

# NRCCTE and NOCTI Present

# CTEDDI

Career and Technical Educators  
Using a Data Driven Improvement Model



CCI Washington D.C.

June, 2012

Sandra Pritz and Debra Andrews

# The National Research Center



 UNIVERSITY OF MINNESOTA

 Cornell University



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Association for Career and Technical Education

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# What is CTEDDI?

- **Training that is highly interactive**
- **A process, not a one time event**
- **Uses data that teachers and schools own**
- **Builds on the success of an ever increasing community of practice**
- **Ongoing state-supported mentorship, local coaches, and online help**



# Why?



“We are drowning in data and starved for knowledge”

# The CTEDDI Instructional Improvement Cycle

## 5 Steps

Collect Data

Analyze Data

Verify & Triangulate

Design Action Plan

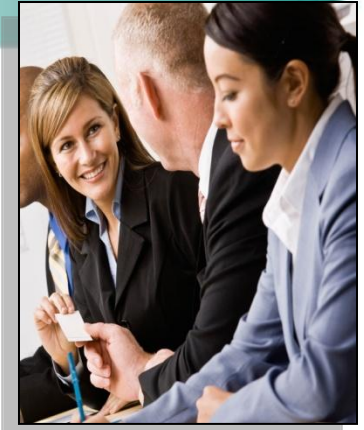
To Improve Learning & Instruction

Implement Plan &  
Review Outcomes

**ONGOING**

# What's Involved?

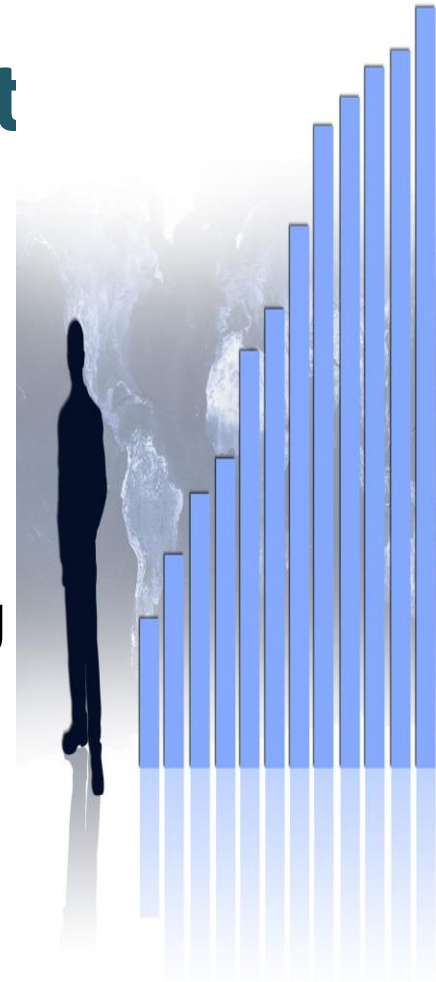
- **Workshop(s) Facilitated by In-State Facilitator**
- **Sharing Center**
- **Internal and External Community of Learners**
- **Mentoring Through the School Year**
- **A Local Team Approach**
- **Development and Implementation of an Action Plan  
with YOUR data**





# Sample Workshop Content of Educator Training

- **Common assessment terms**
- **Sample reporting formats**
- **Methods of interpreting data**
- **How to interpret data in an applied setting**
- **External factors that can impact test scores and trends over time**
- **Strategies for using data**
- **Emphasis on interactive activities, contextualized to participants' own school, follow up in terms of an action plan**



## Step 4: Design an Action Plan Final

### Worksheet 5: Prioritize

Name:  Program: Business Administration School:

**Directions:** From your program's baseline (pretest) data, develop goals and performance targets; determine the indicators of success and whether new practices need to be implemented as part of the next steps and timing. Use information and data sources identified in the previous worksheets for this exercise.

**Overall Goal:** To further improve the technical competency of the KTC McAlester Business Administration program using evidence from class results on the NOCTI and ODCTE state competency test.

**Summarize the strengths in your data:** My program's data shows strengths in the areas of computer applications, working in an office environment, and office procedures.

**Summarize the weaknesses or gaps between the status and the standards your program or school needs to achieve:** The class has weaknesses in the areas of accounting and computational skills and records management.

Prioritize desired short term

Data Required:

Indicators of Success:

Steps for current school year:

Strategies for groups or individual students



# Professional Development Sharing Center



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To upload a file... Click Browse to select, then Upload.

## Educational Resource Articles

[DesignActionPlanFinal.docx](#)

mark.jett

[Form for Credit.jpg](#)

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[Statistical resources for data.doc](#)

carol.hodes

[Data plan narrative.doc](#)

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Teacher  
Clearfield, PA

Health Occupations people, how are you using Nocti Pretest data? --- [beth.rhymestine](#) 3/17/10

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Teacher  
Swenson, PA

Received my first homework assignment. Looking for carpentry instructors willing to discuss NOCTI strategies utilizing Pre-Test data to improve instruction. We have created some helpful NOCTI driven curricular documents in the School Dist. of Phila. recently that are aiding us in focusing the carpentry, electrical and plumbing programs in an organized framework. Hope we can be helpful. --- [Patrick.durkin](#) 3/16/10

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# Follow-up (by webinar, visit, phone)

## Purpose:

- To provide mentoring for implementation of action plans
- To share strategies that are working
- To identify any barriers

## Questions:

- What is going well?
- What are your challenges?
- What has been the reaction by students?
- What additional resources do you need?

## Next Steps:

- Continue to implement action plan
- Make notes of any successes or barriers
- Share on the professional sharing site

# Successes Reported in Pilot Sites

**Educators saw positive improvements based on the instructional changes they had made, such as :**

- **reviewing areas of general weakness,**
- **finding new materials and resources to use with the students,**
- **adding to the curriculum or changing curriculum timing,**
- **assisting or getting assistance for individual students to address weaknesses.**

# CTEDDI's Origin: three years of research and development

- Survey research and literature review  
*How CTE uses data to inform instruction*
- Intervention Development
  - Pilot of the intervention and iterative refinement
  - Extended reviews and model verification
  - Market and viability research



# Benefits of CTEDDI

## Educators

- Data-driven instructional improvement
- Improved ability to meet accountability goals
- A positive educational impact

## CTE Community

- Practical application of Perkins data
- Logic-based policy tool
- Demonstrate ROI

## Everyone

- Increased student achievement
- Enhanced preparation for college and careers
- Gains in workforce competence/productivity



# Who Should Participate?

- **Statewide, state-determined teams**
  - Ongoing support
- **Large city school systems**
  - Ongoing support
- **Local administrators and teachers \***
- **Individual teachers \***
- **Those who just plain love data! \***

**\* Jump-Starts or Introductory PD**





# Ways to Participate

## Statewide Implementation

- State DOE support
- Use of Sharing Center
- Ongoing mentorship
- Access to evolving resources
- Access to a national network
- Statewide common workshops on data
- Use of real data

## Jump-Start

- Local support
- Access to existing resources (for the Jump-Start days only)
- 2-day workshop on CTEDDI process
- Use of mock data

## Introductory PD

- Access to existing resources (for the day only)
- 1-day (or less) workshop
- Use of a portion of exercise data

# CTEDDI in Maine



National Career Clusters Institute

Washington, DC

June 18 – 20, 2012

# Maine's Journey into CTEDDI

## Phase One: June – August 2011

- June 19, 2011 – National Career Clusters, Atlanta, GA: participation in NRCCTE's CTEDDI Jump Start
- June – August 2011 – Selection of potential Maine CTE centers/regions for CTEDDI training
- August 2 – 3, 2011 – CTEDDI Training in Louisville, KY

# A Primer on the Great State of Maine

- Rugged individualists (*translates into local control*)
- Large state geographically, small in numbers (*meaning it's hard to get there from here*)
- Yankee ingenuity (*committing to make it work well on a nickel and dime budget*)



Lincoln

Waldo

Rockland

Bath

Brunswick

# Maine's Journey into CTEDDI

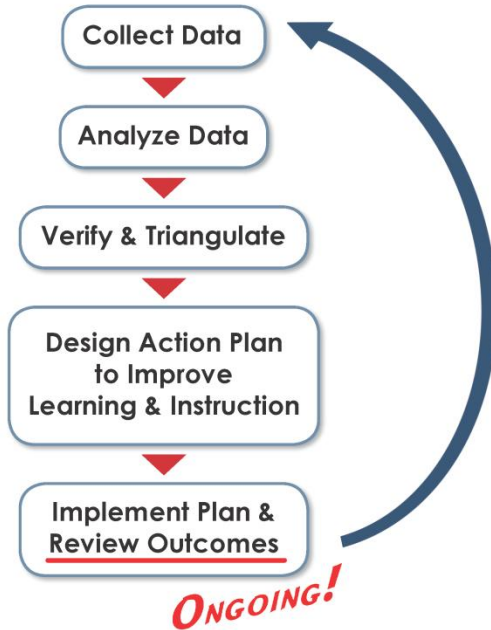
## Phase Two

- August 4, 2011 – MACTE conference overview on CTEDDI
- August 24, 2011 – CTEDDI Team Leader Training
- September 2011 – Visits to five CTE centers/regions for CTEDDI Orientations
- October – December 2011 - CTEDDI training



# Instructional Improvement Cycle

## 5 Steps



# The Maine CTEDDI Team

- Local Team Leaders:
  - 1 Director (Waldo)
  - 1 Assistant Director (Brunswick)
  - 1 Curriculum Coordinator (Rockland)
  - 1 Head Teacher (Bath)
- State Facilitator: Maine Department of Education  
CTE Specialist

# The Maine CTEDDI Team

CTE Center/Region	Instructors' Programs
Bath Regional Technical Center	<ul style="list-style-type: none"><li>•Cooperative Education</li><li>•Applied Academics</li><li>•Composites Manufacturing</li><li>•Drafting</li></ul>
Brunswick Region 10	<ul style="list-style-type: none"><li>•Early Childhood Occupations</li><li>•Building Trades</li><li>•Health Services Occupations</li></ul>
Waldo Region 7	<ul style="list-style-type: none"><li>•Culinary Arts</li><li>•Health Services Occupations</li></ul>
Rockland Region 8	<ul style="list-style-type: none"><li>•Culinary Arts</li><li>•Cooperative Education</li><li>•Health Services Occupations</li></ul>

# Maine CTEDDI Training

## Monday Morning Quarterbacking

- Pre-testing – Reinforce the concept and the expectations!
- Team Leader – Plays a critical role
- Collaboration among participating schools – one thing too many!
- Support from NRCCTE – Priceless!!

# June 2012 – AY 2011 – 2012 Feedback

- Our team found it best to customize the action plans.
- Although the teams did not choose to use the sharing center, collegiality among sites increased.
- Our instructors love data for instructional improvement.

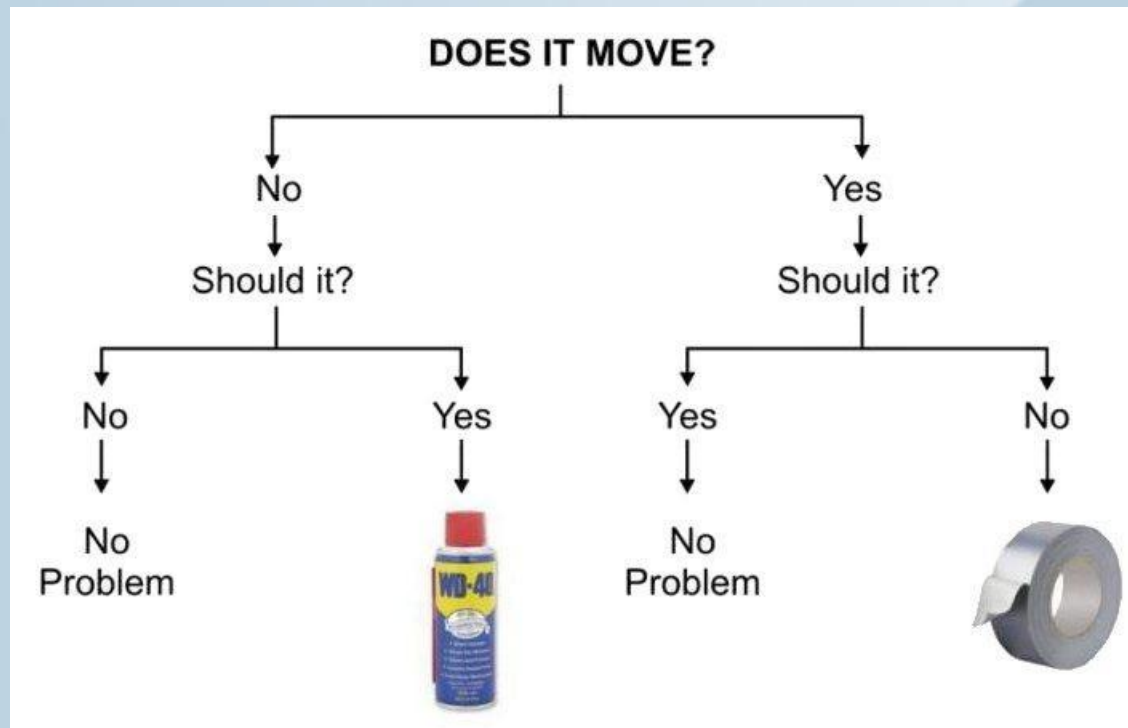
# Maine's Journey into CTEDDI

## Phase Three: AY 2012 - 2013

- Continue with AY2011-12 pilot centers/regions
- Best Practices session at MACTE Directors' Update in August 2012
- Best Practices session at MACTE Conference in October 2012
- Invite 2 – 4 new centers/regions
- Pilot with CTE tech groups



# Some CTE Humor...



# Thank You!

Debra Andrews

Education Specialist

Career and Technical Education

Technical Standards and Assessments

Maine Department of Education

(207) 624-6724

[debra.andrews@maine.gov](mailto:debra.andrews@maine.gov)

# The Timeline

Month/Date/Timing		Event
August 2- 3		National facilitator training for state-designated facilitators and state assessment coordinators (optional). University of Louisville (NRCCTE), Louisville, KY
August	Prior to start of school	In-state session with the state facilitator, assisted by NRCCTE staff, and administration of up to 10 school districts, teacher teams (voluntary), and the State Department of Education.
August	First local pre- or in-service day	Local administrator explains CTEDDI process, schedules pretest times for entire faculty (a briefing of the 3 to 5 selected program areas prior to this meeting is suggested).
October		Students pretest and teachers receive pretest data.
October		Common session on the CTEDDI process for all schools in state. State facilitator, with NRCCTE staff assistance, presents CTEDDI Steps 1-4 to administrator(s) of 10 school districts, teacher teams (for the 3 to 5 program areas), and the State Department of Education.
October		Individual Action Plans (for the 3 to 5 program areas) are drafted and posted on the CTEDDI Sharing Site within 2 weeks.
November	Before Thanksgiving	State facilitator visits each school to monitor plan implementation. Establish date for post-testing, for those utilizing this option.
January through April	Prior to (optional) posttesting	State facilitator conducts a site visit to each school to review CTEDDI Step 4.
Spring semester		State facilitator conducts meetings with school team using technology to present CTEDDI Step 5 ; a combination of e-mail, or phone/web conferencing at least once per month at a minimum.
May		State facilitator conducts a wrap-up site visit to each school to explain the value of using longitudinal data and continued participation. Review posttest results (if utilized) and interpret for action plan effectiveness and impact for coming year.

# How Can I Apply?

## State Implementation

- Request an application packet from [laferr03@louisville.edu](mailto:laferr03@louisville.edu) or [nocti@nocti.org](mailto:nocti@nocti.org)
- Formal agency letter with application by June 31, 2012
- Site identification and contact information

## Individual Introductory PD or Customized Option

- Contact [laferr03@louisville.edu](mailto:laferr03@louisville.edu) or [nocti@nocti.org](mailto:nocti@nocti.org)

# CTEDDI Deliverables

- **National leadership training and orientation for two (2) days for the leadership team at the University of Louisville campus, including;**
  - **CTEDDI leader presentations**
  - **Site leadership handbooks and training materials**
  - **Development of tasks and timelines for the state leadership team**
- **A suggested on-site state leadership team meeting for one day prior to the professional development workshop (fall), including:**
  - **Pre-PD agenda in advance of each session**
  - **Master copies of all materials necessary to conduct the workshops**
- **Communication with the leadership team via e-mail and phone contact as requested by the state leadership team or the NRCCTE:**
  - **Timely exchange of e-mails and phone contacts made between the NRCCTE facilitator and the state leadership team**
  - **NRCCTE facilitator initiation of periodic contacts with the state leadership team regarding tasks that need to be completed during the project**

## **CTEDDI technical assistance information and professional development materials developed by NRCCTE:**

- **CTEDDI materials for educators and the leadership team**
- **Access to web-based materials such as NRCCTE research summaries, newsletters**
- **Resources for teachers and the leadership team provided on the CTEDDI Sharing Site**

## **Assistance with evaluation of professional development effectiveness:**

- **Assistance in utilizing or developing evaluation instruments and methods:**
  - **Provision of evaluation instruments developed by the NRCCTE**
  - **Advice in the development of additional evaluation instruments by the state**
- **Assistance in post-project evaluation:**
  - **Provide focus group questions for a post-project evaluation**
  - **Assist in conducting post-project evaluation focus groups**
  - **Summary of end-of-year evaluation results**

# State Technical Assistance Cost Estimate Worksheet

NRCCTE Technical Assistance Base Fee*	State Costs
<p>See the University of Louisville/NRCCTE Sample Service Agreement (Appendix D) *The NRCCTE offers CTEDDI technical assistance on a cost-recovery basis. This fee is based on implementation in 10 CTE sites. If your state is interested in implementing in more than 10 sites, a new estimate will be prepared. Estimates are based on standard travel in the contiguous 48 states. Destinations that require increased travel costs will be estimated on a case-by-case basis.</p>	
<p><b>State Leadership Team</b></p>	
<p><b>Expenses to consider:</b></p> <ul style="list-style-type: none"> <li>• Time dedicated to the project</li> <li>• Team expenses including transportation, lodging, per diems for the state facilitator and state assessment coordinator</li> <li>• Facility rental for the October common session</li> <li>• Equipment and supplies</li> <li>• Food and refreshments</li> </ul>	
<p><b>Educator Professional Development</b></p>	
<p><b>Expenses to consider:</b></p> <ul style="list-style-type: none"> <li>• Stipend and/or substitute pay for the October common session and possibly for on-site meetings</li> <li>• Transportation, lodging, and per diems for the October common session</li> </ul>	
<p><b>Student Post-testing (Optional, conducted at the discretion and expense of the state)</b></p>	
<p>Estimated per student cost for post-testing : \$14 (discounted for NRCCTE/CTEDDI participant programs)</p>	
<b>Total</b>	



# Your Questions, Please

## Research

- ??

## Concepts

- ??

## Process

- ??

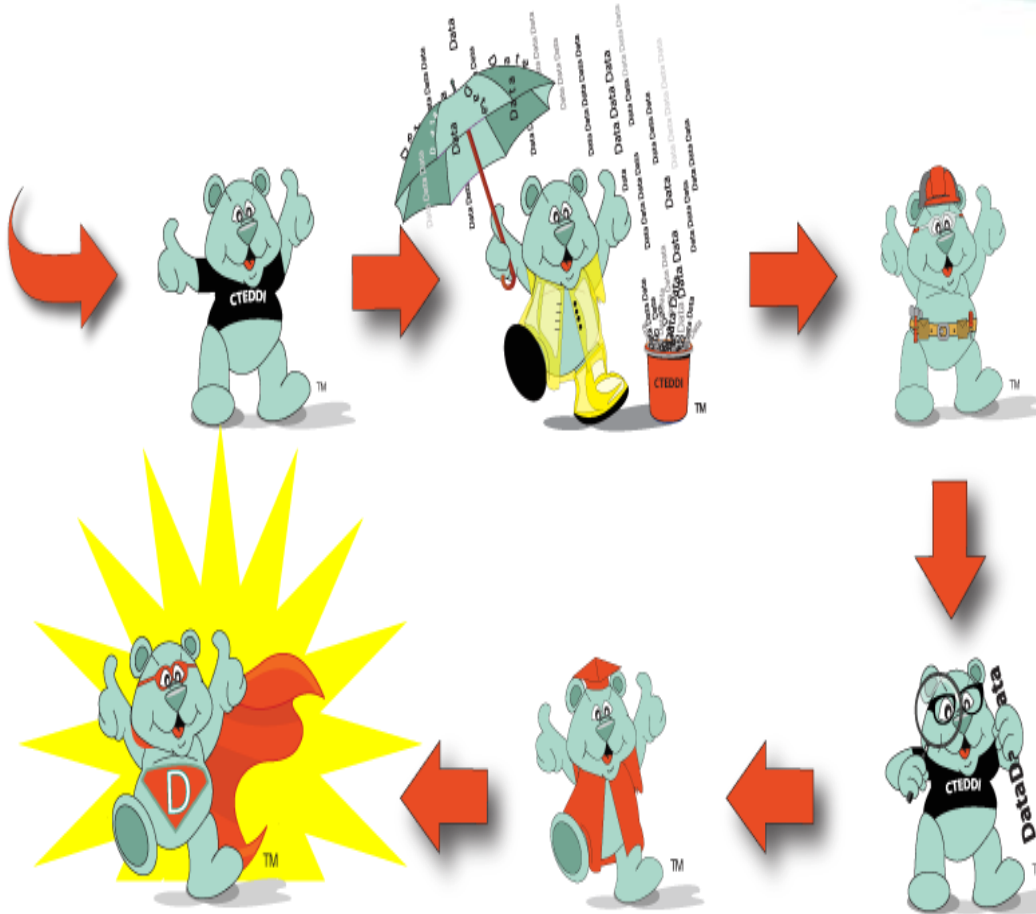
## Costs

- ??

## Customization

- ??

# Thank You!



**John Foster, Ph.D.**  
**Carol Hodes, Ph.D.**  
**Patricia Kelley, Ph.D.**  
**Sandra Pritz, Ph.D.**

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