Programs of Study, College and Career Readiness: CTE and Making High School Matter

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### PROBLEM

- 1. Only success pathway = college
- 2. Ergo, all students take a college prep curriculum

**3.** HS = NEW MIDDLE SCHOOL

- II. Programs of study are the most recent effort in the United States to improve the transition of youth from high school to the workplace. Unlike most other industrialized nations, the United States' lacks formal structures like apprenticeships to facilitate this transition or any national system for that matter. It is a non-system built upon ad hoc fixes beginning in 1862.
- III. As a result, the default structural support for youth transition to the labor market has become college. ... a college degree has become a proxy for employability or work readiness (Stone & Alfeld, 2006).
- IV. College for all College-for-all has morphed in recent years to incorporate the idea that public education ought to prepare youth for college and careers.
  - a. what is the appropriate mix of academic skills, generalizable occupational skills, and specific technical skills required for the emerging labor market.
  - b. A second level question is how can schools help students develop these skills?

# The Education Challenge to College and Career Ready

## A. THE DEBATE : WHAT IS REQUIRED

- B. Engagement, achievement, and transition provide a framework for imagining what a truly college and career system might accomplish and how programs of study fit into this construct.
  - 1. Engagement DEFINE EVIDENCE: Survival analysis
  - 2. Achievement DEFINE EVIDENCE: meta analysis
    - a. One year of academics added
    - b. No change in academic scores
    - c. Technical achievement open questions
  - 3. Transition DEFINE EVIDENCE: meta analysis
    - a. 50-60% will not finish college credential
    - b. How to make HS matter
  - 4. DEBATE
    - a. Academic skills required
      - i. Math (ACT data)
      - ii. Science (think like a scientist)
    - b. Non-cognitive skills required
      - i. Character: perseverance, curiosity, conscientiousness, optimism, and self-control. (Heckman)
      - ii. Grit: the sustained and focused application of talent over time.(Angela Duckworth)
    - c. Employability Skills
      - i. SCANS
      - ii.  $21^{st}$  Century
    - d. Technical skills required

# The Labor Market Challenge to College and Career Ready

- A. "High-skill, high-wage, high-demand occupations"
  - a. Definitions:
    - i. High (college plus+)
    - ii. Middle
      - 1. Cannot outsource
      - 2. Sub baccalaureate
      - 3. (promise or hollowing out?)
    - iii. Low (opportunity: housemaids)
  - b. STEM obsession
  - c. Signaling the labor market: credentials or degrees?
- B. The labor market
  - a. BLS
  - b. Carnevale
  - c. Brynjolfsson & McAfee Race against the machine
- C. The Youth problem: NEET; historic high unemployment
- D. BOY PROBLEM

# **Programs of Study** The National Research Center for Career & Technical Education Agenda

ROLE OF POS IN: Engagement, Achievement, Transition

### PREMISE: Perkins

- link secondary and postsecondary instruction within defined occupational areas,
- include rigorous academic and technical content that is aligned with challenging academic standards, and
- lead to the attainment of an industry-recognized credential or an associate or bachelor's degree.

### **Programs of Study as the Solution**

At its most fundamental level, POS is about linking systems of education and training with the goal of moving adolescents into the workplace. In a very real sense, the assumption is that a high school education has no intrinsic value except to prepare all youth for the next level of education, presumably college. In the name of improving education for all students, high schools have become the new middle school.

### Secondary and postsecondary elements

Efforts to align secondary and postsecondary instruction were core to tech prep and are core to POS. At its core, this requirement is about *building a system* to better facilitate youth transition – quite similar in fact to the focus of tech prep and school-to-work.

- sites with established methods
  - o communication across institutions and partners
  - joint technical skill committees (which bring together secondary and postsecondary faculty with business and labor partners)

o increased the attention paid to aligning secondary and postsecondary programs

## Coherent and rigorous content

- default means to increase rigor in high school coursework is have students take more
- 13 to 18 core credits: Nashville
- Option is curriculum integration
- The limitations, challenges of dual credit
  - Generally good results BUT
  - Self selection bias
  - Advanced Placement (AP), and dual credit courses often conflict and students must make difficult choices among them.

# Lead to IRC

- Why?
- Credentials, and the required assessments, can provide data for program improvement, provide data for program accountability but more to the point here, industry recognized credentials ought to provide a signal to the labor market.

• unable to make the commitments of time, personnel, and funding required to establish and maintain programs that offer such credentials.

• Data on the transition from secondary to postsecondary imply that few graduates continue their postsecondary studies in the same programs of study they had followed in high school thus limiting the potential for acquiring industry recognized credentials.

#### Career Guidance: The Missing Link

Developing a career is a process, not a single decision.

### **More General Issues**

Implicit in the POS theory is the notion that secondary education cannot provide the kinds of credentials valued by industry. Therefore, postsecondary education is a requirement. *Cost* 

Once students leave public education, the student, the students' family or some other entity has to pay for the education. As Barton (2006) noted however, high school is the last publicly funded opportunity to prepare youth to become successful adults. of study.

#### Capacity

While college enrollments have been increasing in the United States, there is growing evidence that some colleges and some programs are turning students away, especially in community colleges which are the focus of many POS efforts.

#### *Capability*

Simply put, not all students who graduate from high school want to continue formal education nor is continued formal education the best fit for their interests or capabilities. Less than 14% of students with C averages or lower in high school earned a 2– or 4– year degree. Even worse, 52% of college students who had a C average or lower in high school didn't even earn 1 college credit! While not all high school graduates may have the capability to succeed in college, they do have the capability to learn.

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#### SUMMARY

These issues raise a fundamental question about how best to prepare young people to succeed in the emerging workplace. Until and unless the 3-Cs identified here are addressed, POS is likely to go the way of Tech Prep, School-to-Work, youth apprenticeship and career education.

One nagging issue remains, why do we assume youth must wait until after high school to begin the real process of preparing for a successful adulthood? Consider these facts:

- Many of our economic competitors structure their educational systems to move youth into intensive occupational programs much earlier than we do. And, as documented in *Pathways to Prosperity*, their youth out-perform ours on most *academic* measures.
- The math skills necessary to achieve a score of 22 on the ACT college exam are learned by the end of Algebra I and Geometry – courses usually completed by the end of 10<sup>th</sup> grade for most students<sup>1</sup>.
- Requiring more academics for graduation has not improved measures of academic performance. Since the 1980s, we have added the equivalent of one full year of academics to high school graduation requirements and NAEP scores have remained unchanged or significantly declined.
- *Tough Choices; Tough Times* that argued for a 10<sup>th</sup> grade Board Examination that permits successful students to move directly into community college level technical programs or to continue in a true college preparatory program to a second level of examinations. Thus the postsecondary elements required in a POS can be delivered during students' high school years either by robust secondary CTE programs or community colleges.

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