



Strengthening the Career Readiness Data Ecosystem: Introducing A Statewide Framework for Improving Policy and Practice

*Advance CTE
March 4, 2021*

Speakers



Austin Estes

Manager of Data & Research

Advance CTE

aestes@careertech.org

@austin_estes



Lee Chipps-Walton

Program Specialist, Federal and State Initiatives, Division of Career and Adult Education

Florida Department of Education

Lee.Chipps-Walton@fldoe.org

Objectives



- Understand the core elements of a high-quality career readiness data ecosystem and state levers of change
- Access tools to evaluate and improve the quality of career readiness data
- Learn how Florida evaluated its career readiness data ecosystem to develop a statewide action plan

New Resources

Career Readiness Data Quality and Use Policy Benchmark Tool

CORE ELEMENT 1
Data is...

CASE STUDY TEXAS
Automated Learning and Statewide Longitudinal Data System

CORE ELEMENT 2
Data systems, policies and practices are fully aligned across agencies and career levels.

CASE STUDY NEW JERSEY
Education to Earnings Data System

CORE ELEMENT 3
Information is used effectively to promote quality and equity in career pathways.

CASE STUDY KENTUCKY
Kentucky Department of Education

CORE ELEMENT 4
Information is used effectively to promote quality and equity in career pathways.

CASE STUDY OHIO
Perkins V Equity Labs

CORE ELEMENT 5
Information is used effectively to promote quality and equity in career pathways.

CASE STUDY KENTUCKY
Kentucky Department of Education

CORE ELEMENT 6
Information is used effectively to promote quality and equity in career pathways.

CASE STUDY OHIO
Perkins V Equity Labs

Career Readiness Data Ecosystem



The broad universe of policies, technology, people and processes that facilitate the collection, analysis, reporting and use of data to support learners along their career pathways.

Value of Data in CTE



- Equity
- Public transparency
- Research and program evaluation
- Continuous improvement
- Accountability

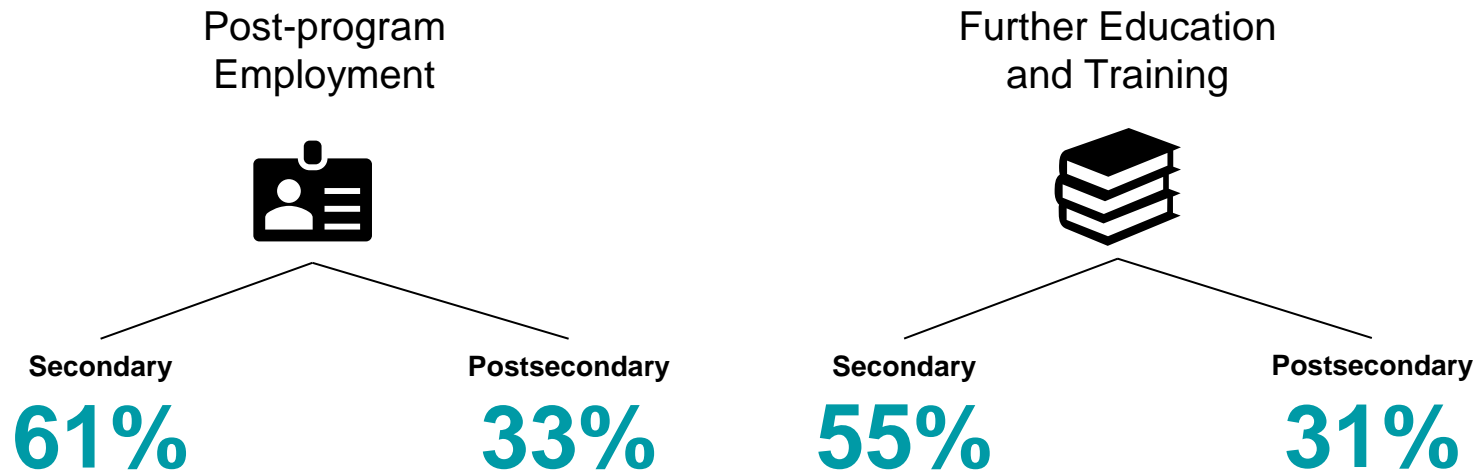
CTE Data Challenges



*Only 45 percent of State CTE Directors say their CTE data systems **provide the information** they need at both the secondary and postsecondary levels*

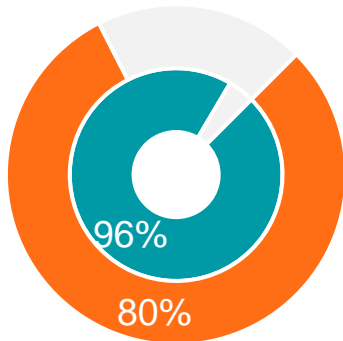
Reliance on Self-Reported Measures

States using survey data to measure learner outcomes

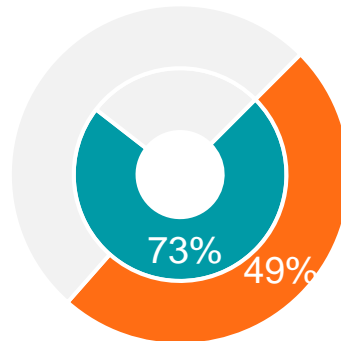


Clarity/Consistency of Definitions

Secondary Industry-Recognized Credentials

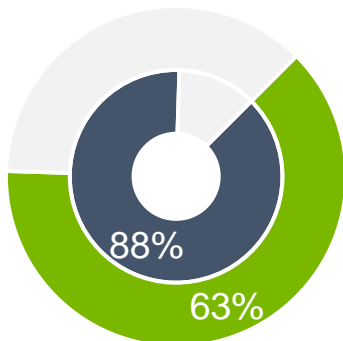


Postsecondary Industry-Recognized Credentials

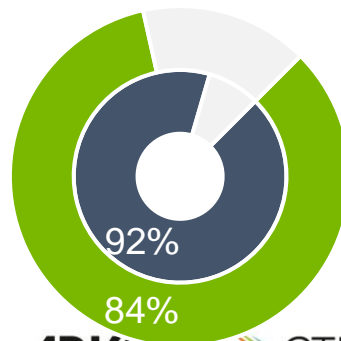


- Have a state-identified list
- Collecting data

Secondary Work-based Learning

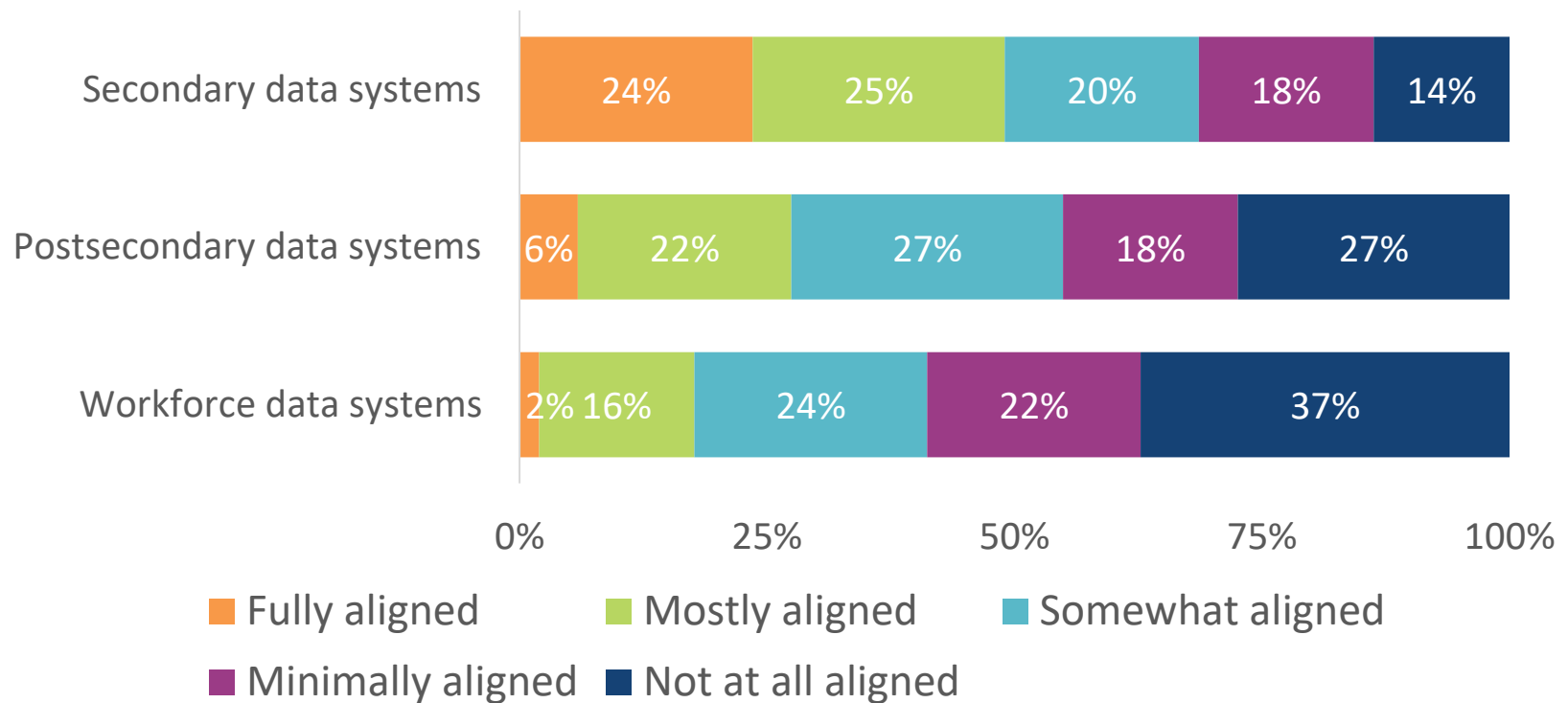


Dual/ Concurrent Enrollment

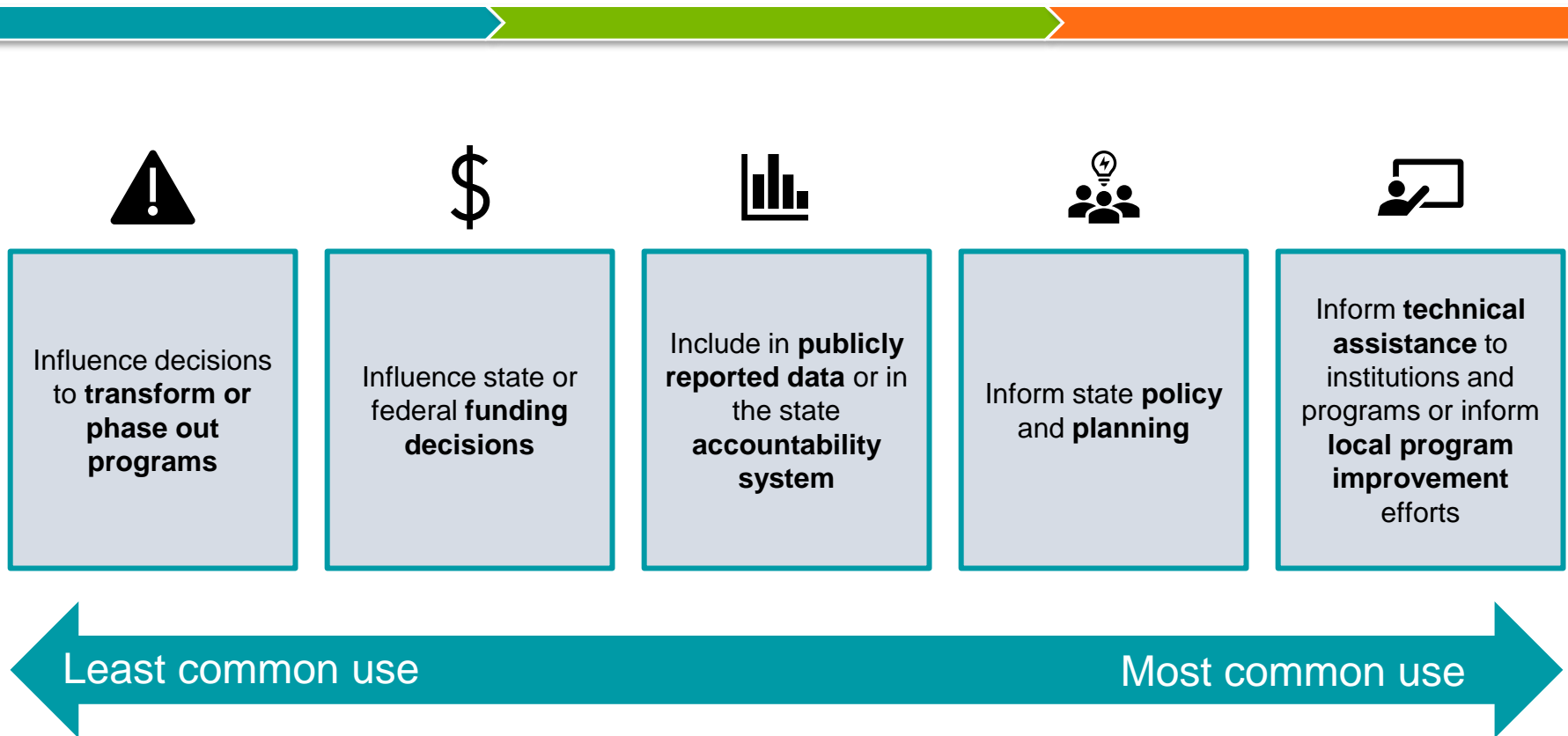


- Have statewide definitions
- Collecting data

Alignment/Interoperability of Data Systems



Use of Data



Core Elements



1. Data is collected consistently and accurately



2. Processes and protocols are in place to ensure effective data governance



3. Data systems, policies and practices are fully aligned across agencies and learner levels



4. Information is relevant, timely and disaggregated



5. Practitioners and the public are equipped to understand and leverage data



6. Information is used effectively to promote quality and equity in career pathways



Data is collected consistently and accurately

- ✓ Data is reliable and collected consistently around the state, across different career pathway programs and across institutions.
- ✓ Processes and protocols are in place to validate career readiness data.
- ✓ Stakeholders are aware of what the data represents, how it will be used and its limitations.



Processes and protocols are in place to ensure effective data governance

- ✓ Roles and responsibilities for collecting, validating and reporting data are clearly laid out in statute and/or policy.
- ✓ Decisions related to the collection and use of career readiness data are coordinated across agencies and responsive to stakeholder needs.
- ✓ State agencies are sufficiently staffed and funded, and structures are in place to withstand personnel and political transitions.
- ✓ Measures are in place to protect the privacy of learner records.



Data systems, policies and practices are fully aligned across agencies and learner levels

- ✓ Learner-level records are reliably linked across agencies and among states, as appropriate.
- ✓ The collection and reporting of career readiness data are coordinated and, to the extent possible, aligned across programs, agencies and learner levels.
- ✓ State agencies use common indicators and business rules for measuring career readiness and align their goals and performance targets.

Information is relevant, timely and disaggregated



- ✓ All information is contextualized to provide a clear understanding of the career readiness system.
- ✓ Reports and dashboards are differentiated by user depending on their need and understanding of the data.
- ✓ Information is made available in a timely manner.
- ✓ Data is disaggregated by population, institution and career pathway and available to relevant users.



Practitioners and the public are equipped to understand and leverage data

- ✓ Public reports are accessible and easy to understand.
- ✓ Professional development and technical assistance are provided to practitioners to build data literacy and help them leverage the data.
- ✓ A statewide career readiness communications strategy is in place that leverages career readiness indicators to tell a story of impact.



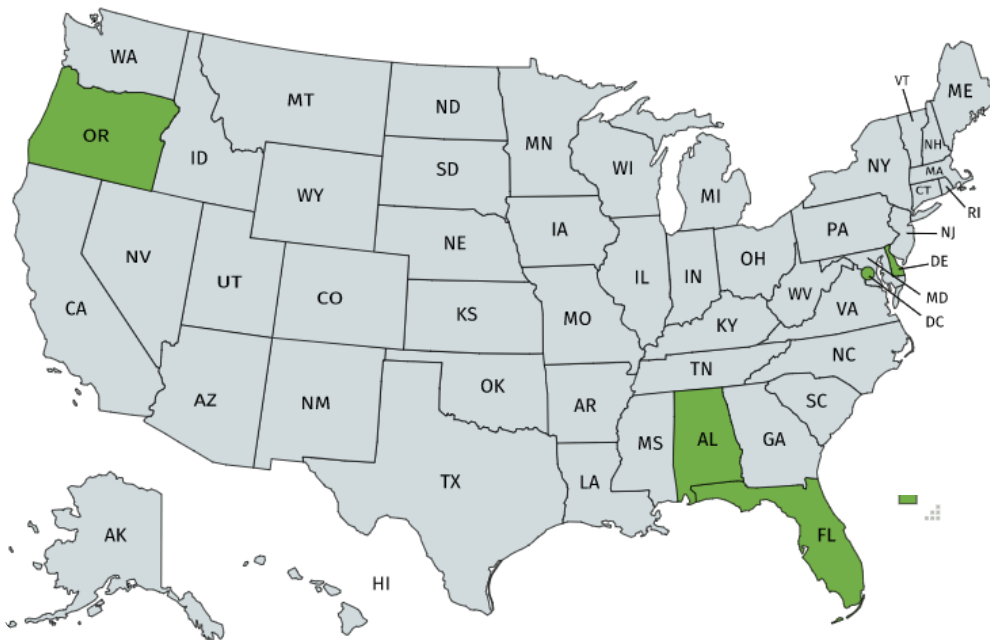
Information is used effectively to promote quality and equity in career pathways

- ✓ Career pathway approval and renewal processes are data driven.
- ✓ State- and local-level decisionmakers regularly reflect and act upon data to inform policy and improve equity, access and quality.
- ✓ State and local leaders regularly identify and respond to opportunity gaps by race/ethnicity, gender and special population status to ensure equitable access to and success in career pathways.
- ✓ Local practitioners have access to real-time data that they use to target interventions.

State Levers of Change



Advancing Postsecondary CTE Data Quality



- Supported by ECMC Foundation
- Two-year, state-led project to improve postsecondary CTE data

If It Matters, Be Systematic Reflections on Structuring Data Initiatives

*Lee Chipps-Walton
Program Specialist
Federal and State Initiatives
Division of Career and Adult Education
Florida Department of Education*



Your Problem: Too Little & Too Much

You got into education to make a difference for students and to get big things done...

...but you don't have the resources to do it solo (*too little!*)

...and you work in a hulking bureaucracy (*way too much!*)

So, how do you stay productive?



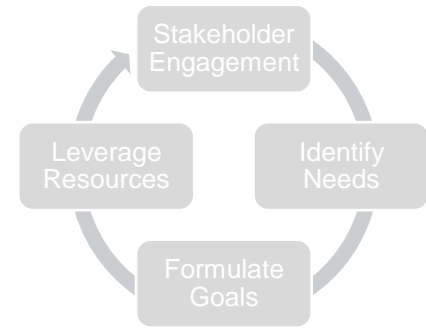
This Photo by Unknown author is licensed under CC BY-SA

Get Systematic

Have a clear project lifecycle in mind. Be okay with making exceptions.

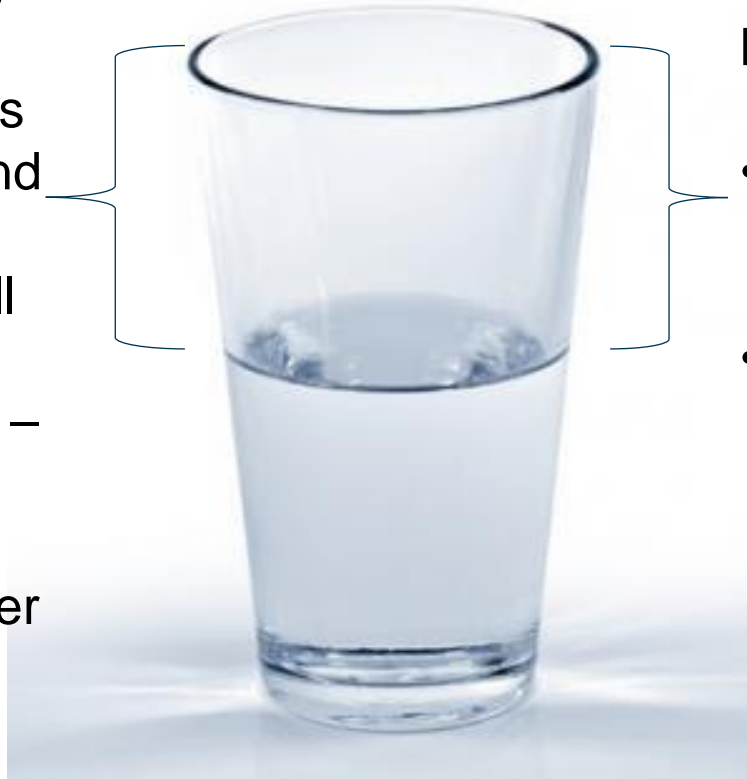


Be Simultaneously Pessimistic & Optimistic



Half-Empty Mentality

- The glass is NOT as full as it could be and no one else is probably going to fill it
- Focus on problems – perform a needs assessment using data and stakeholder engagement



This Glass Will Be Full Mentality

- There is more water to pour in! This glass could be so full!
- Focus on finding the right solution (brainstorm, borrow from other agencies, research evidence-based practices)

Context: FL Work-Based Learning Data Initiative

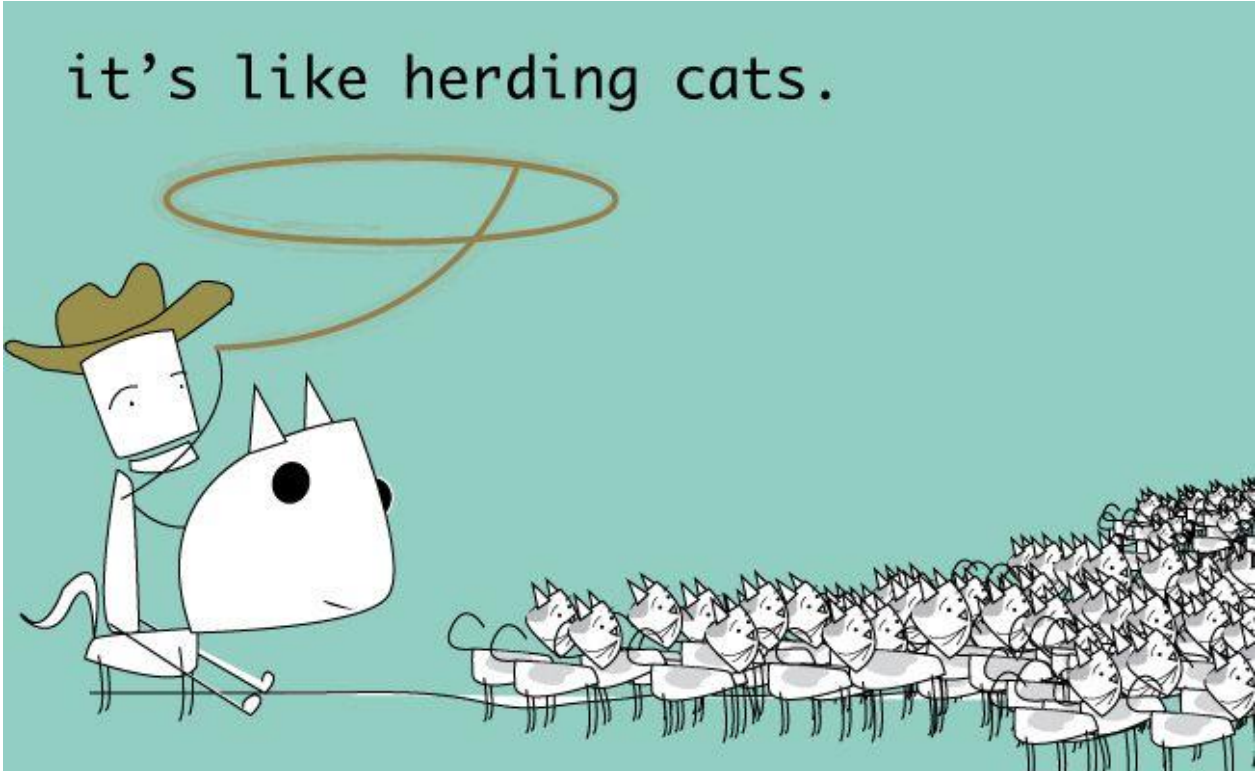
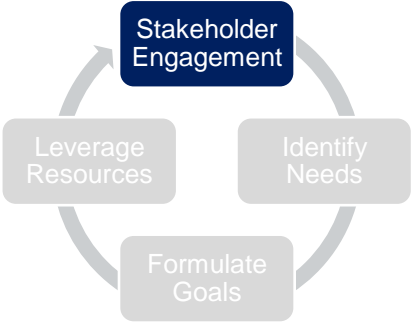
- The FDOE has received a two-year grant from the ECMC Foundation, which is administered by Advance CTE
- During this two-year grant period we hope to:
 - **Outcome #1:** Provide the information necessary for agencies and the FDOE to make informed decisions on resource allocation related to work-based learning participation, quality, and equity by 2023-24 for planning the 2024-25 school year.
 - **Outcome #2:** Increased work-based learning data transparency will spur a higher percent of postsecondary CTE students participating in WBL and a higher number of average WBL participation hours per student across the first three years of data availability - 2024-25 through 2026-27.
 - **Outcome #3:** FL's economy will be strengthened by higher placement rates, higher average starting salaries, increased credential attainment rates, and an increased number of employers involved in CTE by offering WBL by the year 2030.

More and Better
Information

More and Better
Work-Based
Learning

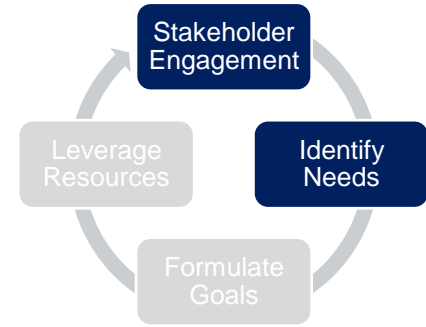
Improved
Economic
Outcomes

Get Out the Lasso



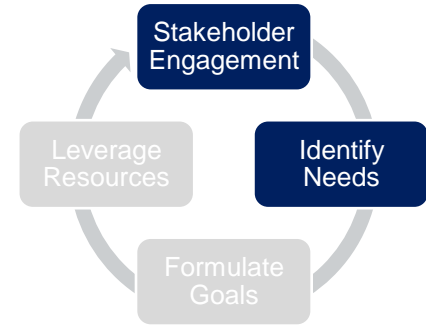
[This Photo](#) by Unknown author is licensed under [CC BY-NC-ND](#).

Stakeholder Mental Model



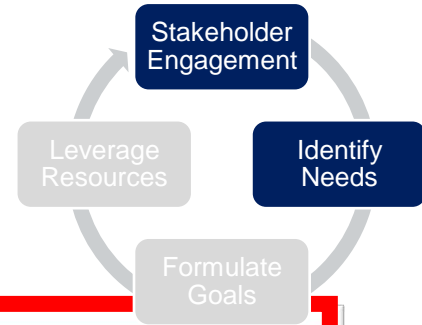
Stakeholder Category	What They Can Offer	Role Characterization
Senior Leadership	Deep subject matter expertise Limited time availability	Oversight Insight Approval
Diverse Advisory Team	Broad subject matter expertise A medium amount of time availability	Subject matter expertise Thought partners
Core Team	Significant time investment	Worker bees In-depth writing, planning, research, and analysis

Stakeholder Model in Action



Stakeholder Category	How They Were Engaged
Senior Leadership	<ul style="list-style-type: none"> • Vision formation • High-level needs identification • Final approval of plan and budget
Diverse Advisory Team	<ul style="list-style-type: none"> • Mid-level detailed input on needs • Problem solving of specific expertise areas
Core Team	<ul style="list-style-type: none"> • In-depth engagement on synthesis, analysis, and writing

Stakeholder Model in Action – Needs Assessment (2 of 2)



1. Data are collected consistently and accurately
In order to be trusted, policies and protocols must be in place to ensure the accuracy of career readiness data. If the data are accurate and will be used, public trust in the data will grow.

6 High-level Categories

of reliable, valid and complete they represent and how they

21 Medium-level Categories

Dozens of In-Depth Rubric Items

A. Data are reliable and collected consistently

- There are limited to no uniform definitions or business rules for collecting career readiness data.
- Career pathways participants and concentrators are identified manually at the local level and reported up to the state.
- There is limited to no statewide guidance for collecting, validating and submitting data.
- There are limited to no regular trainings provided to local data administrators.
- Spreadsheets are used to collect and report data to the state.

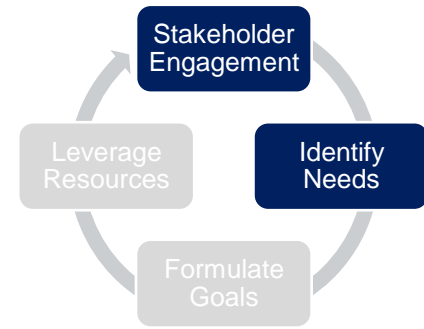
- Statewide definitions and business rules are in place to describe all data elements. Business rules are changed only in the interest of improvement or alignment to new legislation or policy, and data is collected consistently and in the same format across
- Statewide guidelines clearly and effectively describe processes for collecting, validating and submitting data elements.
- Local data administrators have regular, sufficient and timely training (at least once a year) to ensure a full understanding of data rules, policies and technology.
- Local data administrators submit data directly to the state data system using a secure, web-based portal

Rating
 1 2 3 4

Evidence

Community College & Technical Center Management Information Systems (CCTCMIS) and Workforce Development Information System (WDIS) gather data at the college and postsecondary district technical college/center level.

Senior Leadership: High-Level Perspective and Approval



- Senior Leadership gave strengths/weaknesses and vision input on the 6 main categories of the Advance CTE needs assessment

Survey question examples:

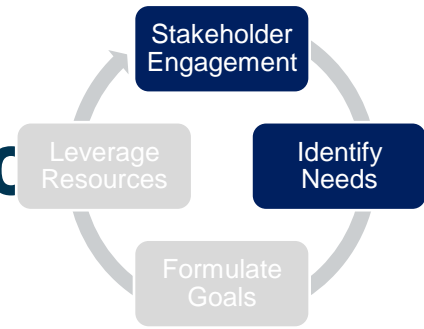
2. Data collection consistency and accuracy.

Strengths:

Areas of potential growth:

10. Investing Strategically: We have been awarded \$70,000 in grant funds over two years to improve work-based learning data quality at the postsecondary level. Where should we focus on investing that money? What needs are most important?

Diverse Advisory Team Approach



- Our broader group of stakeholders gave ratings on the 21 secondary needs assessment categories as well as overall strengths and weaknesses

18. A statewide career readiness communications strategy is in place that leverages career readiness indicators to tell a story of impact

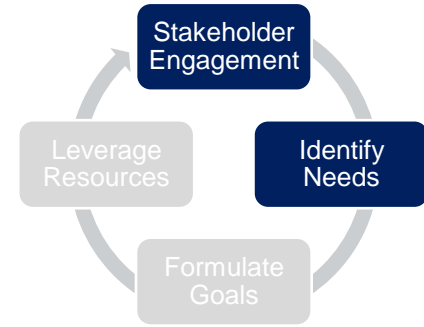
- 1 - Undefined
- 2 - Building
- 3 - Promising
- 4 - Established

19. List Your State's Top Learning Data System Strengths:

20. List Your State's Top Learning Data System Challenges:

Core Team: In-Depth, Nitty Gritty Work

The Core Team synthesized the input and conducted detailed work on Policy Benchmark Tool reading through in-depth needs assessment categories and providing evidence



Element/ Sub-Element	1 (Undefined)	4 (Established)	Rating and Rationale
1. Data are collected consistently and accurately			
<i>In order to be trusted, policies and protocols must be in place to ensure the consistent collection of reliable, valid and complete career readiness data. If the data are accurate and complete, and stakeholders understand what they represent and how they will be used, public trust in the data will grow.</i>			
A. Data are reliable and collected consistently across different programs and around the state	<ul style="list-style-type: none"> There are limited to no uniform definitions or business rules for collecting career readiness data. Career pathways participants and concentrators are identified manually at the local level and reported up to the state. There is limited to no statewide guidance for collecting, validating and submitting data. There are limited to no regular trainings provided to local data administrators. Spreadsheets are used to collect and report data to the state. 	<ul style="list-style-type: none"> Statewide definitions and business rules are in place to describe all data elements. Business rules are changed only in the interest of improvement or alignment to new legislation or policy, and data is collected consistently and in the same format across the state. Designations such as career pathways “participants,” “concentrators” and “completers” are identified using automated data processes. Statewide guidelines clearly and effectively describe processes for collecting, validating and submitting data elements. Local data administrators have regular, sufficient and timely training (at least once a year) to ensure a full understanding of data rules, policies and technology. Local data administrators submit data directly to the state data system using a secure, web-based portal. 	<p>Rating</p> <p><input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 4</p>
Evidence			
Community College & Technical Center Management Information Systems (CCTCMIS) and Workforce Development Information System (WDIS) gather data at the college and postsecondary district technical college/center level.			

Strengths and Challenges



From the needs assessment, we knew FL had the following strengths to build from and challenges we'll need to overcome.

Strengths

- Longitudinal data system
- Data governance system
- Data submission calendar, dictionaries, guidelines
- Data verification process

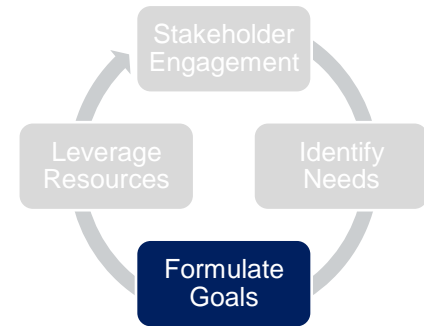


Challenges

- CTE data dashboards
- Local and State data staff turnover



Starting at the End



Long-Term Impacts

Describe 3-4 long-term impacts of the initiative.

1	Provide the information necessary for agencies and the FDOE to make informed decisions on resource allocation related to work-based learning participation, quality, and equity by 2023-24 for planning the 2024-25 school year.
2	Increased work-based learning data transparency will spur a higher percent of postsecondary CTE students participating in WBL and a higher number of average WBL participation hours per student across the first three years of data availability - 2024-25 through 2026-27.
3	FL's economy will be strengthened by higher placement rates, higher average starting salaries, increased credential attainment rates, and an increased number of employers involved in CTE by offering WBL by the year 2030.
4	

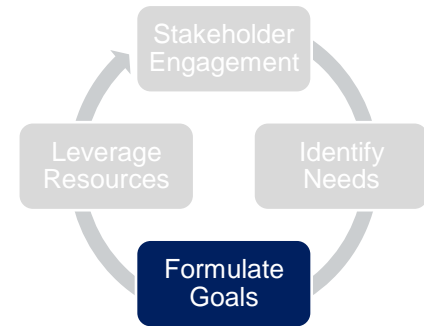
Impacts:

- Improved WBL resource allocation decisions
- Expanded and improved WBL participation
- Stronger economy, improved student outcomes

The Arc of Productivity



Get Specific & Keep Asking 'Why?'



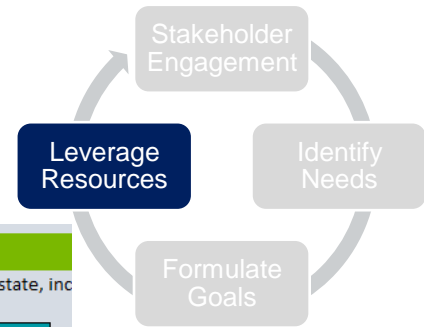
Year One SMART Goals		Year One Outcomes	
List 3-4 goals for the first year of the initiative. Make sure your goals are specific, measurable, attainment, relevant and time-bound.		How will you measure the success of your Year One SMART goals? By the end of 2021, what outcomes will you achieve? Be specific.	
1	An outside consultant will draft a report by March 31, 2021 that outlines how other states define “work-based participation” and “quality” as it relates to work-based learning.	1	Information from this report will guide decisions related to the WBL work group drafting WBL data elements by May 28, 2021.

- Formulated SMART goals and outcomes while focusing on listing:
 - Who – the acting agent
 - What – the deliverable
 - When – the due date
 - Why – the outcome

Resource Identification

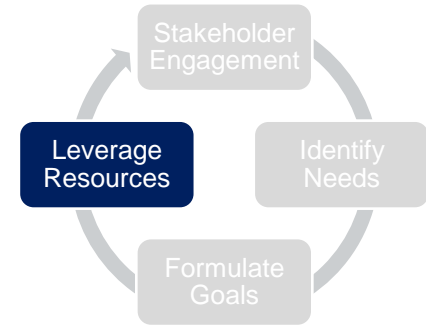
Like making a packing list for a long trip, list out everything you'll need, you have, and that you'll need to get. Including:

- Additional funding sources
- Staffing
- Partners
- Technology
- Other



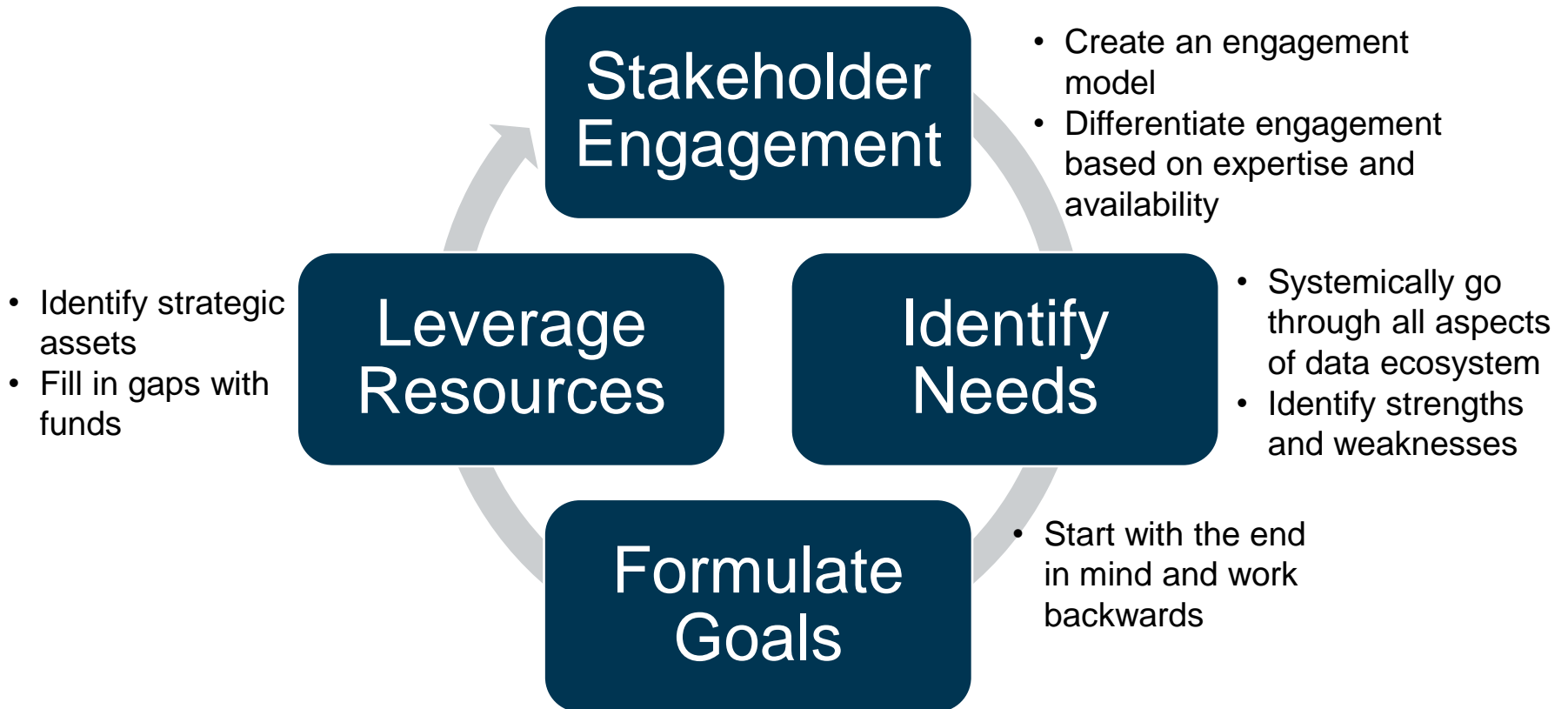
Resources
List the resources available in your state, inc
Funding <i>What funds are available to support this initiative? Consider public dollars (Perkins V, state funding), philanthropic dollars and other sources of revenue.</i>
Staffing <i>What is your staffing capacity to support this work? How many state-level personnel are available to support the implementation of this action plan?</i>
Partnerships <i>Are there any existing partnerships with employers, state networks, associations, etc. that can support this work through in-kind support or other resources?</i>
Technology <i>What infrastructure is readily available and can be leveraged to support this initiative?</i>
Other <i>Are there any other resources that can be leveraged to support implementation of this action plan?</i>

Fill in the Gaps with Money



Process Step	Budgetary Reinforcement
Research	<ul style="list-style-type: none"> • Surveying FL agencies • Researching other states' approaches
Definition Drafting	<ul style="list-style-type: none"> • Facilitated collaboration • Advisory stipends
Training	<ul style="list-style-type: none"> • Training plan draft • Advisory stipends • Printing and distribution costs • Travel costs
Data Collection & Transparency	<ul style="list-style-type: none"> • Tableau subscriptions
Data-Informed Decision Making	<ul style="list-style-type: none"> • Report on how other states incentivize, fund, and support WBL

Summary of Process



My Contact Info

Lee Chipps-Walton

Program Specialist

Florida Department of Education

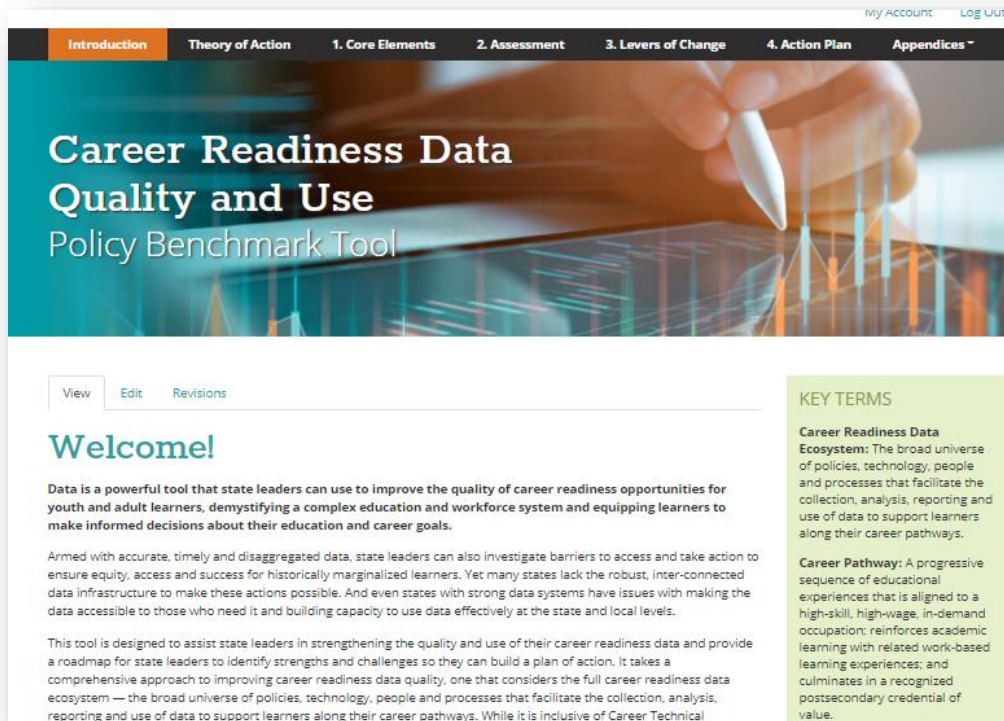
Division of Career, Technical, and
Adult Education

(850) 245-0911

[Lee.Chipps-
Walton@fldoe.org](mailto:Lee.Chipps-Walton@fldoe.org)



Tools and Resources



My Account Log Out

Introduction Theory of Action 1. Core Elements 2. Assessment 3. Levers of Change 4. Action Plan Appendices

Career Readiness Data Quality and Use Policy Benchmark Tool

View Edit Revisions

Welcome!

Data is a powerful tool that state leaders can use to improve the quality of career readiness opportunities for youth and adult learners, demystifying a complex education and workforce system and equipping learners to make informed decisions about their education and career goals.

Armed with accurate, timely and disaggregated data, state leaders can also investigate barriers to access and take action to ensure equity, access and success for historically marginalized learners. Yet many states lack the robust, inter-connected data infrastructure to make these actions possible. And even states with strong data systems have issues with making the data accessible to those who need it and building capacity to use data effectively at the state and local levels.

This tool is designed to assist state leaders in strengthening the quality and use of their career readiness data and provide a roadmap for state leaders to identify strengths and challenges so they can build a plan of action. It takes a comprehensive approach to improving career readiness data quality, one that considers the full career readiness data ecosystem — the broad universe of policies, technology, people and processes that facilitate the collection, analysis, reporting and use of data to support learners along their career pathways. While it is inclusive of Career Technical

KEY TERMS

Career Readiness Data Ecosystem: The broad universe of policies, technology, people and processes that facilitate the collection, analysis, reporting and use of data to support learners along their career pathways.

Career Pathway: A progressive sequence of educational experiences that is aligned to a high-skill, high-wage, in-demand occupation; reinforces academic learning with related work-based learning experiences; and culminates in a recognized postsecondary credential of value.

- Roadmap
- Needs assessment
- Action planning tool
- Case studies
- Resource repository

<https://dataquality.careertech.org/>

Q&A



Thank You



Austin Estes

aestes@careertech.org

Lee Chipps-Walton

Lee.Chipps-Walton@fldoe.org