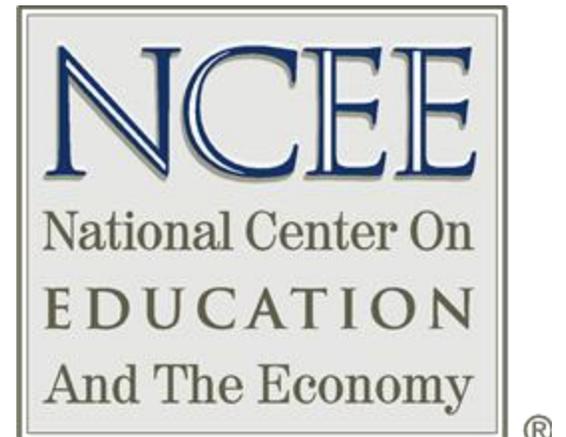
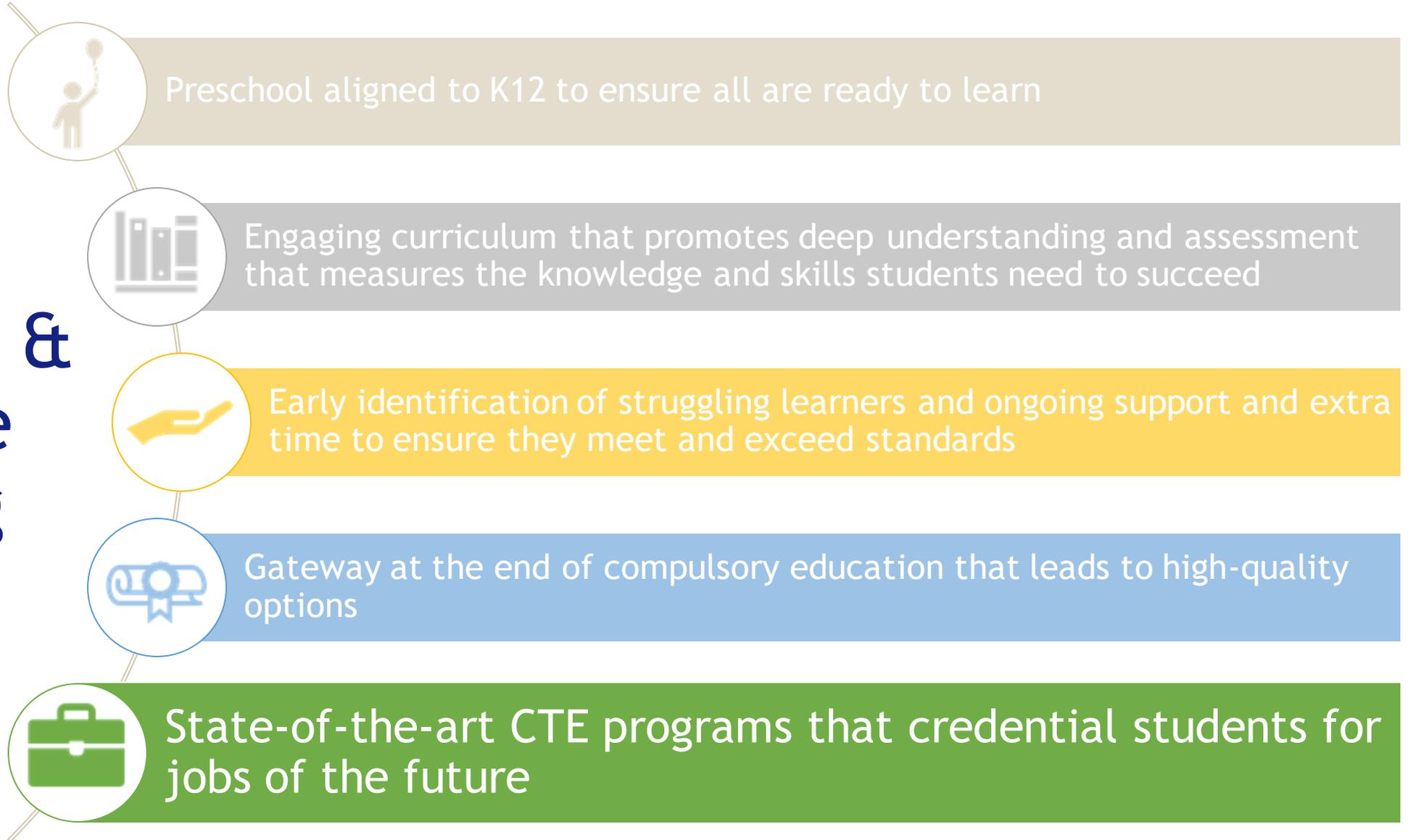


CTE Systems in Top-Performing Countries

Anthony Mackay and Gretchen Cheney



Rigorous & Adaptive Learning Systems



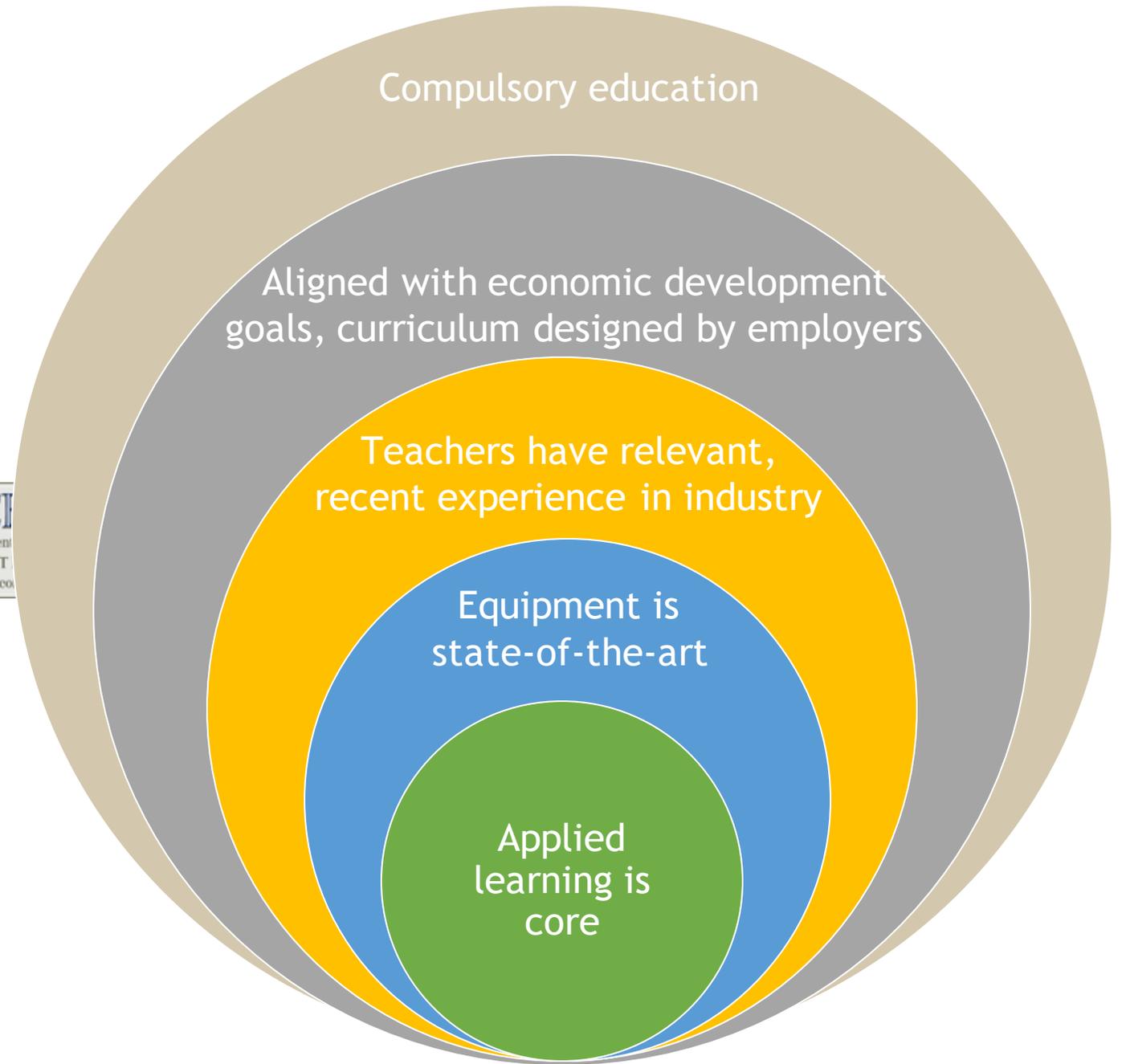
The Economic Challenge

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



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% 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 four-year 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.

Top Performers

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