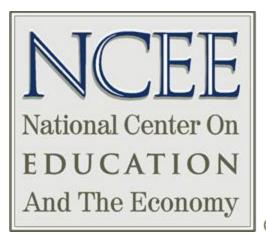
CTE Systems in Top-Performing Countries

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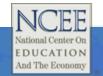
Preschool aligned to K12 to ensure all are ready to learn

Rigorous & Adaptive Learning Systems Engaging curriculum that promotes deep understanding and assessment that measures the knowledge and skills students need to succeed

Early identification of struggling learners and ongoing support and extra time to ensure they meet and exceed standards

Gateway at the end of compulsory education that leads to high-quality options

State-of-the-art CTE programs that credential students for jobs of the future



The Economic Challenge

In response, top-performing countries have redesigned their CTE systems so that the curriculum for vocational courses

- Assumes a high level of academic mastery (just like the courses designed to prepare students for university) and
- Allows for many different "exit" options depending on a student's desired career path



Characteristics of Strong CTE Systems

NC
National Cent
EDUCAT
And The Eco

Compulsory education

Aligned with economic development goals, curriculum designed by employers

Teachers have relevant, recent experience in industry

Equipment is state-of-the-art

Applied learning is core

Top Performer Highlights: Switzerland





Governed by triad of business, cantons and federal government Approximately 70 percent of Swiss teenagers enroll



Dual-track = vocational school + paid apprenticeships (students earn between \$600-\$1200/month)



Mentorship and coaching



Upon completion, students earn nationally recognized credential and have options to access higher education



Top Performer Highlights: Singapore





CTE is key to economic development strategy and the development of a highly skilled workforce

After finishing secondary school, 65 percent chose CTE: (25% ITE 40%

(25% ITE 40% polytechnics)



Instruction is provided in simulated workplaces using state-of-the-art equipment



Industry partners set standards and assess candidates for diplomas



Teachers are given regular training in industry best practices



Making CTE the Pathway of Choice: To be attractive to a large segment of the population, CTE must offer:

Viable Routes

to well-paying occupations requiring less than a fouryear degree

Pathways to more

including further education and training that can prepare them for professional positions

Appeal for all

In our experience, CTE systems risk collapse when enrollment falls below 40% of the population

Comparing Top Performers and U.S.

 Between 40 and 70 percent of secondary students participate
 CTE is seen as a last-resort because of the weak academic component

 Purpose is to train the next generation of workers
 Purpose is to improve student motivation and reduce dropout risk

 Training is rigorous, lasts 2-3 full years
 CTE "concentrators" are typically only required to pass 2-3 classes during HS, with no way of verifying mastery

 Work-based (or other applied) learning is a central feature
 Very few students engage in work-based learning

Students graduate with qualifications and industry credentials certified by employers and valued in the job marketplace

Students rarely earn meaningful credentials that would distinguish them from other HS graduates

