CTE: Data, Transitions, and Policy Goals

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Career & Technical Education: Promise & Practice
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History in Brief

• Current CTE emerges from more than 100 years of evolution in the US public schools
  – Morrill Act of 1862 – Agriculture & mechanic arts

• Longstanding debate about role of public education
  – Pragmatic – school for work
  – Democracy – school for informed community
  – Education for its own sake
CTE: Who participates & how?

• Career and technical education participation is common in high school. 20% take 3 or more HS courses in a single program.
  – True nationally, with some variation at state level
  – Focus on particular clusters or programs of study differ

• 16 Career Clusters, ~80 programs of study

  Agriculture, food, and natural resources
  Architecture & constructions
  Arts, A/V/ technology & communication
  Business management & administration
  Education & training
  Finance
  Government & public administration
  Health science
  Hospitality & tourism
  Human services
  Hospitality & tourism
  Human services
  Information technology
  Law, public safety, corrections & security
  Manufacturing
  Marketing
  Science, technology, engineering & mathematics
  Transportation, distribution & logistics
Measuring CTE exposure

• CTE first introduced in middle school

• High schools offer:
  – Classes
  – Concentration: multiple aligned classes in single pathway
  – Work-based learning/ professional certifications
  – Career-tech student organizations (CTSOs)

• College
  – Includes dual enrollment or early college
  – May include transition plans or articulation agreements
  – Certificates, credentials (stackable),
CTE: Who teaches?

- States vary in requirements to teach

- Generally involves
  - Multiple years of industry experience
  - Initial screening to provide a provisional license

- Turnover has been estimated as slightly higher than among academic subject teachers
  - Face better private sector options
  - Get less formal training to teach
Changes over time: Massachusetts

Figure 1. Trend in proportion of schools offering CTE programs in focal STEM fields.
Figure 2. STEM and non-STEM Growth in Student Participation.
Measuring CTE impacts/outcomes

• What CTE should affect depends, partially, on how you interpret the role:
  – Wages & employment
  – Transitions to postsecondary training
  – Learning & school completion
Opportunities to learn

• Trend towards increased interest in CTE
• Every Student Succeeds Act bridges
  – College for all to
  – College & career readiness
• ESSA & Perkins plans will further alter the CTE landscape
• Extension of state longitudinal data systems presents further opportunities to understand impacts
Thank you

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