### **CTE Career Cluster Professional Learning Communities** (Cluster PLCs)

"Integrating Workforce, Academics and the Environment in Construction"

**Architecture & Construction** 

April 6, 2021



Florida's Workforce Education Initiative





Welcome and Introductions

**Guest Speaker Overview** 

#### Guest Speaker Best Practices

#### Collaboration





#### 1. Electrician Apprenticeship (3,733 Enrollments)

#### 2. HVAC Technology (2,171 Enrollments)

3. Plumbing Apprenticeship (1,365 Enrollments)

4. Electricity/Electrician (1,261 Enrollments)



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# Top 2019-20 Postsecondary Construction Trade Programs

#### (Out of 13,111 District Postsecondary Programs)



FEATURED TOPICS

ACADEMICS

Home | Academics | Career & Adult Education | Perkins V

#### PERKINS

Accountability Measures

Comprehensive Local Needs Assessment

Funding Opportunities

Funding Opportunities Archive

Invoicing

Perkins IV Resources Archives

Programs of Study

#### **Perkins V**

The Strengthening Career and Technical Education for the 21st Century Act (SCATE) was signed into law on July 31, 2018. The Act amends the Carl D. Perkins Career and Technical Education (Perkins IV) Act of 2006 and reauthorizes Perkins for six years. The law took effect July 1, 2019. Florida's Perkins Four-Year State Plan was approved by the U.S. Department of Education in June of 2020.

Perkins serves as the primary federal investment in Career and Technical Education.

#### Florida's Perkins V State Plan

- Executive Summary of Florida's 2020-2024 State Plan (PDF)
- Florida's 2020-2024 State Plan (PDF)

#### Resources

#### The Law

Perkins V Text

https://www.fldoe.org/academics/career-adult-edu/perkins/ProgramsofStudy.stml





1	А	В	С	D	E	F
1	Programs of Study Alignment Matrix					
	Purpose:	, .				
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	CTE P	rogram Alignment				

https://www.fldoe.org/core/fileparse.php/18815/urlt/ProgramsStudy-AlignmentMatrix.xlsx



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	Technology (Arts, A/V							
	Tech. & Comm.)							
	AS-Architectural							
	Design and							
	Construction							
	Technology							
	AS-Architectural							
	Design and							
	Construction							
	Technology							
	AS-Energy							
	Management and							
	Controls Technology							
	(Energy)							
	AS-Air Conditioning, Refrigeration, &							
	Heating (ACR&H)							
	Systems Technology;							
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	CCC-ACR&H							
	Technician							
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## Jared Taylor, PMP Walton Works Center for Excellence **Construction Trades Program Manager NW FL State College**



## Hal Lunsford, Owner/President Lunsford Environmental, LLC Tallahassee, FL













# **Getting to know you...** (Jared Taylor & Hal Lunsford)

## Background

#### **Fun Facts**

## **Teaching Career**

## Today's Topic

## "Integrating Workforce, Academics and the Environment in Construction"

Bridging the gap between skills education and industry needs with a forward focus on environmental issues and shifting cultural stigmas

Jared Taylor, PMP Northwest Florida State College Construction Trades Program Manager taylo122@mefac.edu Hal Lunaford Lunaford Environmental Owner/President lunafordsovironmental@email.com









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#### The Issues

- Skilled labor
- Secondary Education
- Effect on Environment
- Outdated Training Platforms/Curriculum
  - The Truth Hurts...
  - Cape and Perkins
  - Industry Recognition is Relative

### Skilled Labor

- Retiring out
- Negative Stigmas
  - "Only the bottom of the barrel"
- Combating Greed vs Progress
  - "The 1099 Culture"
- Training Pipelines
  - No career Lattices





# Outdated Training

- The Truth Hurts!
- Cape and Perkins
- Industry NOT Recognized









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# Secondary Education

- AP and Honors
- Tech Heavy
- Promotes College but selectively
- Unrealistic and Ineffective

## Society

- Political
- Socioeconomic
- Gender
- Ethics
- Morals and Priorities
- Generational Shifts





## Environment

- Growth vs Need
  - Buildable lots and developing land
- Contribution to Pollution
  - 40% of Energy Consumption
  - Millions of tons of sediment
  - Impaired water bodies
- Depleting Resources
  - Lumber price up 300%
- Reinforced Unsustainable Practices
  - "This is how we've always done it!"









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## The Fix

- Building Construction Specialist
  - Adaptable Framework
  - Best Practices
  - Integrates
- Combating Issues
  - Education
  - Partnerships
  - Feedback and Involvement
- Thinking Outside the Box
- Integrating Other Programs
  - CareerSource
  - BIA and Organizations
  - Faith Based and Non-Profits



- · We need to be forward thinking ...



#### ENVIRONMENTAL EDUCATION

The Missing Component of the Education of Future Construction Personnel & Managers



Florida's Workforce Education Initiative

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#### RETROSPECT

- Looking into the past, Florida's construction personnel were never required to include in their education anything about:
- Environment or environmental regulations
- Sustainability or sustainable practices
- Energy efficiencies of constructed structures
- Water reduction and surface water protection
- Carbon reduction and global warming
- Solid waste minimization, reuse, and recycling





#### FUTURE OF CONSTRUCTION

- Will require construction personnel to have knowledge of:
- Environmental regulations, permitting, inspections, and compliance
- Sustainability development practices
- Energy and water efficiencies
- Waste reduction

"Construction firms that refuse or ignore the growing trends of building green will be left behind in our new century." *American Society for Engineering Education, 2017* 





#### INTEGRATION OF GREEN INTO THE EDUCATION OF CONSTRUCTION TRADES STUDENTS

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## GREEN OR ENVIRONMENTAL LITERACY

Environmental literacy needs to be incorporated into all aspects of higher education:

- Promote interdisciplinary majors/certificates that address environmental literacy in students
- Promote campus organizations that work towards developing environmental literacy in students
- Facilitate professional development for facility to incorporate aspects
  of environmental literacy into courses across the institution, not just
  science courses/departments
- Coordinate sustainability initiatives campus wide; such as, water use, energy use, recycling, etc.

\*See the (Florida Environmental Literacy Plan, 2005)





#### WHERE DO WE GET STARTED?

- Identify grants and monies needed for a program
- Set up goals for construction students in their education to include environmental components in their construction classes
- Integrate green development and environmental sustainability to become part of their way thinking and problem solving

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# col·lab·o·ra-tion











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Hal Lunsford Lunsford Environmental Owner/President

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# **Resources** (continued)...

- Northwest Florida State College: https://www.nwfsc.edu/
- Lunsford Environmental, LLC: http://lunsfordenvironmental.com/
- LEED Website: http://leed.usgbc.org/
- GET THERE Florida: https://gettherefl.com/





# **Thank You!**

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# CTE Career Cluster Professional Learning Communities (Cluster PLCs)



