

# Equitable Access to Career & Technical Education Programs

2019 Equity Conference

September 2019



**Chandrea Walker, Office Director II**  
**Office of Career & Technical Education**

## VISION

---

To create a world-class educational system that gives students the knowledge and skills to be successful in college and the workforce, and to flourish as parents and citizens

## MISSION

---

To provide leadership through the development of policy and accountability systems so that all students are prepared to compete in the global community

MISSISSIPPI STATE BOARD OF EDUCATION  
**STRATEGIC PLAN GOALS**

1

**All  
Students  
Proficient  
and Showing  
Growth in All  
Assessed  
Areas**



2

**Every  
Student  
Graduates  
from High  
School and  
is Ready for  
College and  
Career**



3

**Every  
Child Has  
Access  
to a High-  
Quality Early  
Childhood  
Program**



4

**Every  
School Has  
Effective  
Teachers and  
Leaders**



5

**Every  
Community  
Effectively  
Uses a  
World-Class  
Data System  
to Improve  
Student  
Outcomes**



6

**Every  
School and  
District is  
Rated “C” or  
Higher**



# What is Career and Technical Education?

---

# What is Career and Technical Education?

---

- Encompasses 94 percent of high school students and 8.4 million individuals seeking postsecondary certificates and associate degrees in CTE fields
- Delivered flexibly through high school, area career centers, career academies, community and technical colleges, four-year universities and more

# What is Career and Technical Education?

---

- Partners with businesses to prepare students for tomorrow's workforce
- Prepares students to be college and career ready by providing core academic skills, employability skills and technical, job-specific skills
- Educates students for a range of career options through 16 Career Clusters and 79+ pathways

# What is Career and Technical Education?



# Why CTE?



# Why CTE?

---

By 2020...

**65%** of job openings in the U.S. will require some post-secondary education and training beyond high school.

*Georgetown University, Center on Education and the Workforce, Recovery 2020*

# Why CTE?

---

- 46% of U.S. employers report difficulty in filling open positions, with skilled trades the hardest jobs to fill.
- Between 2014-2024, 48% of job openings will be middle skill.
- In Mississippi, middle-skill jobs account for 58% of the labor market, but only 50% of the state's workers are trained to fill these positions.

# Why CTE?

---

We must change the post-secondary education perception and expectations. We've created a culture that thinks you are not successful if you don't go the academic route post-high school.

# Why CTE?

---

- 71% of parents have the expectation of their students attending a 4-year college, and as a result...
- 69% of students have the expectation of going to a 4-year college

# Why CTE?

---

- 61% of jobs in MS require some post-secondary education.

“Adult skill levels must be elevated. Meeting this demand will require every Mississippian to be successful, regardless of socio-economic background.”

-Education leader

# CTE Works for High School Students

---

- Better prepared for academic classes
- Less likely to need remedial education
- More likely to enroll in college

# CTE Works for High School Students

---

- Taking one CTE class for every two academic classes minimizes the risk of students dropping out of high school (Plank et al, 2005).
- The average high school graduation rate for student concentrating in CTE programs is 93 percent, compared to an average national freshman graduation rate of 80 percent (U.S. Department of Education, 2014).

# Career and Technical Education



# Career & Technical Education

---

## Past:

- Once called vocational education
- Alternative educational option for learners who were considered non-college bound
- Result: disproportionate number: low-income learners, learners of color, learners with disabilities, female learners, and other historically marginalized populations placed in terminal vocation program

# Career & Technical Education

---

## Present:

- Quality of CTE has vastly improved
- Many learners still do not have access to high-quality programs of study in their communities.
- Systemic barriers still exist
- MS- Traditional Diploma with CTE Endorsement

# Traditional Diploma with Career and Technical Endorsement

Curriculum Area	Carnegie Units	Required Subjects
English	4	English I      English II
Mathematics	4	Algebra I
Science	3	Biology I
Social Studies	3½	1 World History      1 U.S. History ½ U.S. Government      ½ Economics ½ Mississippi Studies
Physical Education	½	
Health	½	
Art	1	
Career & College Readiness	1	Must occur in the student's junior or senior year, or in the student completion of a 4-year sequence.
Technology or Computer Science	1	
CTE Electives	4	Must complete a 4-course sequential program of study
Additional Electives	3½	
<b>Total</b>	<b>26</b>	

## Additional Requirements

- Earn an overall GPA of 2.5
- Earn Silver level on ACT WorkKeys
- Earn two additional Carnegie Units for a total of 26

Must successfully complete one of the following:

- One CTE dual credit course or earn articulated credit in the high school CTE course
- Work-based Learning Experience or the Career Pathway Experience
- Earn a State Board of Education approved national credential

# Traditional Diploma with Academic Endorsement

Curriculum Area	Carnegie Units	Required Subjects
English	4	English I                      English II
Mathematics	4	Algebra I + two (2) additional math courses above Algebra I
Science	3	Biology I + two (2) additional science courses above Biology I
Social Studies	3½	1 World History                      1 U.S. History ½ U.S. Government                      ½ Economics ½ Mississippi Studies
Physical Education	½	
Health	½	
Art	1	
Career & College Readiness	1	Must occur in the student's junior or senior year, or in the student completion of a 4-year sequence.
Technology or Computer Science	1	
Additional Electives	7½	Must meet CPC requirements for MS IHLs
<b>Total</b>	<b>26</b>	

## Additional Requirements

- Earn an overall GPA of 2.5
- Courses must meet MS IHL college preparatory curriculum (CPC) requirements
- Earn MS IHL and Community College readiness benchmarks (ACT sub scores of 17 English and 19 math as approved by post-secondary for non-remediation at most community colleges and IHL college-ready courses in senior year, or SAT equivalency)

- Earn two additional Carnegie Units for a total of 26

Must successfully complete one of the following:

- One AP course with a C or higher and take the appropriate AP exam
- One DP-IB course with a C or higher and take the appropriate IB exams
- One academic dual credit course with a C or higher in the course

# Career & Technical Education

## Future:

- Intentional focus on equity to put learner success first
  - Secure and leverage resources to close CTE opportunity gaps
  - Work with stakeholders to expand geographic access to CTE
  - Dismantle barriers that prevent learners from entering CTE programs

# The Danger of a Single Story

---

“The **single story** creates stereotypes, and the problem with stereotypes is not that they are untrue, but that they are incomplete. They make one **story** become the only **story**.”

In what ways do “single stories” impact our own identities, how we view others, and the choices we make?

# The Danger of a Single Story



# The Danger of a Single Story

---

1. How does Adichie describe herself at the beginning of her talk?
2. Later in the story, we learn how other people view her.  
How do these views differ from how she describes herself?
3. According to Adichie, what dilemmas can arise when others view us differently than we view ourselves?



# Nontraditional Career Preparation

# Root Causes & Strategies

---

Can be divided into 5 categories:

1. Education
2. Family
3. Career Information
4. Internal/Individual
5. Societal Issues

# Root Causes & Strategies: Education

Root Cause	Strategies
<p><b><u>Academic Proficiency</u></b> When women are academically proficient, they are more likely to persist in choosing nontraditional careers. While the opposite is more predictive of males.</p>	<ul style="list-style-type: none"><li>• Teach students that ability can be expanded</li><li>• Intervene to revise underestimation</li><li>• Identify and assist students who aspire to science and engineering careers but lack academic proficiency.</li></ul>
<p><b><u>Curriculum</u></b> Essential elements of a bias-free curriculum include: relevancy, gender-inclusive images and text, and hands-on instructional practice.</p>	<ul style="list-style-type: none"><li>• Identify and correct bias in curricular and professional materials</li><li>• All inclusive course sequencing options</li></ul>

# Root Causes & Strategies: Family

Root Cause	Strategies
<p><b><u>Family Characteristics</u></b> Characteristics and engagement of family of origin have a strong influence on career choice.</p>	<ul style="list-style-type: none"><li>• Invite, involve and educate parents</li><li>• Involve parents in developing their child's career plan</li><li>• Engage male and female students by providing activities that they may not have been culturally socialized to participate</li></ul>

# Root Causes & Strategies: Career Info

Root Cause	Strategies
<p><b><u>Materials and Practices</u></b> Traditional awareness-raising recruitment methods such as brochures, talks, or demonstrations alone are insufficient to impact career decision-making.</p>	<ul style="list-style-type: none"><li>• Provide greater intensity of recruitment intervention</li><li>• Practice effective career guidance</li><li>• Provide more career guidance for boys</li><li>• Provide information about high-wage, high-skill jobs for females</li><li>• Educate counselors about changing the landscape of the workforce</li><li>• Make societal benefits known</li></ul>
<p><b><u>Early Intervention</u></b> Providing information about nontraditional careers at the ages at which young people are most open to considering a nontraditional career and prior to their excluding essential preparation will increase participation in nontraditional careers</p>	<ul style="list-style-type: none"><li>• Conduct interventions for middle school students</li><li>• Target elementary and middle school students, especially for math interventions</li><li>• Intervene early in youth's development</li></ul>

# Root Causes & Strategies: Internal

Root Cause	Strategies
<b><u>Self-Efficacy</u></b> The strength of a female's self-efficacy is directly related to entry and persistence in NTO.	<ul style="list-style-type: none"><li>• Teach females to self-affirm</li><li>• Teach that intelligence is incremental</li><li>• Provide professional development on supportive learning environments</li><li>• Utilize real-life teaching strategies</li></ul>
<b><u>Stereotype Threat</u></b> Achievement is positively influenced by the reduction in stereotype threat.  <b>Definition:</b> Stereotype threat refers to being at risk of confirming, as self-characteristic, a negative stereotype about one's group.	<ul style="list-style-type: none"><li>• Provide professional development on supportive learning environments</li><li>• Address the limited development of expressive traits in male students and instrumental traits in female students</li></ul>

# Root Causes & Strategies: Societal Issues

Root Cause	Strategies
<p><b><u>Media</u></b></p> <p>(Positive) National media portrayal of individuals performing the job duties of a nontraditional career in a positive light increases participation of the nontraditional gender in that career.</p> <p>(Negative) The constant and often gender-stereotypical exposure of electronic media solidifies gender stereotyping</p>	<ul style="list-style-type: none"><li>• Provide positive nontraditional role models through established media</li><li>• Encourage critical thinking about the way the media portray CTE and nontraditional careers</li><li>• Emphasize the role of education</li><li>• Provide programs that build positive body image</li></ul>

# Root Causes & Strategies: Societal Issues

Root Cause	Strategies
<b><u>Peers</u></b> The opinions of peers, especially during adolescence, can influence nontraditional career choices, especially for females.	<ul style="list-style-type: none"><li>• Involve men in IT intervention efforts for women</li><li>• Involve like-minded peers in programs</li><li>• Facilitate informal support groups</li></ul>
<b><u>Role Models/Mentoring</u></b> Support services, such as the provision of career-related role models and mentors, aids participation and completion of education leading to nontraditional careers.	<ul style="list-style-type: none"><li>• Ensure positive role models</li><li>• Showcase role models with good work/life balance</li><li>• Provide training and support for mentors and mentees</li><li>• Choose the mentoring format that fits the educational setting</li><li>• Provide positive, attainable role models</li><li>• Conduct nontraditional student support groups and counseling</li></ul>



# Test Your Knowledge

---

# Kahoot.it

# Questions?

---



# Contact Information

---

Chandrea Walker  
Office of Career and Technical Education  
[CSWalker@mdek12.org](mailto:CSWalker@mdek12.org)