

# CTE: Data, Transitions, and Policy Goals

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Career & Technical Education: Promise & Practice  
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# History in Brief

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- Current CTE emerges from more than 100 years of evolution in the US public schools
    - Morrill Act of 1862 – Agriculture & mechanic arts
    - Smith-Hughes act of 1917 – brings it into primary & secondary ed.
  - Longstanding debate about role of public education
    - Pragmatic – school for work
    - Democracy – school for informed community
    - Education for its own sake
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# CTE: Who participates & how?

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- 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

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# Measuring CTE exposure

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- 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),
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# CTE: Who teaches?

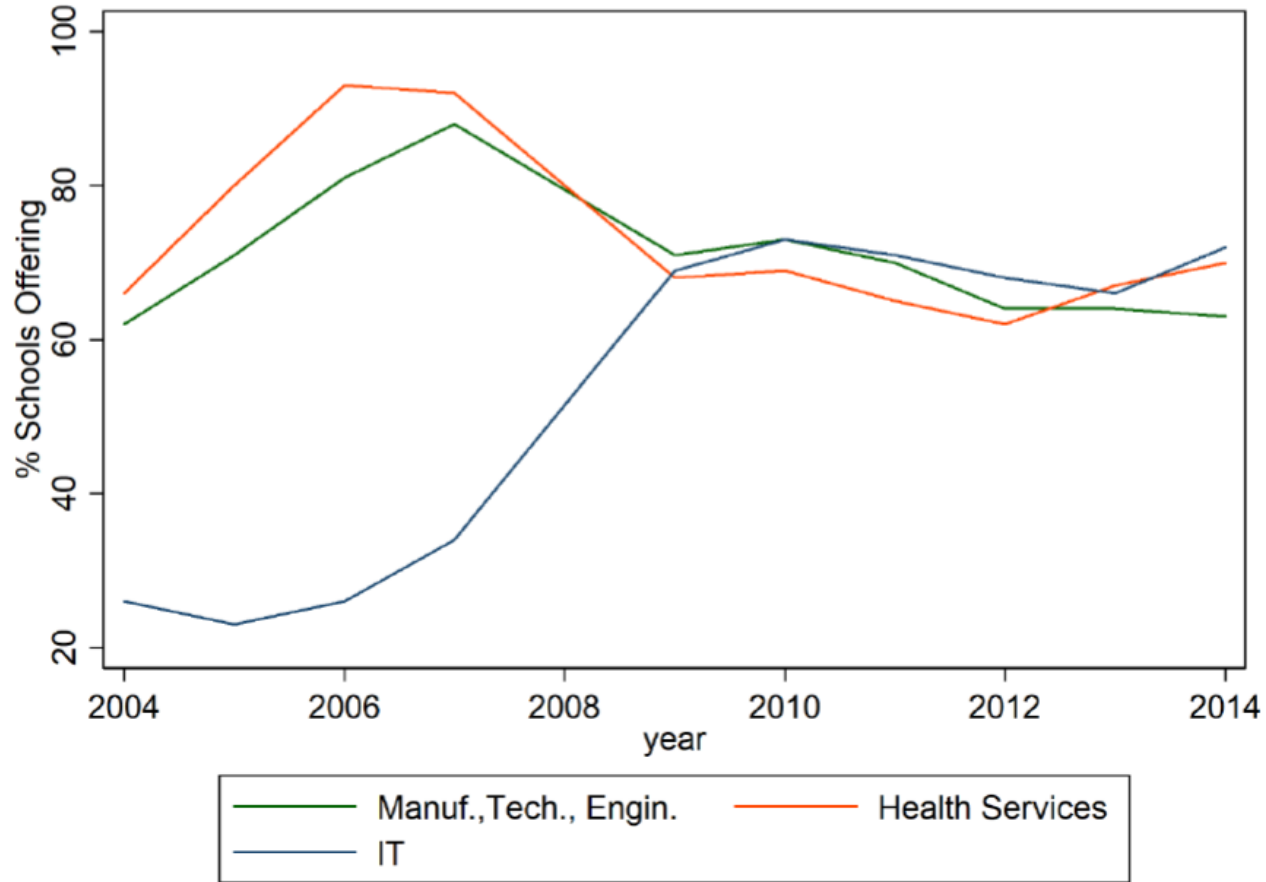
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- States vary in requirements to teach
  - Generally involves
    - Multiple years of industry experience
    - Initial screening to provide a provisional license
  - Turnover has been estimated as slightly higher than among academic subject teachers
    - Face better private sector options
    - Get less formal training to teach
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# Changes over time: Massachusetts

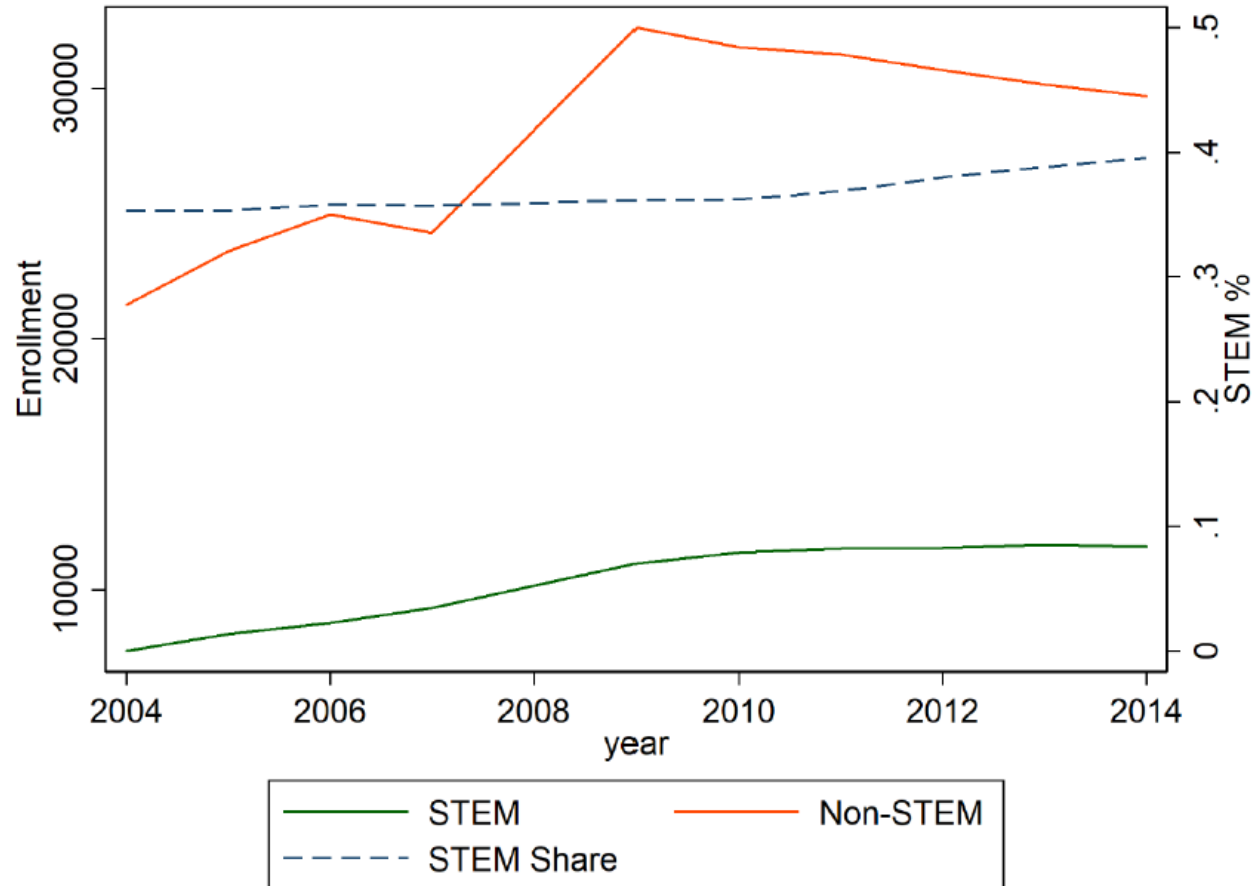
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Figure 1. Trend in proportion of schools offering CTE programs in focal STEM fields.



# STEM on the rise?

Figure 2. STEM and non-STEM Growth in Student Participation.



# Measuring CTE impacts/outcomes

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

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- 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
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# Thank you

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