



Growing
Michigan
Together
Commission
Pre-K - 12
Workgroup



Aug 16, 2023

Who We Are



Non-profit
based in D.C.



At the intersection of
education & economy

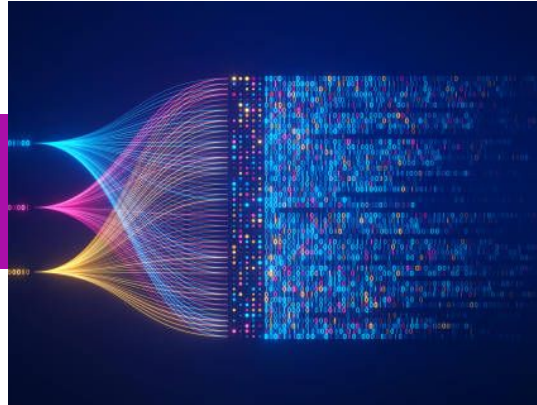


35+ years connecting
global research with
national, state, &
district **policy &
practice**

What We Do



Study the highest-performing, fast-improving, most equitable education systems globally and in the U.S.



Distill insights and **identify** what is common across them



Use this **analysis** to inform our partnership work with states and districts

A hand is shown from the bottom, holding a glowing globe. The globe is covered in a network of white and orange nodes connected by thin lines, representing a global network or data flow. The background is dark with some blue bokeh lights.

NCEE's Global Focus

Why look globally?

- As the world globalizes, **we compete with the world**, not just our neighbors
- We face **common challenges** across the globe — climate, political division, advancing technology
- Global leaders inform us about how they **adapt to a changing future**
- We **translate insights** from leading global systems to our states, rather than copy them





NCEE's Global Focus

What is common to those high-performing systems?

- Tight connection between **economy and education**, linked to the kind of society they want to create
- **Designed as systems** — parts fit together and reinforce each other
- **Future-focused** – proactive rather than reactive; look around corners



Benchmarking Globally

Why PISA?

- Assessment of how well 15-year-olds in 79 countries can **apply what they know** in
 - ➔ **Reading** literacy (core domain)
 - ➔ **Mathematics** literacy
 - ➔ **Science** literacy
 - ➔ **Global competence** (in some countries)
- Paired with survey of social and emotional factors such as student self-efficacy, life satisfaction, and school culture — **not just a test score**



Benchmarking Globally

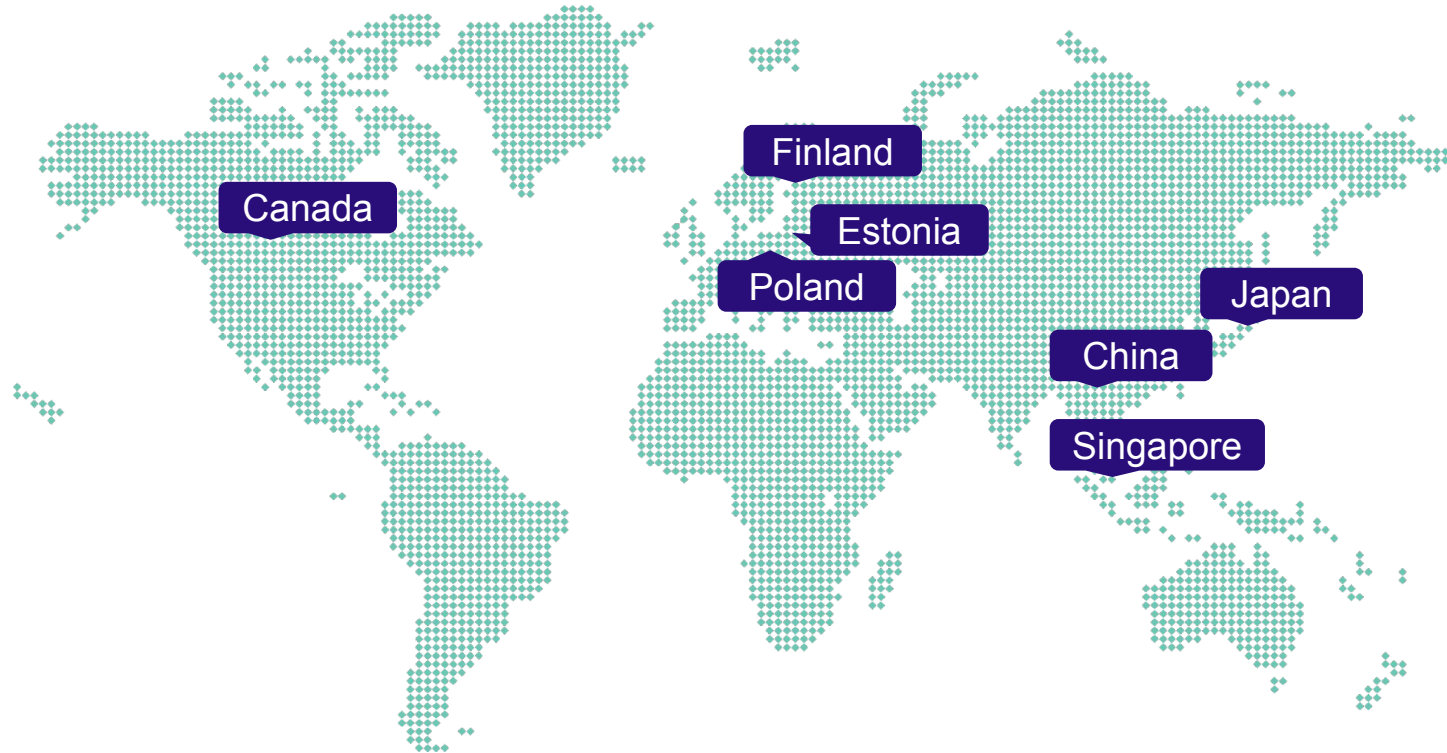
What Does PISA Look Like?

- **Computer-based** tests were used in most countries
- Assessments lasting a total of **two hours**
- Multi-stage **adaptive** approach
- **Mixture** of multiple-choice questions and questions requiring students to construct their own responses



Benchmarking Globally

Who Are PISA Leaders?



Benchmarking Globally

How Do US Students Perform on PISA?

U.S. students
have basic skills

80% Can recognize a main idea, cause and effect, and if conclusions are warranted

60% Can compare the distance across two different routes on a road, or convert currency

But they
struggle to
apply them.

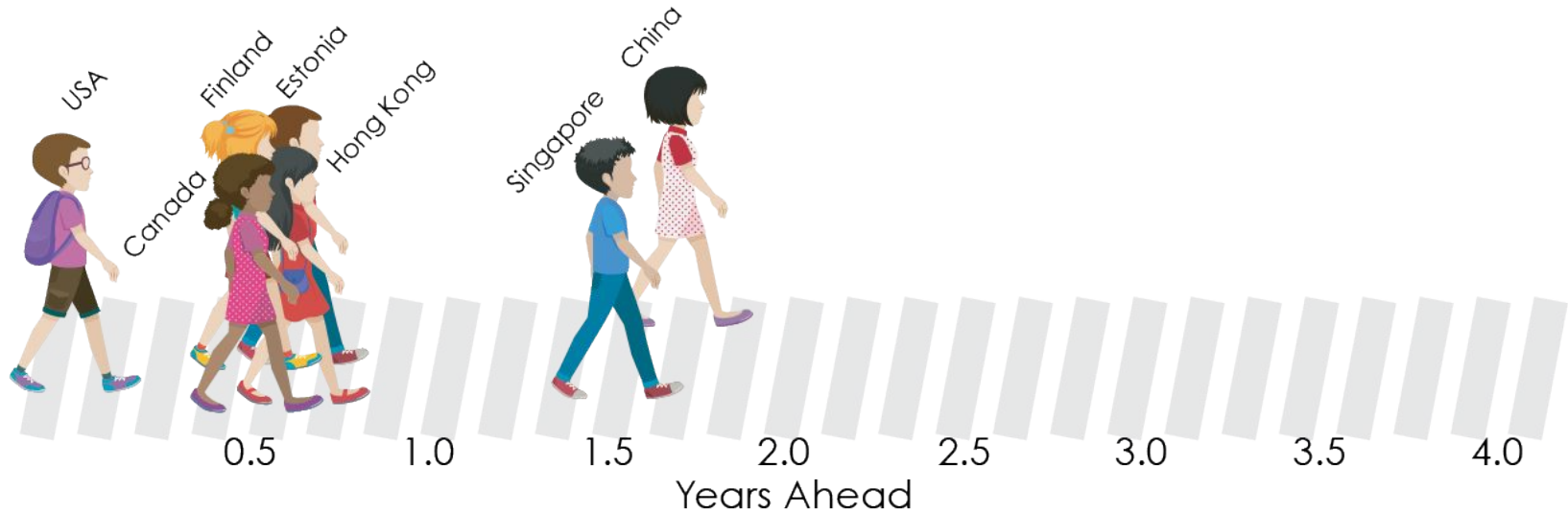
14% Can distinguish fact from fiction

9% Can apply scientific knowledge to an unfamiliar situation

8% Can model complex situations in math equations and compare and evaluate different ways of solving problems

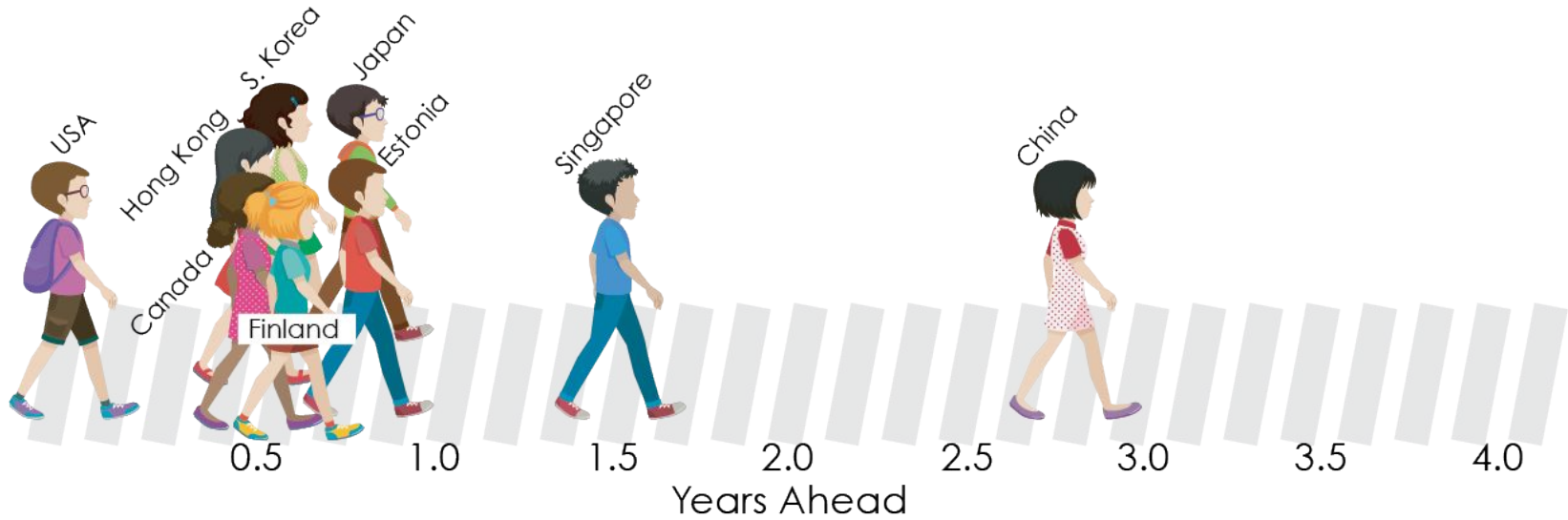
Benchmarking Globally

US Average Student Performance on PISA: **Reading**



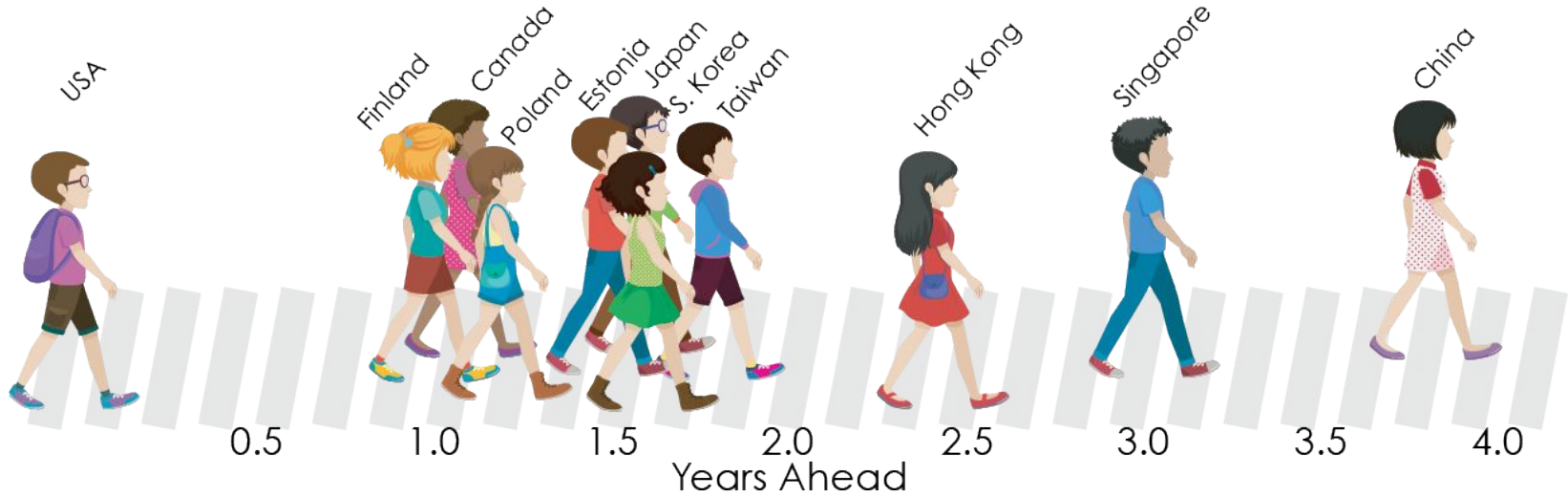
Benchmarking Globally

US Average Student Performance on PISA: **Science**



Benchmarking Globally

US Average Student Performance on PISA: **Math**

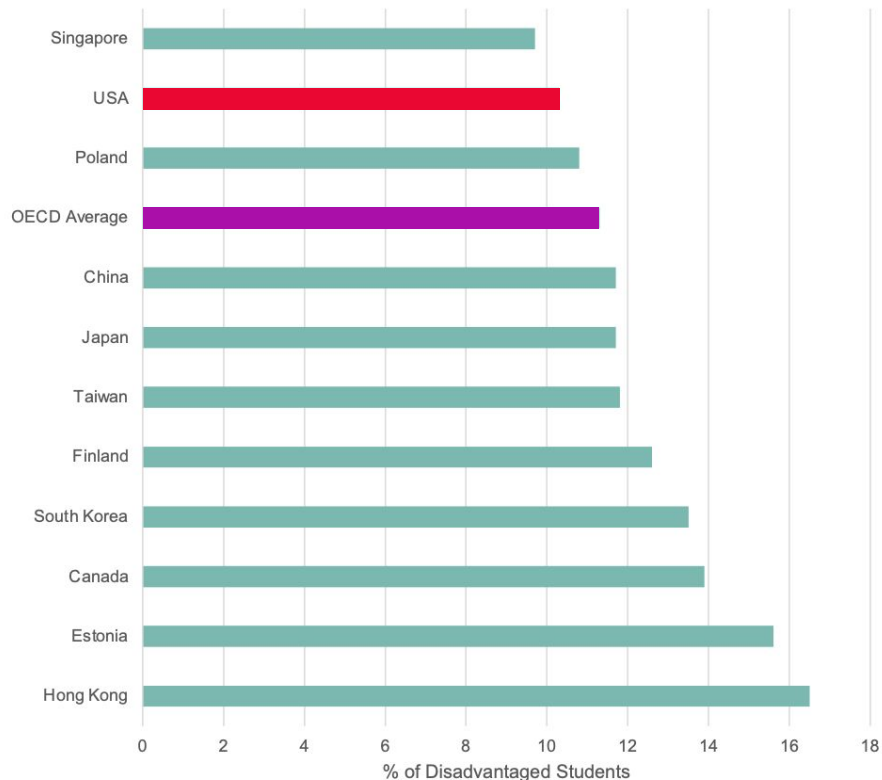


Benchmarking Globally

Equity on PISA: **Resilient Students**

This chart shows the percentage of students from the bottom quartile of socioeconomic status who perform at the top quartile of achievement — those who are **"beating the odds."**

Percent of Disadvantaged Students
Who Perform at the Highest Levels: PISA 2018

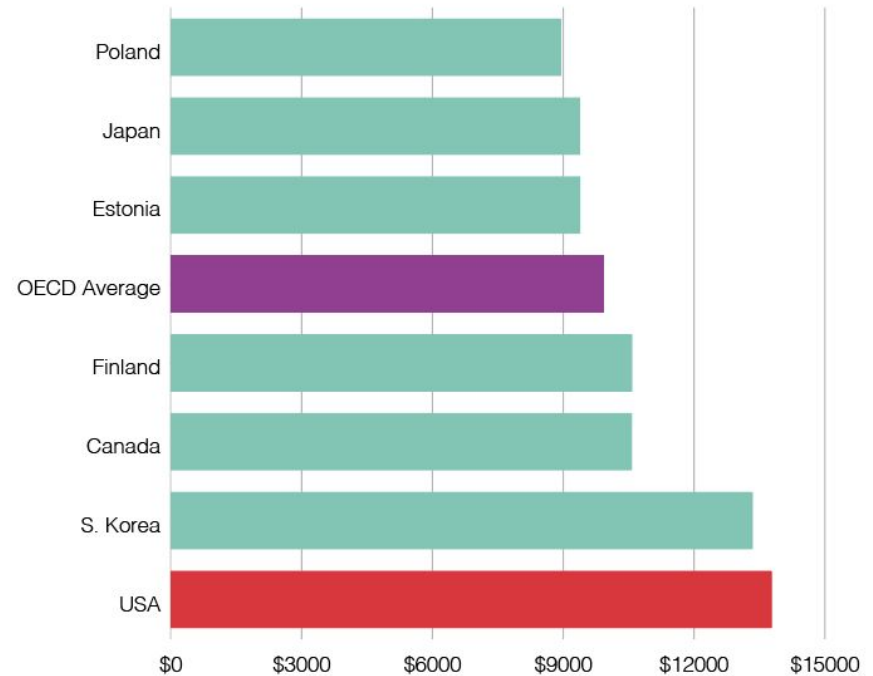


Benchmarking Globally

US Performance on PISA: **Spending**

US spends more per student than the countries that outperform us on PISA

Annual Spending per Primary Student



Benchmarking In the US: NAEP

- Assessment of **4th and 8th graders** nationwide and in each state; **12th graders** nationwide
- Subjects: **math and reading** every two years, broader range of subjects less frequently
- Measures how well students have **mastered a consensus curriculum**

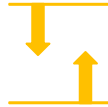


NAEP Performance in Michigan



Overall

MI is **about the US average in 8th grade**, and slightly below average in 4th grade, over the long term



Double Gap

Black, Hispanic, low income students trail White students

White students trail **national peers**



Proficiency

Less than 1/3 of students in MI are proficient in Math or reading in 4th or 8th grade.

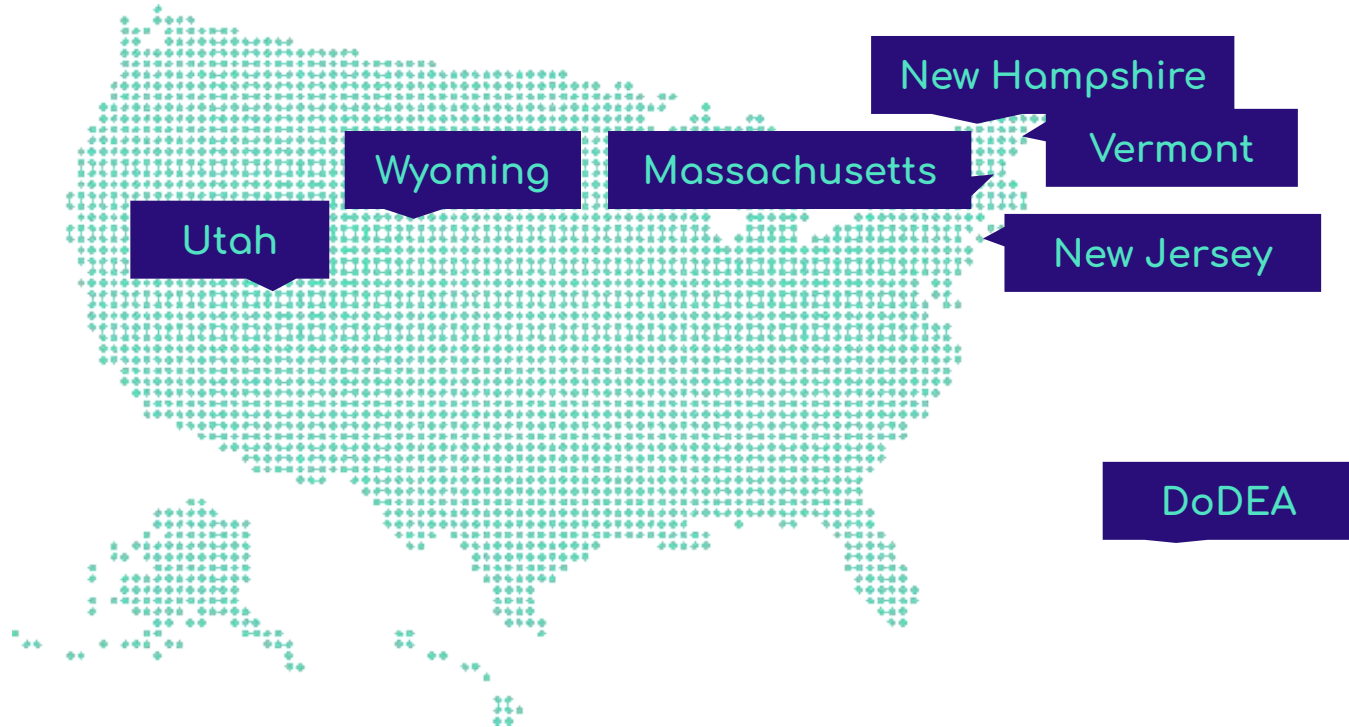
Detroit:

Trails urban district average in 4th grade but average in 8th grade, similar to the state compared to the nation.

NAEP Performance in Michigan



High Performers on NAEP



NCEE's Blueprint

To graduate students future ready, high performing systems have:



Proficiency-based learning system based on future-ready performance standards, with supports for all students



World-class **teaching and learning** to develop confident and engaged self-directed learners



Aligned and coherent governance focused on accountability for system goals and continuous improvement



Proficiency-based learning system based on future-ready standard

Students

- Work towards a clear performance standards
- Move on when ready
- Graduate ready for next step

Proficiency-based Learning System



A clear performance standard

All students can reach standard

Benchmarks along the way

Relentless focus on ensuring all students stay on track to that goal

Assessment for learning

Provide teachers & students clear info about progress & challenges

External assessment only at key levels

Aimed at ensuring students are ready for next level

Well-designed curriculum

Pedagogically & developmentally appropriate

Targeted at what is most important

With rigorous personalized pathway options in HS

Early learning & supports

Including early intervention

Ensure readiness for learning

Wraparound services & targeted academic support

Students stay on track and thrive

Proficiency-based Learning System



British Columbia

Focus on literacy and numeracy

Big ideas and concepts at each grade level

More focused HS exams

Provincial framework with room for districts to adapt and innovate

Estonia

Performance standards

Student-centered & future-focused teaching & learning

Data informs whole-of-system continuous improvement

Global Benchmarks

Proficiency-based Learning System

Emerging US Examples

Aligned curriculum, standards, assessment in Louisiana

Graduate profile in Madera, CA

Portfolio assessment in New Hampshire

Empirically-based college and career ready standard in Maryland

Defined career pathways in Indiana



Proficiency-based Learning System

Building lifelong learning systems, aligned from preschool to upskilling for adults, with access for all

Singapore: Skills Future

Finland: Lifelong Learning



Future Focus



Teaching & Learning to Enable Student to Achieve World-class Standards

Teachers

- Are professionals who work together to improve their practice & develop expertise
- Focus on improving student learning across schools & districts
- Create learning environments that develop engaged, self-directed, future-ready learners

World-class Teaching & Learning

Rigorous
teacher
preparation

- Deep content knowledge
- Ongoing professional learning
- Pedagogical expertise
- Focus on practice
- Mentorship from expert teachers

A continuum
of leadership
roles

- Incentives to support & reward development of expertise
- Aligned leadership development & professional learning

Schools
organized for
teacher
collaboration

- Central goal of improving student learning

Well-trained
school
leaders

- Create and lead schools where:
 - learning is engaging, personalized, & self-directed
 - students have a variety of experiences outside the classroom
 - students prepare for the world in which they will live

World-class Teaching & Learning



Global
Benchmarks

Rigorous teacher
preparation

Teacher career ladder

Leadership
development system

Innovative learning
approaches

Singapore

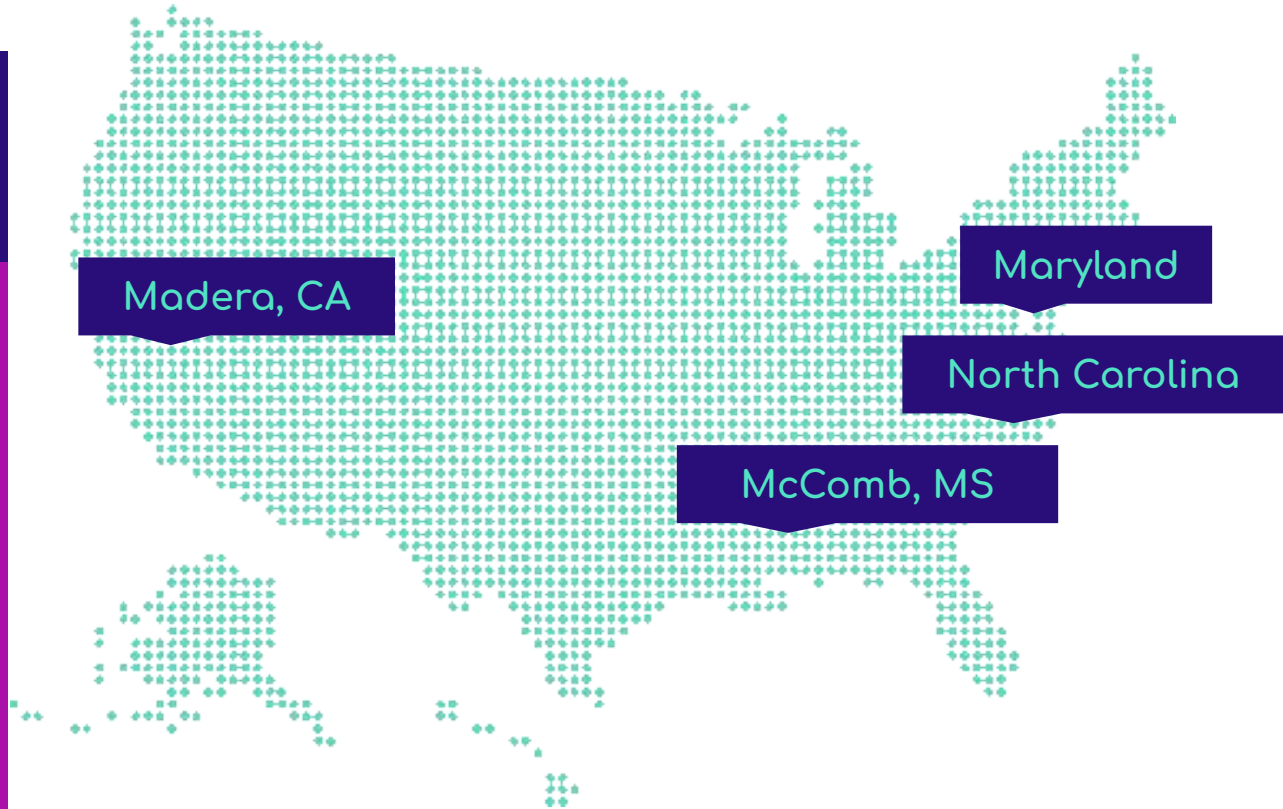
World-class Teaching & Learning

Emerging US Examples

Teacher career ladder in Maryland and McComb, MS

Cooperative Innovative High Schools in North Carolina

MadTECH Career exploration in Madera, CA



World-class Teaching & Learning

How to enhance teaching and teacher roles with new technologies

Estonia: New platforms for designing lessons

Singapore: Digital grading of writing with immediate feedback to students

South Korea: Learning assistants for students to keep students motivated and on task



Future Focus

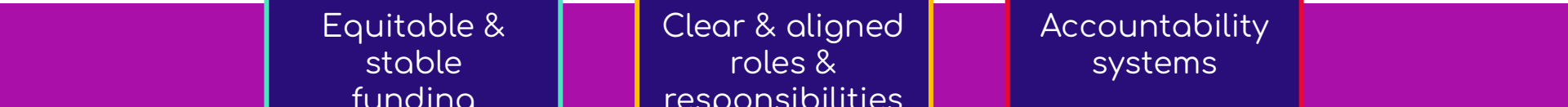


Coherent & Aligned Governance Focused on Continuous Improvement

Feature:

- Governance coherent & aligned
- Financing of schools focused on accountability for results and continuous improvement of the system

Coherent & Aligned Governance



Equitable &
stable
funding

Provides all students
with the resources
and opportunities to
succeed

Tied to effective
policies and
practices for
improving student
learning

Clear & aligned
roles &
responsibilities

For leaders
throughout the
system

Long term strategic
vision

Deep system
capacity to support
schools

Accountability
systems

Incentives & supports
to reach system goals
& to innovate to
continue to improve

Coherent & Aligned Governance



British Columbia

Planning and
accountability
framework for schools

Finland

Clear roles and
responsibilities

Cross agenda future
focused planning

Funding equity

Global
Benchmarks

Coherent & Aligned Governance

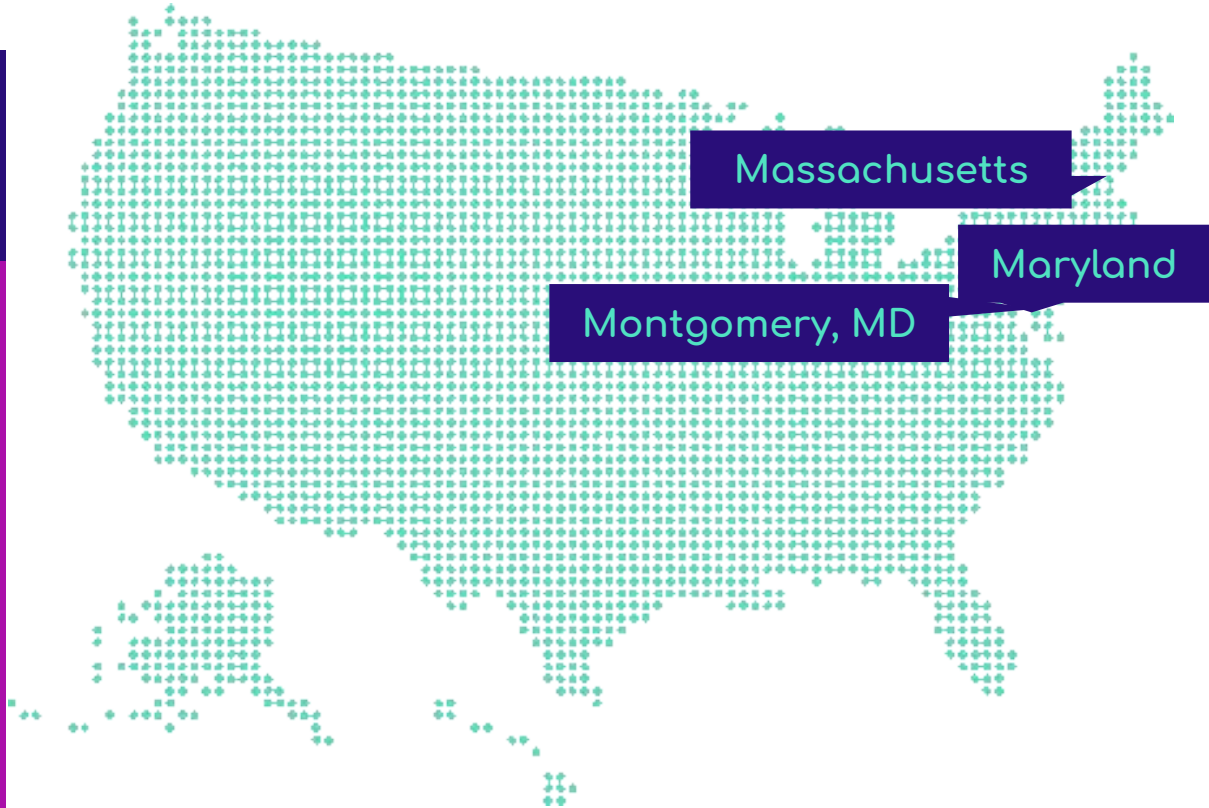


Emerging US Examples

Coordinated governance of P-12 learning in **Massachusetts**

Education funding tied to policy goals in **Maryland**

Peer assisted teacher support in **Montgomery County, MD**



Coherent & Aligned Governance

Rethinking accountability systems to look at broader measures and to focus on future readiness

Vicksburg, MS: Community wide accountability

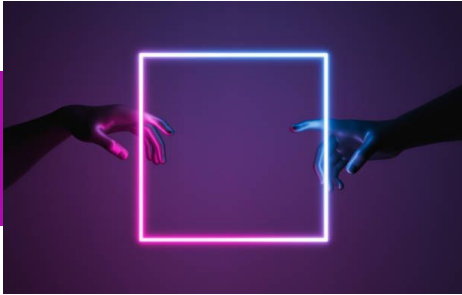
Singapore: Assessment of co-curricular and out of school learning

Estonia: Requiring collaborative cross disciplinary project for graduation



Future Focus

Redesigning Michigan's System



Michigan's education systems designed for a **different era and a different economy**

Many high-performing systems were designed **much more recently**

High performing systems are **continuing to pivot and adapt** to emerging challenges

Next meetings will **analyze Michigan's system in the three goal areas** to identify areas for redesign and consider promising work to build on