Outcomes-Driven Funding
& the Future of Employment Data

Sharing the status and direction of C4EO & SkillsEngine.
INTRODUCTION

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CONFIDENTIAL
TODAY'S TOPICS

INTRODUCTION
- Introductions
- About TSTC, C4EO, & SkillsEngine

VALUE-ADD FUNDING FORMULA
- Contact Hour Model vs. Value-Add Model
- How We Got There
- Results & Insights

ENHANCED UI WAGE RECORD LINKAGE
- Basic Mechanics
- Enhanced UI Wage Data
- The Indiana Example

THE FUTURE OF SKILLS OPTIMIZATION
- The Burden on Employers
- Proposed Solution
- What We’re Doing

DISCUSSION / Q&A
About TSTC

Helping Texas meet the high-tech challenges of today’s global economy in partnership with business and industry, government agencies and other educational institutions.

- The technical college system of Texas
- 10 campuses
- 12,000 students
- 115 awards across 48 programs
- Founded 1965
The nation’s only higher education institution funded 100% on student earnings outcomes
Outcomes-Driven Funding

A formula for value-add
**OLD METHOD**

**Contact Hour Model**
A “headcount” system of cost reimbursement.

\[
\text{[Number of Contact hours]} \times \text{[Funding rate]} = \text{State Funding}
\]

- Rewards activity, enrollment, and retention
- Aligns with academic traditions
- Encourages prolonged seat-time
- Neutral to quality of outcome

**NEW METHOD**

**Value-Add Model**
An “outcomes-driven” system based on student job placement & salary rates.

\[
\text{[Student Job Earnings]} \times \text{[Funding Rate]} = \text{State Funding}
\]

- Rewards outcomes and workforce alignment
- Aligns with student and industry needs
- Encourages efficiency
- Rewards quality of outcome
We get paid only if students get a job. More placements with higher wages equals more funding.
How We Got There

80th Session
TSTC asked to do outcomes funding.

81st Session
THECB, Comptroller, TWC conduct feasibility study.

82nd Session
THECB, Comptroller, TWC, TSTC, UT-Austin RMC help develop the Value-Add Model.

83rd Session
THECB & LBB use Value-Add Model.

2007
Independent Study and preliminary Value-Add model designed.

2008

2009
THECB concludes model is feasible and “has great merit.”

2010

2011

2012

2013
TSTC Board approves new Value-Add funding model for TSTC.
The Results

Since implementing the Value-Add funding model, TSTC has delivered increasing value to students and industry partners, including:

- Increased student salaries
- Increased job placements
- Enhanced industry partnerships
- Reduced inefficient curricula
- Increased state funding
- **Record graduation counts**

Data Source: THEClF Funding Formula, Value Add Updated Oct 2021
Key Learnings & Insights

- **Incentives are everything**
  The best interests of students become the best interests of the college and state.

- **Faster to market wins**
  Flexible entry and shorter duration training programs generate higher outputs.

- **Competency is currency**
  Quality outcomes require quality programs responsive to industry needs.

- **Better data = better outcomes**
  Placement and earnings outcomes drive accountability and transparency.
UI Wage Record Linkage

The enabling mechanism
Using UI Wage Records to Drive Insights, Funding, & Innovation
What are “Enhanced” UI Wage Records?

Enhancing UI Wage Records include additional employment data points which enable:

- **Alignment** by optimizing educational pathways with business and industry needs
- **Transparency** by informing students/parents on returns for their investment
- **Accountability** by benchmarking the economic returns of training programs

### Basic UI Wage Records Linkages

- SSN - Informs record linkage
- FICE - Educational institution
- CIP - Educational program
- Award Level - Cert, AAS, BA, etc.
- $ Wages - Quarterly wages paid
- Employer - Business name
- NAICS - Industry classification
- Gender, ESL status, Eco Disadvantaged, CTE Status...

### ENHANCED UI Wage Records

- Job Title - Worker job title
- Hours Worked - Informs hourly rate
- Start Date - Corrects partial quarters
- End Date - Corrects partial quarters
- Zip/County - Actual worker location
- Full time / Part time - Informs salary
- SOC - Dept of Labor Occupation
States leveraging UI wage record enhancements gain a major advantage in understanding labor market supply and demand.

- Washington D.C.
- Alaska
- Louisiana
- Nebraska
- Indiana*
IN ACTION: Indiana Dept. of Workforce Development

The enhancements implemented by Indiana consist of:

- Hire date
- SOC code
- Part-time/full-time status
- Zip code where work services are primarily performed

- Voluntary participation
  New fields available but not required.

- Simplified entry
  Data automatically carries over from one quarter to the next.

- Reduced burden
  Eliminated an additional reporting form.

- Reduced Fines
  Halved the non-filing penalty from $50 to $25.

- Early Results
  40% of employers reported SOC codes in Q1 2020.
**WHY ENHANCED UI WAGE RECORDS?**

**SUPPLY DEMAND OPTIMIZATION**
- Longitudinal modeling of labor market movements
- Source of new, emerging occupational titles
- Coverage for rural areas not addressed under the OES

**BENEFITS TO PUBLIC**
- Better aligned talent pipelines for employers
- More informed choices for consumers (i.e., value)
- Career-relatedness associated with training
What’s Next?
Optimizing Skills
JOB PROFILE VALIDATIONS

Getting Input From Industry
Improving workforce outcomes for state & federal agencies

Formal recognition by the THECB (GIPWE) for use in Texas by all Community Colleges

Adopted by TEA for update of entire state CTE standards

US Gov. HR office uses our services (largest employer in the world)
## Growing Skills Library focused on industry validation

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,900+</td>
<td>Industry experts (SMEs) engaged in skill reviews</td>
</tr>
<tr>
<td>1,500+</td>
<td>Organizations engaged in Calibrate reviews</td>
</tr>
<tr>
<td>160,000+</td>
<td>Skill validations conducted by industry experts</td>
</tr>
<tr>
<td>1,800+</td>
<td>Unique occupational skill profiles created</td>
</tr>
</tbody>
</table>
Disparate data systems burden employers

Employers face an impossible landscape of data demand from an array of partners, collaborators, suppliers, and supporters.

Problematic results:

- Duplication of efforts/data
- Inaccurate insights & information
- Employers exit rather than adjust
Evolving the Strategy for Shared Skills Data

CURRENT REALITY:
- Siloed and locally focused
- Duplicative and redundant
- Inefficient sharing of insights/data

FUTURE VISION:
- Connected and unified
- Streamlined and interoperable
- Efficient sharing of insights/data
Efficient for industry is efficient for everyone

Removing the burden on employers through more efficient data sharing enables everyone to benefit from greater insights and ability to respond to labor market demands.
Build the world’s wikipedia of skills

A single source of truth to unify the employment ecosystem through our common skills language.
Open Skills Platform
by SkillsEngine (CAEO) at TSTC

Employers
Subject Matter Experts
Associations
Shared Skill Frameworks
e.g. Credential Engine & T3 Competency Frameworks

Curation & Management

Required Skills

Create  Organize  Align

Shared Trends & Insights

Industry & Employers
Educators & Trainers
Workers & Learners
Agencies & Policymakers

Shared Skill Frameworks
e.g. Credential Engine & T3 Competency Frameworks
NOT another way to build resumés, job postings, explore careers, select majors, etc.

A way to make them ALL smarter and more effective, with skills.
Questions & Discussion
APPENDIX
Background
How we got here

Created to address the Chapter 135 Forecasting Mandate (formerly TSTC Forecasting).

**Activities:**
Research, publications, speeches, testimony, public policy, outreach, data modeling.

Created to improve student employability outcomes by aligning curriculum to market needs.

Generated revenue for operations and profit for TSTC.

- Ensuring value for stakeholders
- Maintaining market relevance
- Listening to customer signals
Better employment outcomes for everyone, through skills

We are on a mission to connect educators, employers, agencies, and individuals through a common skills language.

**VALUE**
Create lasting value for TSTC and everyone in the employment ecosystem.

**INNOVATION**
Fuel industry & community progress with innovative tech & data solutions.

**IMPACT**
Drive social impact at scale with a focus on better employment outcomes for all.
Actively contributing to national discussions on skills and outcomes
JOB PROFILES
Start With The End In Mind
User-facing tools utilizing a common skills language

- **Calibrate** software platform for skills-based curriculum alignment
- Skills-based **API data services**
- **Professional Services** offerings

**Teach what matters**
*Aligning educators with industry demand*
Validated Job Profile

1. **Calibrate Job Profiles**
   Identify the occupations that your curriculum targets and the skills students need to succeed.

2. **Engage Industry**
   Collect feedback from Industry SMEs about which skills are most critical.

3. **Align Curricula**
   Leverage Validated Job Profiles to identify skill gaps and align curriculum with Industry needs.

4. **Stay Updated**
   As skill requirements change and occupations evolve, revise and refine Job Profiles to update and keep curriculum relevant.
JOB PROFILES  What is a Job Profile?

A collection of demonstrable, observable, and measurable skills and characteristics.

- Describe the skills required by employers for a specific job or occupation
- Include of four types of skills
What is a Skill?

Job Profiles are living documents that represent the most up-to-date and relevant industry validated skill requirements for a specific occupation.

Comprised of four (4) skill types:

**Work Activities**
How units of time are organized on the job - what you actually do on the job.

**Knowledge Domains**
Areas of knowledge that someone needs to know in order to do the job.

**Employability Skills**
Behaviors, interpersonal skills, character or personality traits, attitudes, social and emotional intelligence – what make you effective at the job.

**Tools & Technologies**
Categories and specific examples of machines, equipment, software, and technologies used on the job.
**JOB PROFILES**  Process Overview

1. **Create or Revise**
   Edit the Job Profile details. Review and rate skills. Make edits based on Industry feedback.

2. **Validate**
   Create a Job Profile Validation to collect feedback and input from your Industry partners.

3. **Publish**
   Use your validated Job Profiles to identify skill gaps in curriculum and more.

4. **Deactivate**
   Archive unused and irrelevant Job Profiles.
<table>
<thead>
<tr>
<th>Critical</th>
<th>Highly relevant, required, and central to this job. Candidates are disqualified if these skills are missing or deficient.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important</td>
<td>Important, complementary, and frequently performed within this job, but not required. Candidates can acquire or become proficient in these skills while on the job.</td>
</tr>
<tr>
<td>Beneficial</td>
<td>Supplementary and helpful, but not necessary for the job. Candidates will benefit from having these skills but are qualified without them.</td>
</tr>
<tr>
<td>Irrelevant</td>
<td>Not relevant to this job. Candidates gain no benefit or advantage in this job from having these skills.</td>
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VALIDATIONS  What is a Job Profile Validation?

A collection of Reviewers and their review of a Job Profile

Reviewers can be Industry experts or advisors, faculty and alumni, or anyone else invited to review the Job Profile.

- The revision being reviewed may not always be the most current revision of the Job Profile
- When a Validation is updated Reviewer feedback is kept and updated with each new revision of the Job Profile
- Closing a Validation will archive all feedback and assigned Reviewers.
Deeply integrated in TSTC core operations to validate curriculum
Where to next?
Utilize a common skills language to unify the employment ecosystem

Build the foundation for a dynamic and self-sustaining skills-based employment ecosystem.
Open Skills Platform + Profile Manager

Give everyone the power to benefit from, and build with, our common skills language.

Putting the world of skills to work for everyone

Our ambition is to create a platform to enrich the existing employment ecosystem with our common skills language and make the resulting insights available to everyone.

Community sourced skills & insights integrated with the employment ecosystem
WHO THIS HELPS

EMPLOYERS

- Greater access to qualified talent
- More efficient signaling of workforce needs to training providers
- Enhanced talent acquisition, retention, development, and planning

JOB SEEKERS

- Greater access to relevant career opportunities
- Improved tools for skills communication and job acquisition
- Enhanced data for career development and planning

EDUCATORS & AGENCIES

- Objective data to align program offerings with employer needs
- Direct regional engagement with employers
- Improved responsiveness to changing industry need
Use Cases
Use Case: Coaches Helping Job Seekers

Career coaches through the Markle network will use the Builder tool directly with job seekers to help them achieve their career goals.

Partner: Rework America Alliance (Markle)

EXAMPLE USE CASES

- Enhance a job seeker’s resumé with career-relevant skills
- Provide an understanding of the skills required for a targeted job
- Explore related skills and careers based on an individual’s skills
- Assess the baseline skills of an individual to inform coaching direction
Use Case: Individuals Seeking a New Job

Job Seekers and students will use the new Skill Builder and Public Library tools to explore and discover career-relevant skills and enhance their job seeking efforts better skills data.

Partner: TSTC, Markle, Texas Workforce Boards

EXAMPLE USE CASES

- Capturing and validating personal skill sets to enrich job seeking activities
- Explore careers/skills related to an individual’s existing skill sets
- Explore skills required for a target career or job progression
Use Case: Industry Certification Standards

Industry certification and standards groups will use the Builder to author and validate skill profiles to feed microcredentials and share with their national network of partners and SME’s.

Partner: ASE

EXAMPLE USE CASES

- Create and validate skill profiles for specific micro-credentials
- Make skill standards publicly accessible through the Public Skill Library
- Exchange skill profiles with partner organizations and network members
Use Case: Employment Ecosystem Integrations

Credly and other partners will integrate the Skill Builder capabilities and Public Library data directly into their existing workflows to help their customers enhance the work they’re already doing.

Partners: Credly, Pairin, CourseTune, etc.

EXAMPLE USE CASES

- Embed skill profiles within shareable Credly credentials
- Enrich Badgr pathway mappings with skill profile data
- Enhance CourseTune workflows with skill profile data
Future State
A connected skills-based employment ecosystem

Share the value of our common skills language with everyone in the employment ecosystem.

- Educators
- Employers
- Students & Job Seekers
- Coaches & Recruiters
- Prof. Certification Organizations
- Partnership Integrations

API

Builder Generate skill profiles

Skill Profiles

Public Skills Library
Community-sourced skills & skill sets

Calibrate Align curriculum skills

Partner Integration

ENHANCED SKILLS DATA
- Career Progressions
- Industry Credentials
- Resumé Enhancement
- Job Post Enrichment
- Recruiting Assessments
- Talent Development

Foundation data & infrastructure will provide opportunities to drive future impact & monetization.
Future State: Unified skills ecosystem

We will continue to open our core capabilities to the public with the goal of simplifying and improving the experience and value for everyone.
VALIDATIONS Process Overview

1. **Create or Update a Validation**
   Automatically created or updated when a Job Profile revision transitions into the “Review” state.

2. **Invite Reviewers using the Shareable Link**
   Reviewers get notified when an update happens.

3. **Revise the Job Profile**
   Start a new revision of the Job Profile that includes the feedback from your Reviewers.

**Diagram:**
- **CREATE/UPDATE** (Send updated Job Profile out for further review)
- **INVITE REVIEWERS** (Activate the Validation)
- **REVISE** (Collect feedback from Reviewers)