Reskilling/Upskilling Adults through Micro-credential Innovation: TRUE

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## Texas Reskilling and Upskilling Through Education: TRUE Agenda

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Texas community colleges will be the state’s economic engine for recovery by providing training that meets regional and local labor market demands.
Learners From Multiple Entry Points

Enter Careers, Earn More Credentials, & Transfer to 4-Year Institutions

Connect
Enter
Progress
Succeed

PATHWAYS FRAMEWORK

Texas Association of Community Colleges

Learners From Multiple Entry Points

Enter Careers, Earn More Credentials, & Transfer to 4-Year Institutions

Connect
Enter
Progress
Succeed

PATHWAYS FRAMEWORK

Texas Success Center

Community College Association of Texas Trustees
Section I

Making the Case and Implementation
CAREER PATHWAYS & CREDENTIALS
What challenges does your college face when embedding aligning micro-credentials across continuing education and credit programs?
TRUE PATHWAYS
Systemic whole-college reform helping students reach their goals

**Connect**
- Learners From Multiple Entry Points
  - High school
  - AEL
  - Cont. Ed
  - Adults
  - Displaced workers
- Easily shop and select career pathways that include industry-based certifications within metamajor/career cluster

**Enter**
- Onboard with a clear initial completion plan of less than 6 months

**Progress**
- Gain skills and work-related experiences
- Provide support to be successful

**Succeed**
- Complete credentials in key occupations with living wages

Enter Good Careers
Earn More Credentials
Transfer
The TRUE Workforce Initiative

Phase I TRUE Colleges

- Central - Austin Community College
- Central - McLennan Community College
- East - Paris Junior College
- East - Northeast Texas Community College
- North - Dallas College
- North - Tarrant County Community College
- South - Alamo Colleges
- South - Del Mar College
- Southeast - Brazosport College
- Southeast - San Jacinto College
- West - Amarillo College
- West – Midland College

Phase I: January-August 2021

1. Identify high-priority credentials and foundational career specific skills
2. Design and implement high-quality, short-term and micro-credentials aligned with regional demand
3. Create program maps to credentials, including opportunities for careers, further education, and related wages

Phase II: September 2021-August 2024

1. Leverage business & industry partnerships
2. Utilize the Texas Pathways strategy for statewide scaling
3. Advocate for state and federal policy
Profile: Statewide
Key Occupation: Cardiovascular Technologists and Technicians*

4,197
Job Postings
Dec 1, 2019 - Nov 30, 2020

$52,560
Median Salary
Based on BLS data for Texas

16%
Projected Growth
Estimated growth in employment, 2020-2030

85%
Enter Level
Percent of job postings calling for 0-2 years of experience

10%
BA+ Level
Percent of job postings calling for a BA or higher

23% (Low)
Automation Risk
Based on Osborn and Frey’s methodology

Top 5 Specialized Skills
1. Cardiopulmonary Resuscitation
2. Patient Care
3. Electrocardiogram
4. Cardiology
5. Catherization Laboratory (Cath Lab)

Top 5 Certifications
1. First Aid CPR AED
2. Basic Life Saving (BLS)
3. Advanced Cardiac Life Support Certification
4. Basic Cardiac Life Support Certification
5. American Registry of Radiologic Technologists Certification

Top 5 Employers
1. Hospital Corporation of America
2. Christus Health
3. Baylor Scott & White Health
4. Texas Health Resources
5. Houston Methodist

This occupation is important to the following industries:
Health Care and Social Assistance
Professional, Scientific, and Technical Services
Other Services (except Public Administration)

*License typically required
TRUE Pathways Map
Industry Area of Study: Health Sciences

Cardiovascular Technologists and Technicians*
$52,560 (4,197 job posts)

**Starter Occupation**
- **Phlebotomists**
  - $33,090
  - (9,410 workers)
- **Pharmacy Technicians**
  - $35,110
  - (37,240 workers)

**Skills to Acquire**
- Electrocardiogram (EKG / ECG)
- Stress Testing
- Catheterization Laboratory (CATH LAB)

**Salary Boost for Next Occupation**
- $19,470
- $17,450

**Next-step Occupation**
- **Diagnostic Medical Sonographers**
  - $72,080
  - (sub-BA)
  - (2,495 job posts)
  - +$19,520

- **Magnetic Resonance Imaging Technologists**
  - $73,300
  - (sub-BA)
  - (2,589 job posts)
  - +$20,740

- **Radiologic Technologists**
  - $60,180
  - (sub-BA)
  - (4,096 job posts)
  - +$7,620

**TRUE Credential Example**
North Central Texas College’s EKG Technician Certification has 2 courses, can be completed in 15 weeks, and costs $1,199 for tuition, textbook, practical lab materials, and CET certificate testing fee.

**License typically required**
Profile: Statewide

Key Occupation: Heating, Air Conditioning, and Refrigeration Mechanics and Installers**

9,235
Job Postings
Dec 1, 2019 - Nov 30, 2020

$45,510
Median Salary
Based on BLS data for Texas

16%
Projected Growth
Estimated growth in employment, 2020-2030

38%
Entry Level
Percent of job postings calling for 0-2 years of experience

0%
BA+ Level
Percent of job postings calling for a BA or higher

65% (Med)
Automation Risk
Based on Osborn and Frey’s methodology

This occupation is important to the following industries:
Construction
Manufacturing
Retail Trade

Top 5 Specialized Skills
1. HVAC
2. Repair
3. Plumbing
4. Ventilation
5. Predictive/Preventative Maintenance

Top 5 Certifications
1. Drivers License
2. Environmental Protection Agency Certification
3. EPA/CFC/HCFC Certification
5. Occupational Safety and Health Administration Certification

Top 5 Employers
1. Sears
2. TDindustries
3. Lochridge Priest Industries
4. Johnson Controls Incorporated
5. Cxc Talent Solutions

Top 5 Specialized Skills
1. HVAC
2. Repair
3. Plumbing
4. Ventilation
5. Predictive/Preventative Maintenance

This occupation is important to the following industries:
Construction
Manufacturing
Retail Trade

*License typically required
+Texas Workforce Commission Target Occupation
TRUE Pathways Map
Industry Area of Study: Design, Manufacturing, Construction & Applied Technologies

**Starter Occupation**
- Maintenance and Repair Workers, General
  - $36,560
  - (9,235 job posts)
- Home Appliance Repairers
  - $40,420
  - (2,640 workers)
- Outdoor Power Equipment and Other Small Engine Mechanics
  - $37,400
  - (2,670 workers)

**Skills to Acquire**
- HVAC
- Ventilation
- Duct Work
- Boilers

**Salary Boost for Next Occupation**
- +$8,950
- +$5,090
- +$8,110

**Next-step Occupation**
- **Key Occupation**
  - Heating, Air Conditioning, and Refrigeration Mechanics and Installers
    - $45,510
    - (9,235 job posts)
  - Skills to Acquire
  - Transformers
  - Wiring
  - Schematic Diagrams
  - Test Equipment
  - Circuit Breakers
  - +$5,610
  - +$8,600
  - +$5,270

**Skills to Acquire**
- Welding
- Hydraulics
- Programmable Logic Controller (PLC) Programming
- Conveyor Systems
- Machining
- Pipe Fitting
- Pipe Systems
- Residential & Commercial Plumbing
- Drain Cleaning

**TRUE Credential Example:**
Austin Community College HVAC Certification has 4 courses, can be completed in 16-20 weeks, and costs $1,450 in tuition. 96% of students complete the program and 93% of completers are placed in HVAC jobs.

**License typically required**
The Post-Secondary Employment Outcomes (PSEO) is an experimental data product from the US Census Bureau containing earnings outcomes and employment flows for recent graduates of partner colleges and universities.

These statistics are generated by matching university transcript data with a national database of jobs.
Post-Secondary Employment Outcomes Explorer

Annual Earnings of Degree Holders (2019 Dollars)

- Health Professions and Related Programs: $56,219
- Homeland Security, Law Enforcement, Firefighting, and Related Protective Services: $87,826
- Business, Management, Marketing, and Related Support Services: $89,511
- Culinary, Entertainment, and Personal Services: $37,888
- Engineering/Engineering-Related Technologies/Technicians: $43,592
- Vocational/Technical, Health Professions, and Related Services: $33,784
- Visual and Performing Arts: $43,488
- Science Technologies/Technicians: $26,663
- Human Sciences: $25,590
- Social Sciences: $32,010
- Family and Consumer Sciences/Human Sciences: $29,085
- Agriculture, Forestry, and Related Services: $29,773
Dallas College True Pathway Focus Areas

**Manufacturing & Industrial Technology**
- Logistics – Certified Logistics Technician and Associate
- Mechatronics – PMMI Mechanical and Fluid Power
- Robotics – Automation Technician

**Engineering, Technology, Mathematics and Sciences**
- IT Support – Comp Tia A+ and Linux+
- Cloud Support – AWS SysOps Administrator and CyberOps

**Health Sciences**
- Telehealth Patient Care Technician – PCT Certification and Google IT Support Professional

**Business, Hospitality and Global Trade**
- Business Foundations
TRUE Pathways In Practice - Logistics Technician

ASSOCIATE OF APPLIED SCIENCE
Logistics and Manufacturing Technology AAS

LEVEL 1 CERTIFICATE
Logistics Distribution Technician Certificate

The Logistics Technician TRUE Pathway is built on stackable, workforce credentials with employment and advancement opportunities in the local economy.

FAST-TRACK CE
Logistics Technician

- MESC Certified Forklift Technician (CFT), Certified Logistics Associate (CLA), and Technician (CLT)

LEVEL 1 CERTIFICATE
Logistics Distribution Technician Certificate

- LMGT 1319 Intro to Business Logistics
- LMGT 1321 Intro to Materials Handling
- LMGT 1325 Warehouse and Distribution Center Management
- LMGT 1340 Contemporary Logistics Issues
- IRUS 1300 Global Logistics Management
- BMCT 2384 Co-Op in Operations Management & Supervision or LMCT 2394 Principles of Traffic Management

FAST-TRACK CE

- 18 Credits Articulated CEU + 3 Earned Credits + 39 Credits (Total 60 Credit Hours)

ASSOCIATE OF APPLIED SCIENCE
Logistics and Manufacturing Technology AAS

7 Courses Specialization
- LMGT 2350 International Logistics Management
- ENGL 1301 Composition I
- MATH 1314 College Algebra or Plane Trig or Math for Business & Social Sci
- SPCH 1301 Speech of Public Speaking
- Elective Humanities/Fine Arts
- ECON 2301 Principles of Microeconomics or ECON 2302 Principles of Macroeconomics

The Logistics Technician TRUE Pathway is built on stackable, workforce credentials with employment and advancement opportunities in the local economy.
Driver Diagram Discussion Starter for TRUE colleges:
What’s Your Focus, What’s the Work to Be Done between Now & September?

OVERALL AIM
Build and scale a robust suite of (truly) stackable, high-value short-term credentials that align to regional labor market needs

S.M.A.R.T. AIM
Launch three micro-credentials in September

PRIMARY DRIVERS
Refining curriculum & aligning to pathways
Marketing & recruitment to ensure key partners are able to make sure potential students are aware of the opportunity & supported to enroll
Advisor preparation Designing the learner experience

Actions
Partnering with VPASs & Deans
Micro pathways visualizations
Streamline Articulation Agreements/Equivalencies
Testing messages
Providing marketing materials
Creating a Video library of curriculums
Engaging Industry-focus groups
Weekly meeting with Student Success: enrollment and advisors (creating advising model from non-credit to credit)
Hosting design sessions to complete student journey mapping
Focus groups with potential learners
Pilot: UpSkill Project

• 1 Facebook Ad
• Free Until July 17
• Products Tested:
  ○ 3 Marketable Skills Career Badges
  ○ 8 Professionals Certificates in IT Support, Cybersecurity, Construction Management and Health IT
  ○ Google IT Support Included
• Results as July 28:
  ○ 170: Approximate # of Inquiries
  ○ Over 300: Applications (% Women, Average Age: 38)
  ○ 187: Total Joined a Pathway and Actively Engaged
  ○ 131: Class Completions as July 28
  ○ 4 Top Pathways: Cybersecurity Analyst, Healthcare IT Support, Google Data Analytics, Construction Management
Del Mar College
TRUE Initiative Team

Dr. Mark Escamilla
President & CEO
TRUE Initiative Update

Micro-credentials:
Accounting
Industrial Machining Applied Technology Specialization:
Industrial Rotating Equipment Mechanic (Millwright)
Welding Applied Technology

Frontline Program Advisors:
P/T Career Counselor hired
Training for Program Coordinators and Program Managers
<table>
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<th>Specialization: Industrial Rotating Equipment Mechanic (Millwright)</th>
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<td><strong>Helpers</strong>&lt;br&gt;Median Salary $30,967</td>
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<tr>
<td><strong>Maintenance Technician</strong>&lt;br&gt;Median Salary $48,750</td>
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<tr>
<td><strong>Millwright</strong>&lt;br&gt;Median Salary $54,920</td>
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**CE OSA**<br>MCHN 2005* Millwright III <br>MCHN 2007* Millwright IV <br>MCHN 2016* Millwright VII <br>MCHN 2018* Millwright VIII <br>*Course able to be matriculated to credit

### Level II Certificate
- MCHN 1325 Millwright I
- MCHN 1338 Basic Machine Shop I
- MCHN 1341 Basic Machine Shop II
- MCHN 1329 Millwright II
- MCHN 1300 Beginning Machine Shop
- MCHN 1343 Machine Shop Mathematics
- MCHN 1308 Basic Lathe
- MCHN 2312 Millwright V
- MCHN 2314 Millwright VI
- MCHN 1313 Basic Milling Operations
- INMT 2388 Internship – Manufacturing Technology/Technician
- OR
- PTRT 1313 Industrial Safety
- COMG 1391 Special Topics in Communications, General
- TECM 1301 Industrial Mathematics

### Associate in Applied Science
- ENGL 1301 Composition I
- Core Sciences
  - Mathematics OR Life & Physical
  - Core Elective
- Core Elective
  - Communications (SPCH) Core
  - Creative Arts or Language, Philosophy &
  - Culture Core Elective
- Core Science
  - American History, Government/Political
  - OR Social and Behavioral Core
  - Elective

**Level II Certificate**

CE OSA
Section II  Business Advisory Council
Business Advisory Council

The Business Advisory Council (BAC) provides strategic guidance in three key areas:

• **Changes in the economy and job market.**
  • Provide insight into the areas of future job growth and the skills most critical to business and industry.

• **Texas Reskilling and Upskilling through Education (TRUE).**
  • Provide support, strategic guidance, and advocacy in establishing and advancing the components of the TRUE Initiative.

• **Legislative priorities and strategies.**
  • Provide strategic guidance in advancing the components of the TACC legislative priorities in support of a stronger Texas economy.
Membership of the BAC

- 6 College CEOs
- President, Texas Business Leadership Council
- Chairman and CEO, Commit Partnership
- Vice President, Texas Cattle Feeders
- Director of Global Programs, AWS
- Public and Government Affairs, ExxonMobil
- CEO & President, Precision Task Group, Inc
- CEO & President, Texas Chemical Council
- Managing Director, J. P. Chase
- Director of Workforce Partnerships, Lockheed Martin
- Senior VP, Americas Manufacturing, LyondellBasell
- Workforce Development Lead, Tesla
- CEO & President, Texas Association of Manufacturers
- Chairman of the Board, Hunt Companies
- Chair, Metro 8 Chambers of Commerce
- CEO Texas Economic Development Council
Section III

Legislation & Grant Funding
SB1102 and TRUE Program Uses

By statute, funding for TRUE must be used as follows:

- to support industry-aligned, high-demand postsecondary workforce credentials or industry certifications in growing occupations that can be completed in six months or less;
- to provide training through existing, new or redesigned programs focused on high-demand skills and leading to workforce credentials or industry certifications in growing occupations;
- to expand institutional capacity to provide stackable postsecondary workforce and industry certifications in high-demand pathways;
- to provide student aid awards to incentivize enrollment and completion of industry-aligned, high demand postsecondary workforce credentials and industry certifications; and
- to cover the cost of tracking and reporting enrollment, credential completion and employment outcomes of students in these courses and programs to gauge student success.
Accelerating the Production of High Value Credentials

Additional GEER Funding July 2021:
$25 million - TRUE Program Start Up

Purpose:
Institutional capacity building to rapidly create, redesign and expand education and training programs in high value occupations that are tightly aligned with employer and industry needs.
Texas Success Center

tacc.org/tsc