Improving Secondary CTE through Professional Development: Alternative Certification and the Use of Technical Assessment Data

ACTE, St. Louis, MO, Nov. 18, 2011

Room 260

3:45 -4:45 p.m.

Dr. John Foster

NRCCTE National Research Center for Career and Technical Education

Let's Talk About…

NRCCTE and the big picture
- The mission
- The partners

CTEDDI
- The need
- The process

Alternative Certification
- XXThe mission
- XXThe partners

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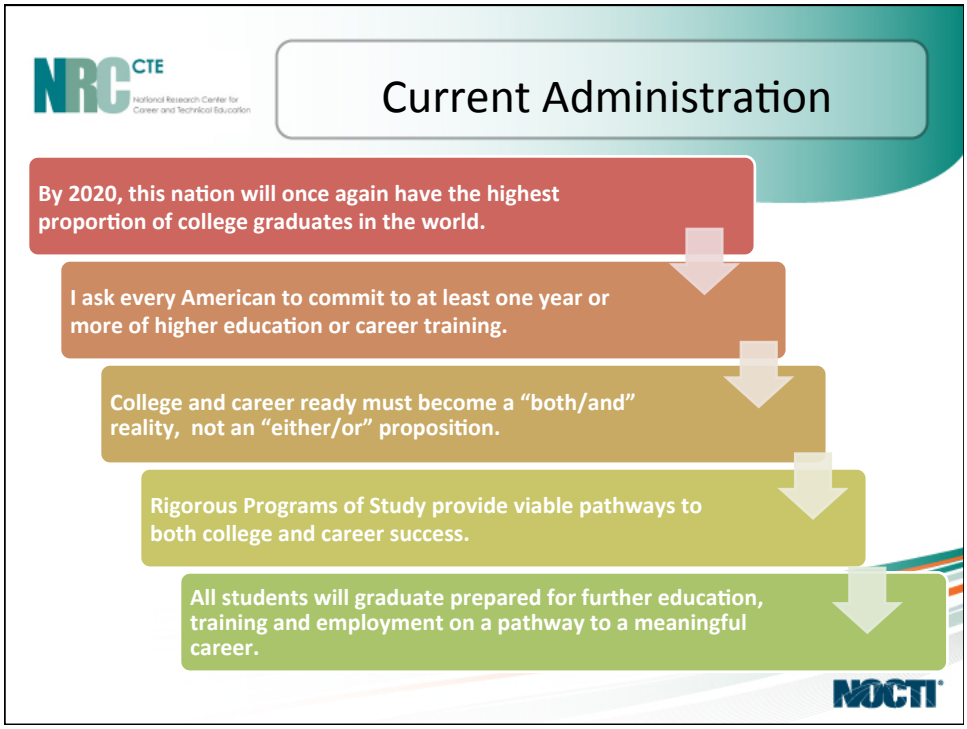
NRCCTE
National Research Center for Career and Technical Education
Current Administration
By 2020, this nation will once again have the highest proportion of college graduates in the world.
I ask every American to commit to at least one year or more of higher education or career training.
College and career ready must become a "both/and" reality, not an "either/or" proposition.
Rigorous Programs of Study provide viable pathways to both college and career success.
All students will graduate prepared for further education, training and employment on a pathway to a meaningful career.
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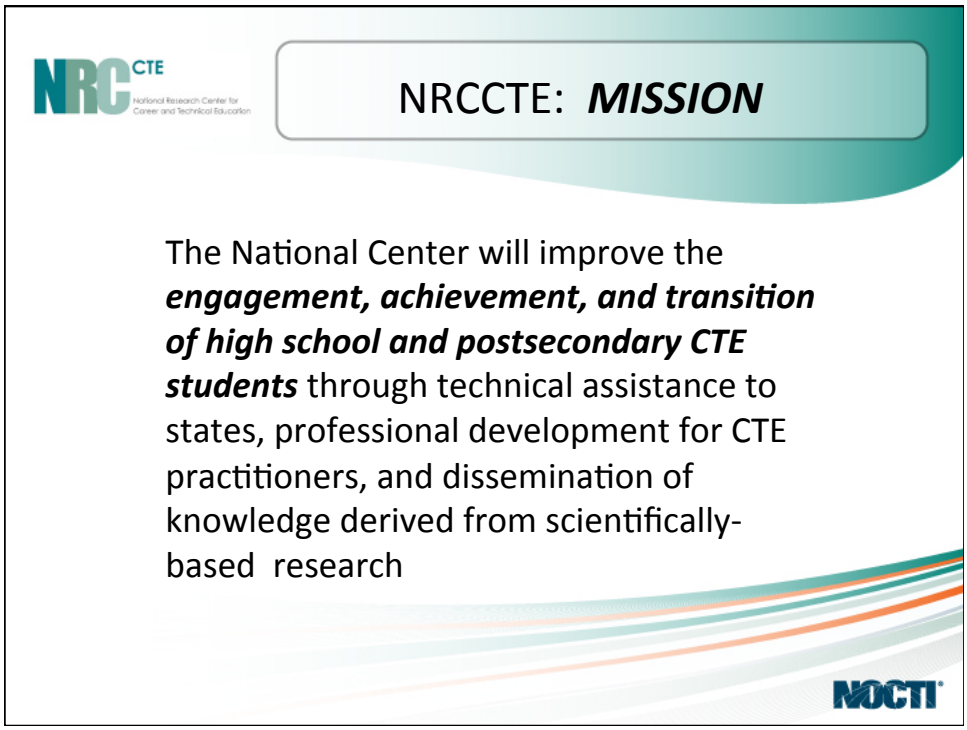
NRCCTE
National Research Center for Career and Technical Education
NRCCTE: MISSION
The National Center will improve the engagement, achievement, and transition of high school and postsecondary CTE students through technical assistance to states, professional development for CTE practitioners, and dissemination of knowledge derived from scientifically-based research
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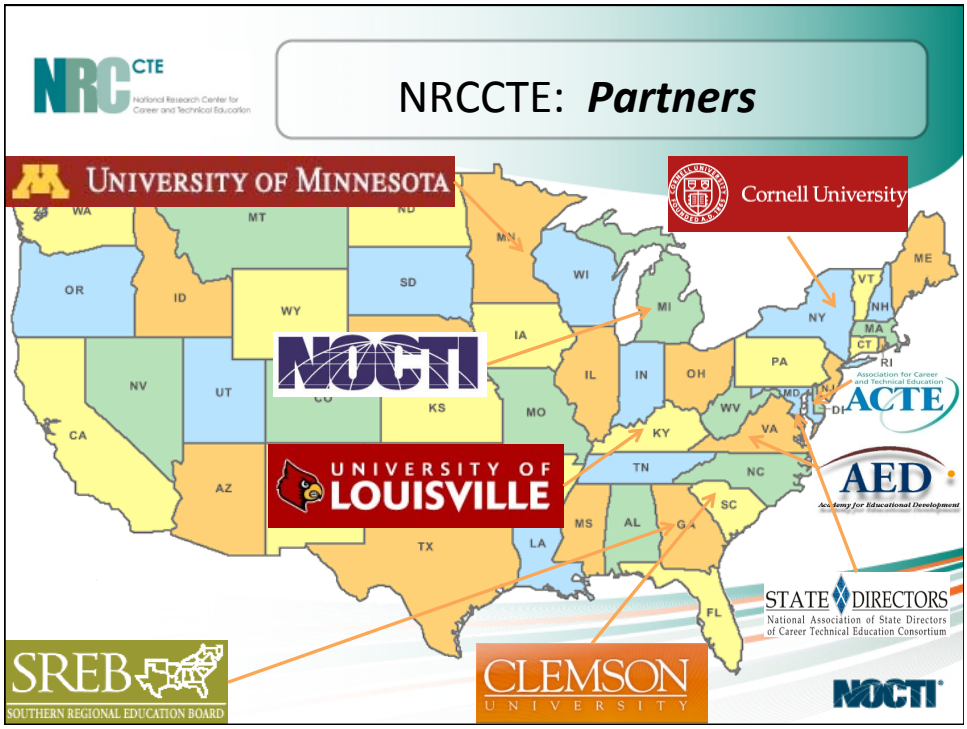

Definition of Professional Development

Activities that increase teachers' knowledge and change their instructional practice in ways that support student learning .

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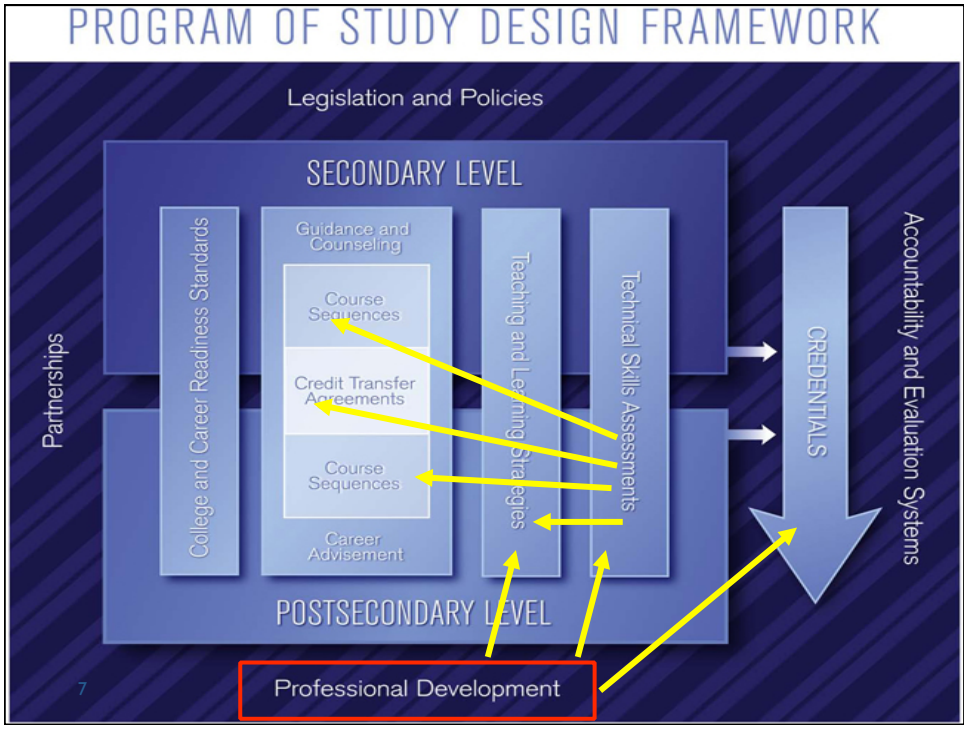

Guiding Principles of Professional Development

- Continuous and on-going
- Contextual to the teachers' work
- Emphasis on analysis and reflection
- Active engagement that reflects adult learning principles
- Collaborative communities of practice
- Connected to efforts to improve student learning

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Putting the Data to Work

CTEDDI

Career and Technical Educators
Using a Data Driven Improvement Model

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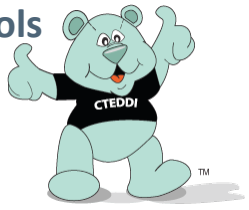
What is CTEDDI?

- 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



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CTEDDI's Origin

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

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CTEDDI Instructional Improvement Cycle

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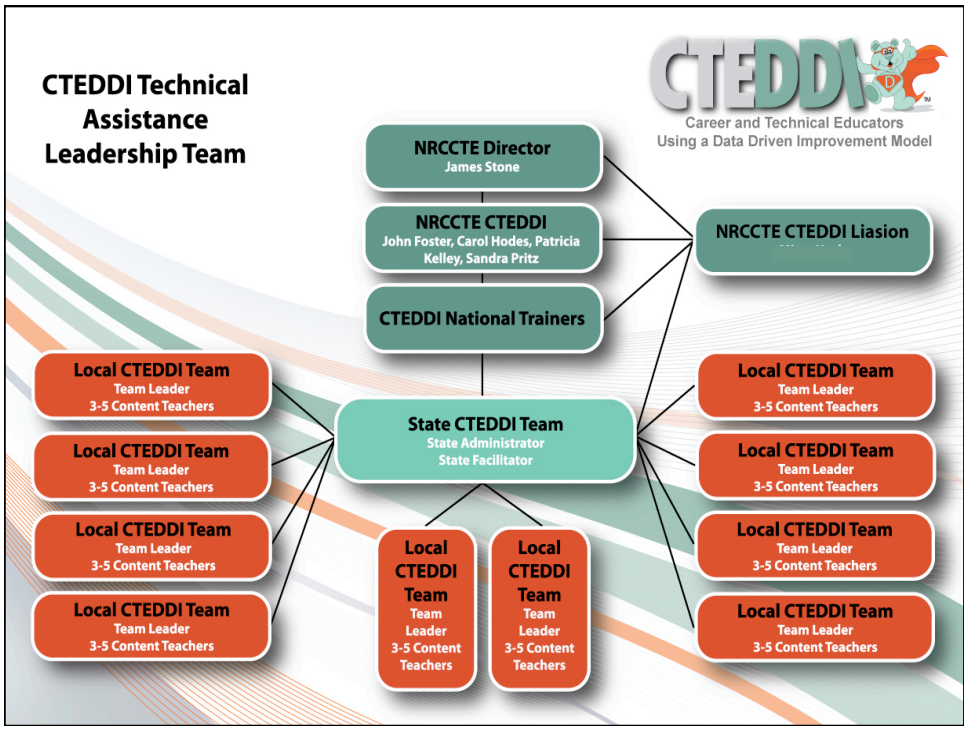
Professional Development Sharing Center
cte
Facilitator Login Page || Change Password || Logout
Browse...
Upload
To upload a file... Click Browse to select, then Upload.
Educational Resource Articles
DesignActionPlanFinal.docx
mark.jett
Form for Credit.jpg
sandy.pritz
Course credit through Oklahoma State University.docx
sandy.pritz
Statistical resources for data.doc
carol.hodes
Data plan narrative.doc
carol.hodes
Step 4Worksheet 5 Final.doc
carol.hodes
NOCTIWhitePaper.pdf
sandy.pritz
Dreams1.jpg
david.hall
NRCcte Site Coordinator Training
Type comment here, then click Add Comment to post a message...
Add Comment
Teacher Clearfield, PA
Health Occupations people, how are you using Nocti Pretest data? --- beth.rhymestine 3/17/10
(0) View/Create Threaded Conversation
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
(0) View/Create Threaded Conversation


CTEDDI Technical Assistance Leadership Team
CTEDDI
Career and Technical Educators Using a Data Driven Improvement Model
NRCCTE Director
James Stone
NRCCTE CTEDDI
John Foster, Carol Hodes, Patricia Kelley, Sandra Pritz
CTEDDI National Trainers
NRCCTE CTEDDI Liasion
State CTEDDI Team
State Administrator
State Facilitator
Local CTEDDI Team
Team Leader
3-5 Content Teachers
Local CTEDDI Team
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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

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Ways to Participate

Statewide Implementation	Jump-Start	Introductory PD
• 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	• Local support • Access to existing resources (for the Jump-Start days only) • 2-day workshop on CTEDDI process • Use of mock data	• Access to existing resources (for the day only) • 1-day (or less) workshop • Use of a portion of exercise data

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SREB

Southern Regional Education Board

CTE Teacher Alternative Certification Induction Model

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SREB

Alternative Certification Model for Career/Technical Teachers

- Develop an induction model for new CTE teachers pursuing alternative route certification
- Increase competency, self-efficacy, and career commitment
- Prepare the intervention for experimental trials

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SREB

Why This Project?

Complexity of Nontraditional Entry into CTE Teaching

- Diversity of certification routes
- Increasing percentage of teachers entering through nontraditional routes
- Unique needs of beginning CTE teachers
- Teacher attrition
- Shortage of CTE teachers

Increased CTE Teacher Responsibility

- Challenges of the new mission —students college and career ready
- Role of CTE in school improvement
- Student diversity
- Intellectual rigor
- Project- and problem-based learning
- Embedded academic content

SREB

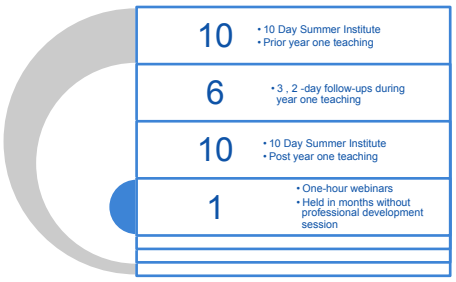
Research-Based Professional Development Content Alignment

- **Interstate New Teacher Assessment and Support Consortium Model Standards for Beginning Teachers (1992)**
- **Framework for Teaching (Danielson, 1996)**
- **National Board for Professional Teaching Standards for Career/ Technical Teachers (1997)**

SREB

Components of the Intervention

Professional Development



Support

- On-site coaching visits from the professional development instructor
- Mentoring from a trained, experienced teacher
- Support from the building administrator
- Electronic communities of practice

SREB

Professional Development Content

Instructional Planning:
Create short-term and long-term standards-based instructional plans based on the varying learning needs of students.

Instructional Strategies:
Use instructional strategies that actively engage students in learning and encourage the development of problem-solving, critical thinking, and teamwork skills.

Teacher Competence

Classroom Assessment:
Use formal and informal assessment strategies to evaluate student progress toward learning goals and provide feedback to improve student learning.

Classroom Management:
Create a learning environment that encourages student motivation, positive behavior, and collaborative social interaction.

Teacher Reflection: Reflect, both individually and collaboratively, on the effects of instruction and use the reflective process to continually improve instructional practice.

SREB

Iterative Development Process

Year 3 Field Test

Module Content

- Scope and relevance of content
- Delivery strategies
- Intended outcomes

Year 4 Field Test

Full Induction Model

- Intended outcomes—competence, self-efficacy, commitment to profession

Year 5 Field Test

State-Led Field Test of Full Induction Model

- Feasibility of implementation
- Fidelity of implementation

SREB

Conditions for Implementation of the Model

- Fidelity to structure of model—professional development and support
- Facilitated planning with stakeholders
- Selection and training of instructors
- Selection of participants —identify in time for 2-week workshop
- Training and commitment of local administrators and mentors
- Incentives (course credit and/or paid work time) for professional development
- Commitment to on-going evaluation of the effects of the model

SREB

What's Next?

- Collecting data on state-led field test this year
- Initiating discussions with states about the use of the model
- Piloting module content with veteran teachers

Resources from the Center

Visit http://www.nrccte.org/

John.foster@nocti.org
or
Heather.Sass@sreb.org
www.sreb.org

Thank You for Coming!

Disclaimer:

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