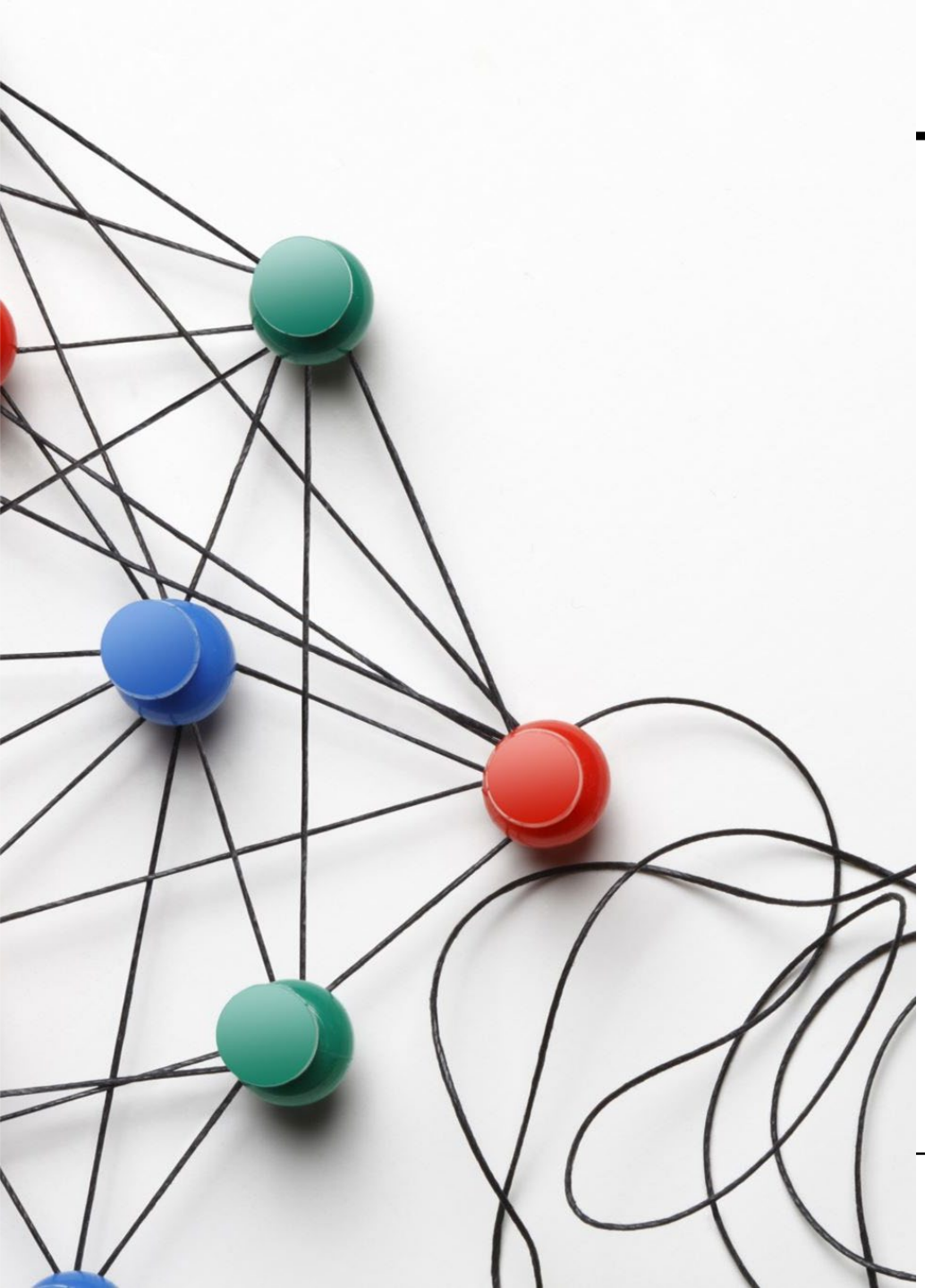

CONNECTING SECONDARY TO POSTSECONDARY THROUGH CAREER AND TECHNICAL EDUCATION PATHWAYS

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SESSION TOPICS

- **Arkansas**
  - LEARNS Executive Order and Legislation
  - Arkansas (AR) CTE Pathways Audit Report
  - Vision of a Success Ready AR Graduate
- **Florida**
  - Perkins V Funding.
  - Postsecondary CTE courses for Students with an Intellectual Disability.
  - Employment strategies to increase placement outcomes.
- **Secondary and Postsecondary Connected Pathway**
- **Reflection Activity**
- **Questions**

LEARNS Executive Order

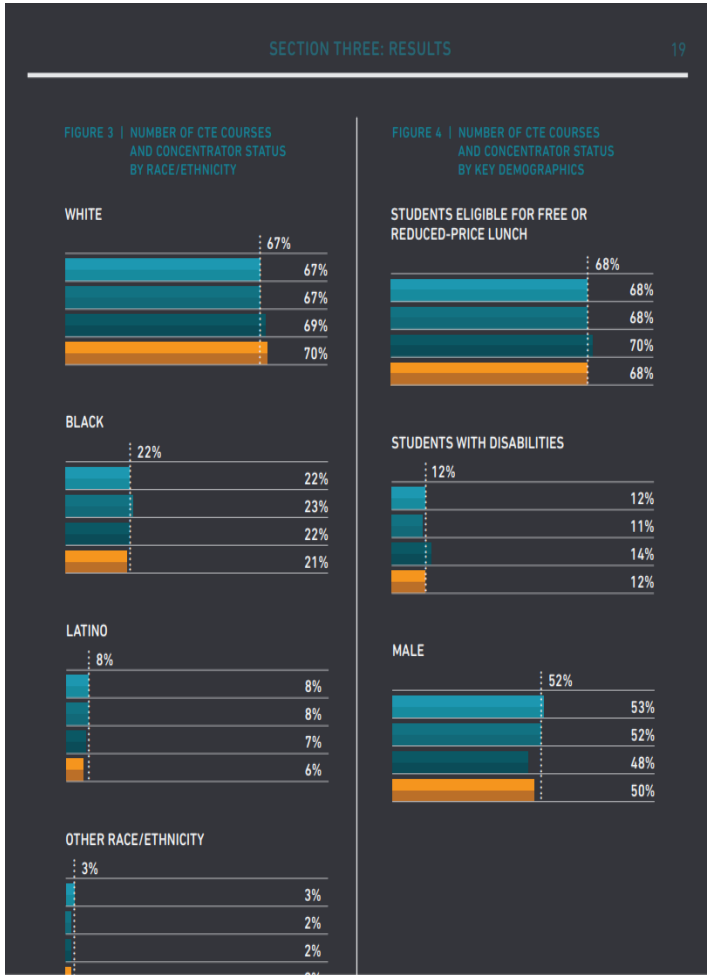
1.11.2023

Arkansas State Legislature Act 237

2023 Session

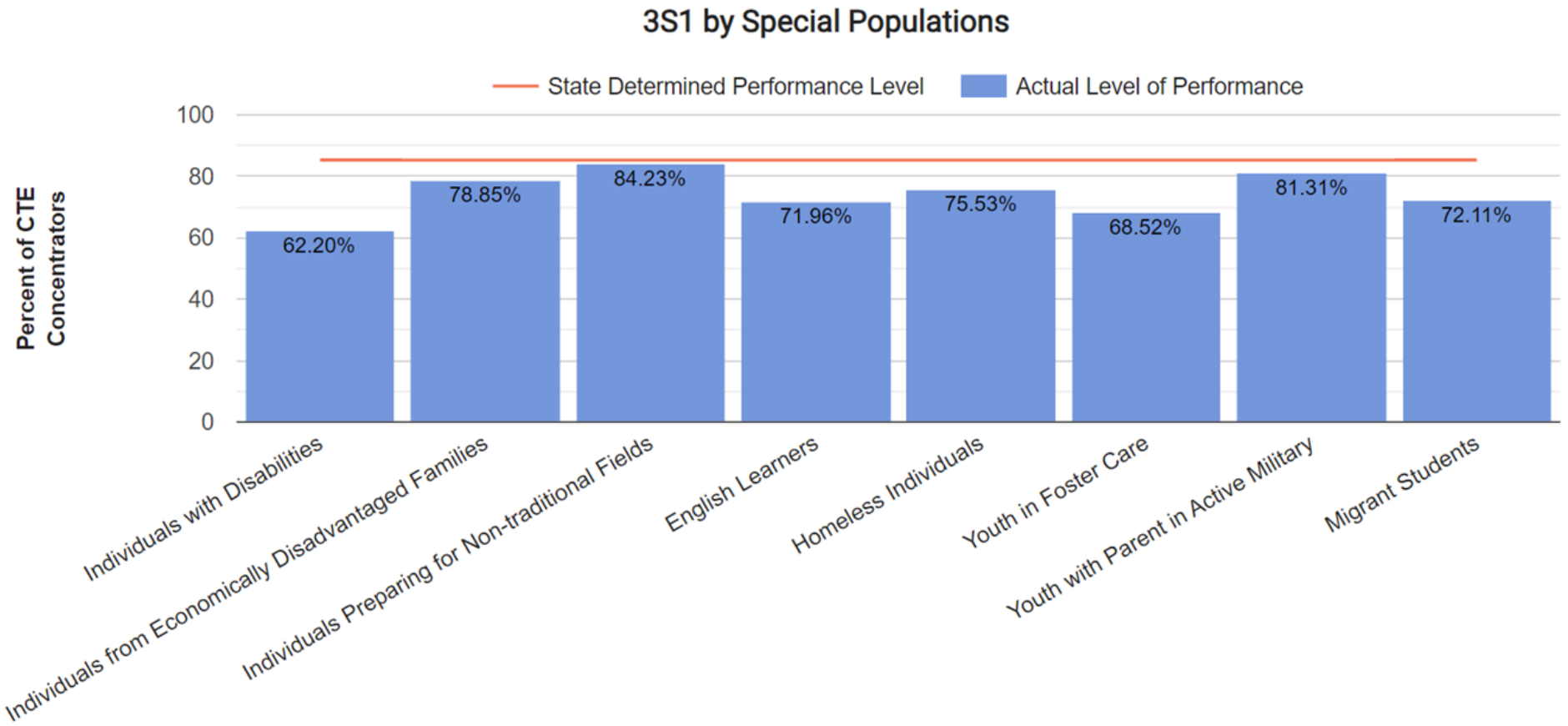
AR CTE Learners Data:
Course Enrollment v Concentrator Status

Students with disabilities make up about **12 percent of the high school population**, but are overrepresented (14 percent) among those taking seven or more CTE courses, suggesting there might be some directing of students with disabilities into more CTE coursework. Said another way, on average, a student with a disability takes half a class more in CTE than his or her peers without disabilities (Daugherty, 2016).



Dougherty, S. (2016).Career and technical education in high schools: Does it improve outcomes? Fordham Institute.

AR CTE Learners Perkins Outcomes: Postsecondary Placement Rates



*Some secondary indicators are not applicable for all states or data were not available for these indicators

L E A R N S

READINESS

Roughly six in 10 jobs in Arkansas require advanced credentials beyond a high school diploma, but less than half of the state's workers meet these requirements.

Every Arkansas student deserves opportunities to graduate on a path toward prosperity.

LEARNS Executive Order

called for an annual audit of the state's career pathways.

- An analysis of the alignment of the programs, degrees and certificates, and industry-recognized credentials offered by Arkansas K-12, postsecondary, and workforce institutions;
- An analysis of the alignment of these programs, degrees and certificates, and industry-recognized credentials with high-growth, high-demand, high-skill, and high-wage employment opportunities in Arkansas;
- An evaluation of the outcomes of individuals who participate in or receive these programs, degrees and certificates, and industry-recognized credentials such as academic achievement, college readiness, postsecondary enrollment and completion, attainment of degrees, certificates, credentials of value, and employment and wages; and
- An analysis of the return on investment of the programs, degrees and certificates, and industry-recognized credentials offered by Arkansas K-12, postsecondary, and workforce institutions.

Analysis of Arkansas's Career and Technical Education (CTE) Programs

Office for Education Policy
Department of Education Reform
University of Arkansas
and
Insightful Education Solutions
July 2023

Office for Education Policy

Insightful Education Solutions

Findings & Recommendations: CTE Program Quality

- **Finding:** CTE completers have low rates of early postsecondary credit and industry credential attainment and postsecondary matriculation, suggesting that too many CTE pathways are "dead ends" and do not articulate or transition seamlessly to postsecondary credential programs.
  - **Recommendation:** Ensure that every CTE program of study articulates to a postsecondary credential CTE program. All students enrolled in CTE programs of study should have access to early postsecondary credit offerings aligned to a postsecondary credential.
  - **Recommendation**: Establish statewide articulation agreements across 2-year and 4-year colleges and universities to ensure college credits earned in K–12 or at one institution transfer and count toward a degree at another. Include technical credit (CTE) and valued industry credentials under the agreements to help students earn a postsecondary credential more quickly.

Findings & Recommendations: CTE Program Alignment

- **Finding:** There is significant directional misalignment between the most completed programs of study and high demand, high skill, higher wage occupations or industry sectors.
  - **Recommendation:** Strengthen alignment between programs of study and H3 occupations. This may include making changes to existing programs of study, creating new programs of study to address gaps between labor market needs and offerings, or phasing out legacy programs that are not projected to grow or meet H3 occupation expectations.
  - **Recommendation:** Consider ways to support school and district transitions to higher value programs through financial incentives or grants. Incentives should be aligned with those programs of study that provide the greatest ROI for students, communities and state/regional economies.

L E A R N S

READINES

High Schoo Career-Ready Pathway t Diploma

The Division of Elementary and Secondary Education shall develop a career-ready pathway to a high school diploma in AR's high schools, which shall include:

- **Challenging academic courses**
- **Modern career and technical studies** aligned with high-wage, high-growth jobs in Arkansas (informed by annual audit)
- Provide a student with **credentials of value** in a desired high-wage, high-growth career and a strong academic core
- Be offered to each high school student

L E A R N S

- **Prepare students** to
  - Pursue either a degree or certification from:
    - An institution of higher education
    - An industry-based training or certification
    - An apprenticeship
    - Or the military
  - Immediately enter a career field; and
- Be primarily designed for students who are seeking **stackable credentials** to be successful in a career

READINES

High Schoo
Career-Ready
Pathway t
Diploma con

Vision of a Success Ready AR Graduate

LEARNS

Early Career Experiences Guide

Arkansas LEARNS requires students to incorporate career awareness and exploration activities (§ 6-16-1802) to expose them to academic, career, and technical fields of study. As students progress towards high school graduation, it is crucial to offer opportunities for career-connected learning that are tailored to student interests and involve hands-on experiences. This approach can give students a valuable head start in planning their academic and career paths. This progression for early career experiences is designed to guide districts and schools in facilitating age-appropriate activities that enable students to explore a wide range of career choices that resonate with student interests.

Elementary School → **Middle School** → **High School**

Career Awareness

Students become familiar with careers through learning that connects classroom instruction to future work. Career awareness strategies show students various types of careers and stimulate interest in future work.

Career Exploration

Students learn about themselves, including their interests, values, and personality types, and their career options. Students also begin to explore the world of work and begin to plan for their futures.

Career Preparation

Students learn how to be successful in their future career pathway, including deepening their understanding of how to be successful in the workplace. Students have more opportunities to learn through workplace experience.

Arkansas has additional requirements in place to support these career readiness experiences. For example, the School Counseling Rules outline requirements for direct counseling services including age-appropriate career planning for all students. Additionally, work-based learning opportunities allow high school students to participate in practical learning that aligns with their career goals. These requirements, in conjunction with the experiences outlined below, provide Arkansas students with a continuum of career readiness opportunities that will help guide them as they plan for their education and career goals.

LEARNS

By the end of 6th grade

A student should be supported to **explore their interests as it relates to careers.**

Activities MAY include:

- **Completing an interest inventory/ personality test** to determine likes, dislikes, strengths, and weaknesses and how that will affect choosing a career
- **Exploring career clusters** and categorizing related jobs into each career cluster
- **Identifying long- and short- term goals** needed to reach a potential career (e.g., academic goals, skill development)
- **Identifying careers in local regions** to build awareness of local in-demand fields
- **Describing 1-2 careers** related to interest inventory results to learn about a potential career path
- **Practicing career readiness skills**, such as communication skills, collaboration, and organization

By the end of 7th grade

A student should be supported to **research careers they are interested in**.

Activities MAY include:

- **Evaluating interests, strengths, and weaknesses** and examine how that will affect choosing a career
- **Evaluating appropriate work behavior** to learn about employability skills
- **Describing 1-2 Success Ready Pathway options** available upon entering high school
- **Deciding on a math pathway** for acceleration
- **Attending a career fair** to explore various careers represented by working professionals
- **Engaging in career planning strategies**, such as researching education and training requirements for careers of interest
- **Attending a career discussion** related to their career of interest (i.e., at an employer panel or career fair)
- **Exploring local community service** experiences
- **Completing a career awareness course**
- **Exploring available career and technical student organization (CTSOs) opportunities**

By the end of 8th grade

A student should be supported to **understand the relationship between school and future career options**.

Activities MAY include:

- **Reviewing graduation requirements** for high school and developing short- and long-term goals to meet those requirements
- **Researching postsecondary options** that will prepare them for stated career goals
- **Exploring the relationship between community service/extracurricular activities and postsecondary/career goals**
- **Creating a Student Success Plan** that is tied to an updated career interest inventory
- **Choosing high school courses** that align with their chosen pathway
- **Practicing employability preparation strategies**, such as creating a resume
- **Speaking with an adult** employed in a career they are interested in
- **Participate in a job shadowing experience**
- **Completing a career awareness course**
- **Participating in community service** to increase civic engagement and enhance their personal growth
- **Exploring available career and technical student organization (CTSOs) opportunities**

CTE Summer Camp

Hands on Experiences	Exploration	Connections
Nursing: proper handwashing techniques & CPR **Welding:** Proper equipment handling, techniques of welding, & cutting metal **Automotive Service Technology:** Simulated oil change, tire change, and learning how to wire **Construction:** Proper equipment handling, techniques of construction, BUILDING a birdhouse **Robotics:** components of a robot, how to build a robot **Dental:** Proper equipment handling, daily, proper cleaning of the teeth	• **Morning**: Hands on exploration in CTE areas **Afternoon**: Classroom & other activities • Students did career exploration through web based programs • Students participated in a self-determination workshop *(self determination Inventory + College & Career Readiness 4 transition (CCR4T)* • Students did career exploration activities • Student learned about work-based learning opportunities	• **Presentation:** Professionals working in the industry • **Campus Tour:** Arkansas State University - Three Rivers • **Fun Activities:** Competitions & graduation ceremony at end of camp • Connecting with the students throughout the school year • Prioritizing students for CTE Pathways • Workforce Services & Mobile Unit

By the end of 9th/10th grade

A student should be supported to start **exploring real-life aspects of their careers of interest.**

Activities MAY include:

- **Assessing personality and interests** in relation to finding a satisfying and rewarding career.
- **Analyzing qualities and obstacles that can lead to educational and career success**, such as work ethic, responsibility, and success.
- **Exploring different components of the labor market data** to understand how they relate to one's career prospects
- **Reviewing and evaluating student success plans** with chosen career pathways.
- **Practicing essential/soft skills necessary for career success**, such as teamwork, time management, leadership qualities, etc.
- **Researching the income potential of careers of interest**, including short- and long-term salaries
- **Completing and maintaining a resume** that documents their academic, work, and extracurricular achievements
- **Exploring available career and technical student organization (CTSOs) opportunities**
- **Setting short-, medium-, and long-term goals** to achieve their career goals
- **Establish connections with 2-3 adults** who work in interested career fields.
- **Participating in a job-shadowing experience**
- **Participating in community service** to increase civic engagement and enhance their personal growth

➤

By the end of 11th/12 grade

A student should be supported to start **planning and preparing for careers they are interested in.**

Activities MAY include:

- **Exploring the connection between classroom and workplace** to help student recognize applicability of skills gained during high school
- **Examining labor market information for careers of interest** to analyze related economic and workforce trends
- **Practicing essential/soft skills necessary for career success**, such as teamwork, time management, leadership qualities, etc.
- **Reviewing and evaluating student success plans** with chosen career pathways.
- **Researching the postsecondary training requirements** for careers of interests
- **Applying to postsecondary institutions with programs** that provide training for careers of interests
- **Research financial aid options** to explore cost and affordability of desired postsecondary options
- **Establish connections with 2-3 adults** who work in interested career fields.
- **Completing an informational interview** with a professional working in a career of interest
- **Exploring available career and technical student organization (CTSOs) opportunities**
- **Complete a work-based learning experience**, such as a Career Practicum, Pre-Apprenticeship, or Internship
- **Participating in community service** to increase civic engagement and enhance their personal growth

Success-Ready Graduates

GRADUATION REQUIREMENTS FOR ALL STUDENTS

STUDENT SUCCESS PLANS

ACADEMIC CORE COURSES

PURPOSEFUL COURSES IN A SUCCESS READY PATHWAY

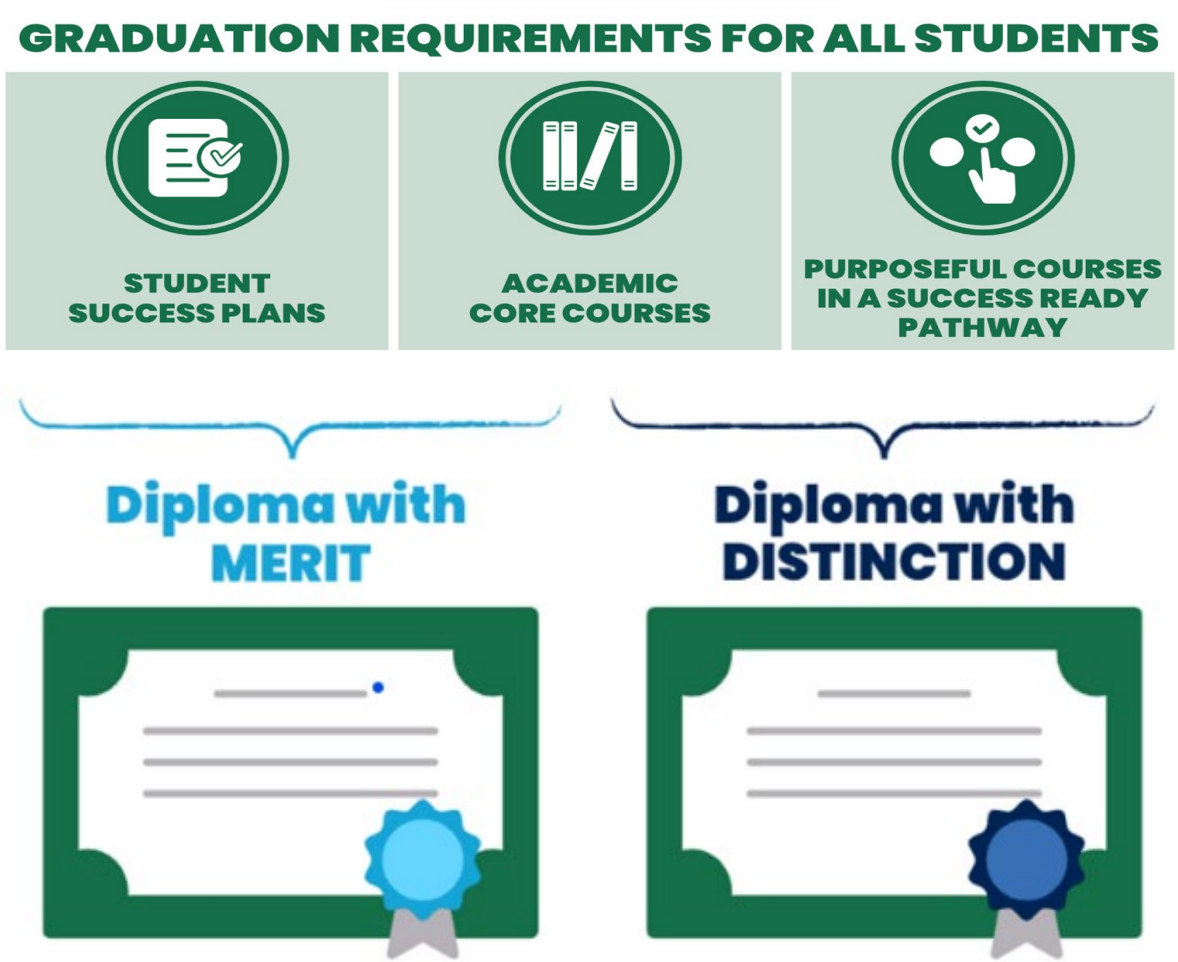
Enrollment

Enlistment

Employment

Merit and Distinction

- Provides an extra level of demonstration that aligns with student post-secondary goals.
- Recognizes students who go above and beyond graduation requirement
- Recognizes school systems that are intentional in providing pathways thc lead to student post-secondary success.



Success-Ready Pathways

- Accounting
- Advanced Manufacturing
- Advanced Placement (AP) (Scholar, Scholar w/ Honor, Scholar w/Distinction, or Capstone Diploma)
- Agriculture Power, Structural and Technical Systems
- Animal Systems
- Automotive Service Technology
- Banking
- Business Finance
- Cambridge AICE Diploma
- Computer Science - Networking
- Computer Science - Programming
- Construction
- Criminal Justice
- General Bachelor's Degree Preparation
- International Baccalaureate (IB) Diploma
- Management
- Nursing Services
- Plant Systems
- Pre-Educator
- Pre-Engineering
- Retail Management
- Welding
- World Language

Merit

1. **Complete Success-Ready Pathway**
2. **Demonstrate Readiness via one of the following:**

- Identified High Wage, High Demand Industry-Recognized Credential
- 12 or more postsecondary credits that include either
  - a Certificate of Proficiency OR
  - 9 Postsecondary Credits of academic core
- AP Scholar
- AP Scholar with Honor
- Seal of Biliteracy - Can stand alone

Distinction

1. Complete Success-Ready Pathway

2. Demonstrate Readiness via one of the following:

- Technical Certificate or higher (Associates)
- AICE diploma
- IB diploma
- AP Scholar with Distinction
- AP Capstone Diploma
- Youth Apprenticeship leading to Registered Apprenticeship

Success-Ready Pathway Guide

Agriculture, Food & Natural Resources

Agriculture, Food & Natural Resources						
Pathway	Early Career Experiences	Level 1	Level 2	Level 3	Merit Demonstration	Distinction Demonstration
Agriculture Power, Structural & Technical Systems ●	Intro to World Agriculture Science (399030)	Survey of Ag Systems (491150)	Agricultural Mechanics (491390)	Agricultural Metals (491380) **-or-** Agricultural Structures (491410) **-or-** Advanced Agricultural Mechanics (490810) **-or-** CASE Ag, Power, & Technical (491630)● ▯	Industry-Recognized Credential **-OR-** 12 Postsecondary Credits: • Certificate of Proficiency **OR** • 9 Postsecondary Credits of Academic Core	Technical Certificate or Higher **-OR-** Youth Apprenticeship
Animal Systems ●	Intro to World Agriculture Science (399030)	Survey of Ag Systems (491150)	Animal Science (491180) **-or-** CASE Animal Science (491160)● ▯	Advanced Animal Science (491010) **-or-** Poultry Science (491440) **-or-** Veterinary Science (491460) **-or-** CASE Biotechnology (491490)▯	Industry-Recognized Credential **-OR-** 12 Postsecondary Credits: • Certificate of Proficiency **OR** • 9 Postsecondary Credits of Academic Core	Technical Certificate or Higher **-OR-** Youth Apprenticeship

● Career and Technical Education (CTE) Program of Study
✪ Non-CTE H2 Pathway Eligible for State Merit or Distinction
● CTE course that satisfies a general education graduation requirement (see graduation course code list)
▯ Course counts as a weighted credit

What We Know

- The Higher Education Opportunity Act (HEOA, 2008) established comprehensive transition and postsecondary(CTP) programs to support students with intellectual disabilities participation in inclusive postsecondary programs that offer a meaningful credential leading to employment.
- Inclusive postsecondary education has changed dramatically in the past decade. Program availability has increased by 87% since 2009 (Grigal et al., 2021).
- There is underrepresentation of career and technical education focused programs (Grigal et al., 2021).

Perkins V

- Signed into law on July 31, 2018.
- Primary federal investment in CTE at the postsecondary level.
- Funds may be used for creating new programs of study (CTPs).
- Under Perkins, states are required to disaggregate data by special populations.
- Stipulates that districts can use Perkins funds to provide accommodations.

Florida Center for Students with Unique Abilities

UNIVERSITY OF CENTRAL FLORIDA

Popular CTE Courses for Students with Disabilities

Culinary Arts

Digital Design

Automotive Service Technician

Cosmetology

Early Childhood

Why Does CTE Work So Well for Students with ID?

- Hands-on learning environments.
- Short lectures, longer labs
- Multiple points of exit.
- Multiple points of entry.

Why are CTE courses the perfect fit for students with ID? Cont.

CTE accreditation relies upon the things

we value for students with ID: Completion,

Placement, and Licensure.

UCF | Florida Center for Students with Unique Abilities
UNIVERSITY OF CENTRAL FLORIDA

Strategies to Support Students with ID

- In-depth admissions and evaluations
- Peer mentors
- Accommodations via 504 plan
- Universal Design for Learning
- Tutoring
- Micro-Credentials
- Push-in support
- Study guides and exam review sessions

Florida Center for Students with Unique Abilities
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Total Credentials Earned

97
Concentrations

111
Micro-credentials/ badges

217
Industry Certifications

Credentials Earned by Students with Disabilities

Universities	Professional Services	Corporate Communication	Community Employment	Postsecondary Certificate of Professional Readiness
State Colleges	Chef Apprentice	Horticulture Agriculture Pathway	Digital Media Video Production	Office Support Specialist
Career Technical Colleges	Professional Culinary Arts and Hospitality	Digital Design	Nail Specialty	Automotive Collision Technology Technician

Popular MicroCredentials for Students with Disabilities:

WORKPLACE READINESS

INDEPENDENT LIVING SKILLS

DIGITAL LITERACY

SELF-ADVOCACY

ASSISTIVE TECHNOLOGY PROFICIENCY

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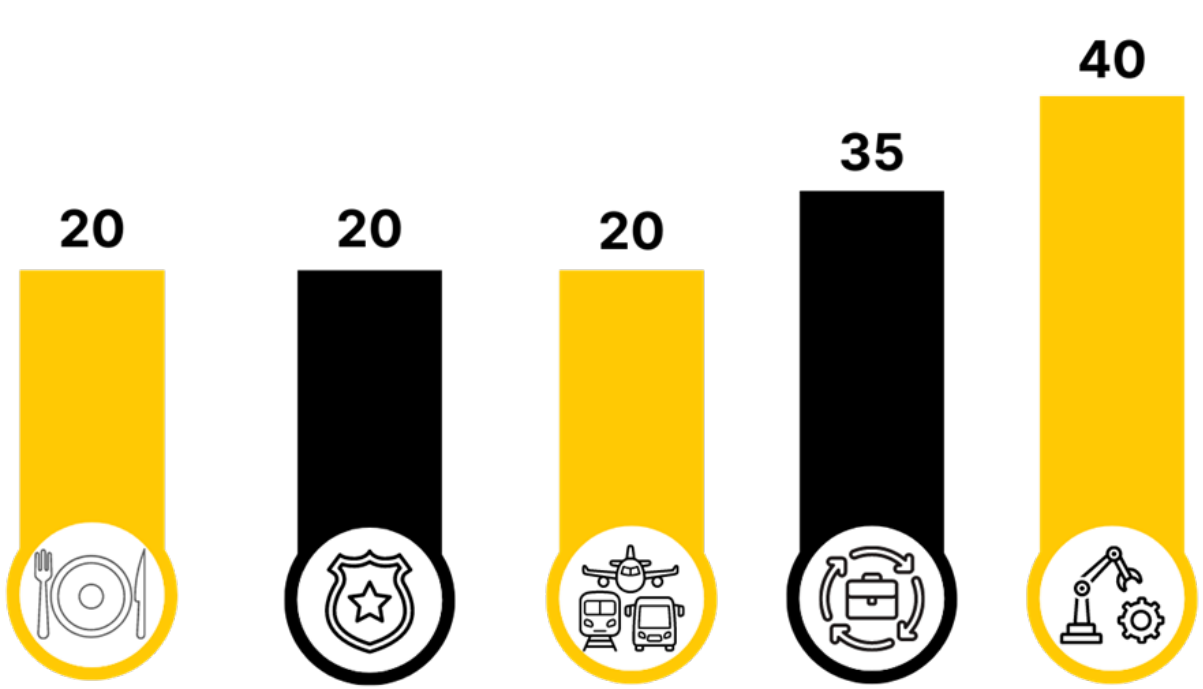
UNIVERSITY OF CENTRAL FLORIDA

Getting From Graduation to Employment

- Internships
- Boots on the ground
- Keep it close to home
- Mom and Pops are your friends
- Federal incentives
- Pluck the Pathos

Florida Center for Students with Unique Abilities
UNIVERSITY OF CENTRAL FLORIDA

Median Hours per Week: Top Five Career Clusters



- Manufacturing
- Business Management & Administration
- Transportation, Distribution & Logistics
- Law, Public Safety, & Security
- Hospitality & Tourism

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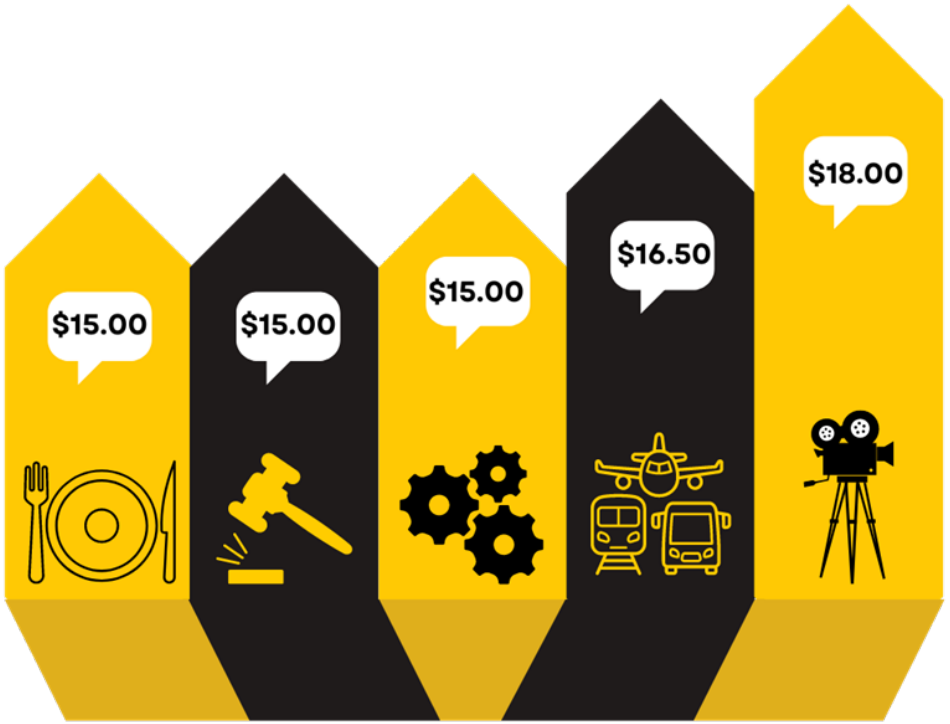
Hourly Salary:
Top Five Career Clusters



- Arts, A/V Technology and Communication
- Transportation, Distribution & Logistics
- Manufacturing
- Law, public safety, and security
- Hospitality & Tourism

But what if the student doesn't want to work full-time??!!??!!

- Easy, find another student who is also limited to part-time and give the employer a 2-for-1.
  - This saves the employer money on benefits and gives them two great employees for less than it would cost to hire one full-time employee.

Reflection Activity

Question

Presenters' Contact Information

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