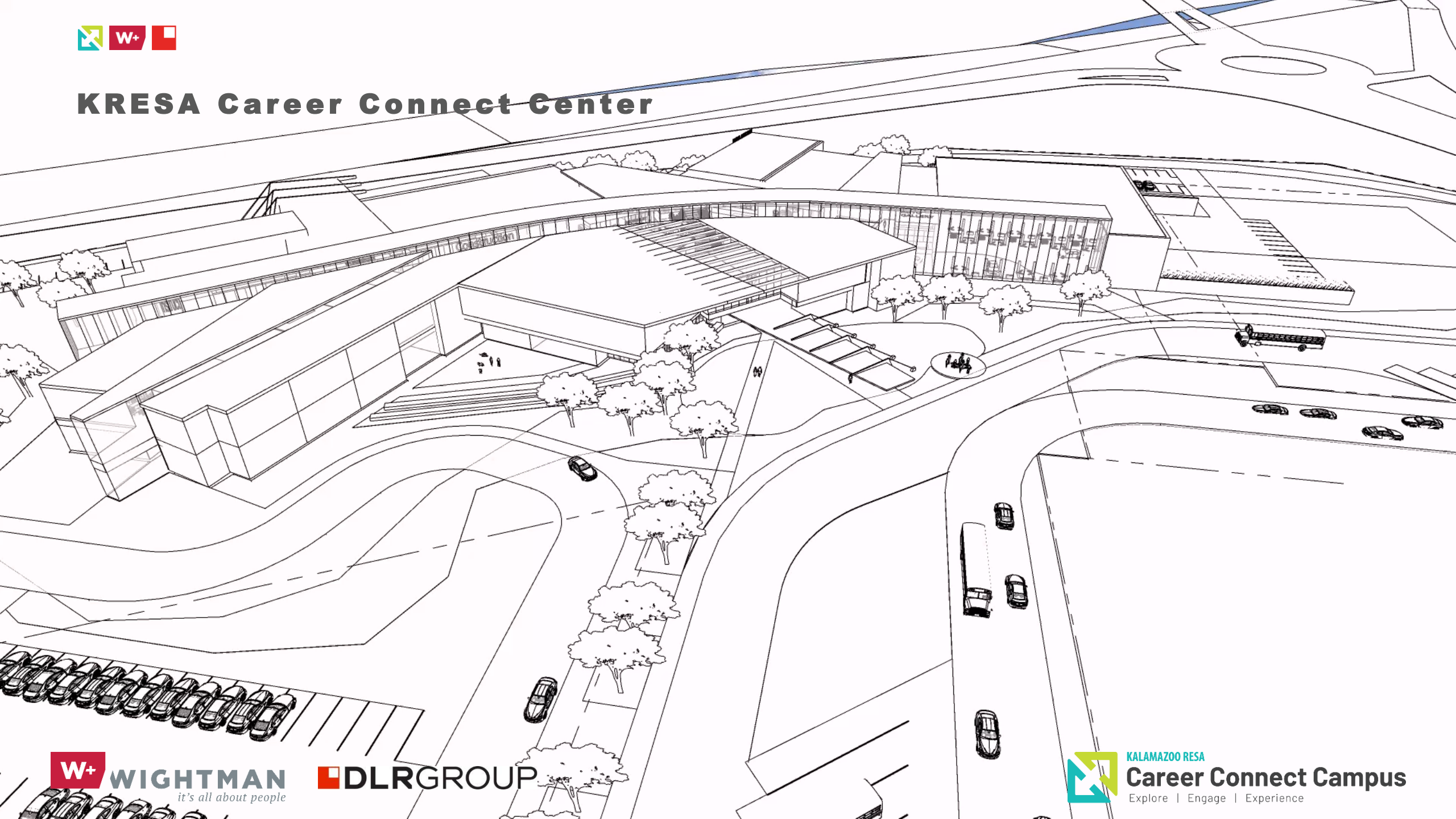


# KRESA Career Connect Center

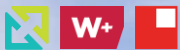




# KRESA Career Connect Center







# KRESA Career Connect Center



KALAMAZOO RESA

**Career Connect Campus**

Explore | Engage | Experience







# Groundbreaking



KALAMAZOO RESA

Career Connect Campus

Explore | Engage | Experience





# KRESA Construction Continues







# KRESA CCC Bridging to the Future



KALAMAZOO RESA

**Career Connect Campus**

Explore | Engage | Experience





## Understanding the Stigma of Vocational Education

### KELSEY JORDAN's Brother's 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 socially and emotionally, but never has to study for anything because it's all too easy, including Calc





## Understanding the Stigma of Vocational Education







# KRESA Opens, May 2025



KALAMAZOO RESA

## Career Connect Campus

Explore | Engage | Experience







## Questions & Answers



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[www.kresa.org/career-connect](http://www.kresa.org/career-connect)

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[www.gowightman.com](http://www.gowightman.com)



## ❑ Please scan or visit for more details

- [www.kresa.org/career-connect](http://www.kresa.org/career-connect)
- KRESA CTE Project
- Wightman Education Sector Page and Video



WIGHTMAN EDUCATION SECTOR



KRESA



KRESA CONCEPTUAL DESIGN BOOK



## Destigmatizing through Design: Designing for CTE

